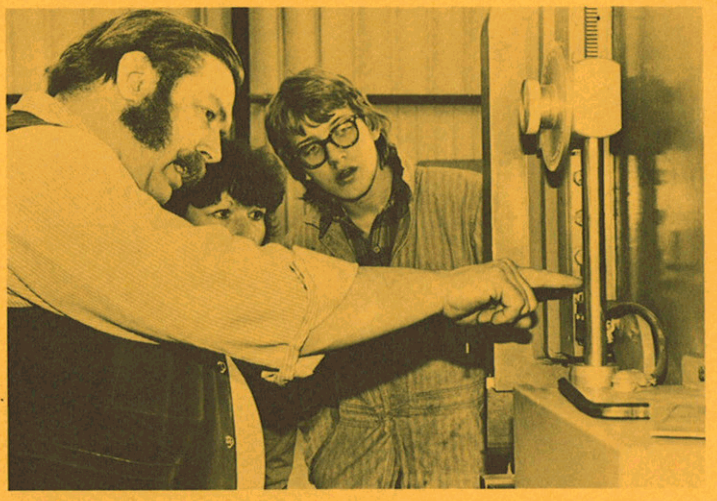
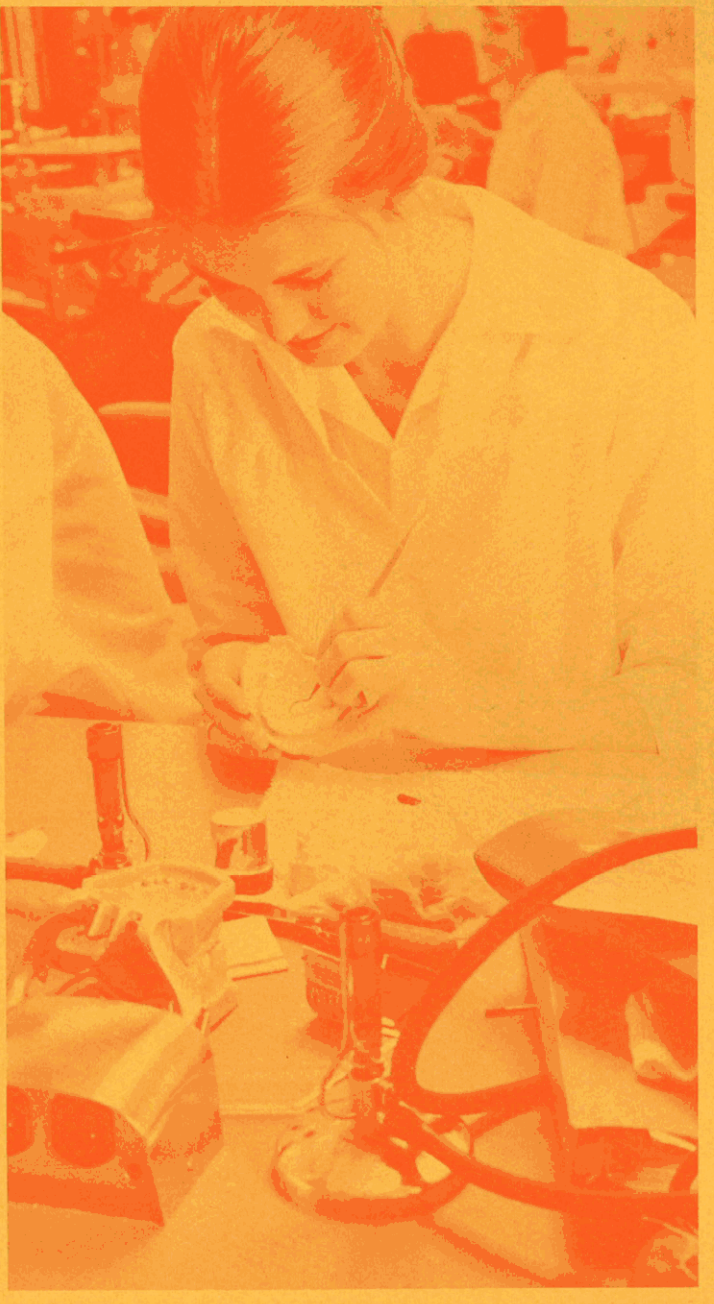
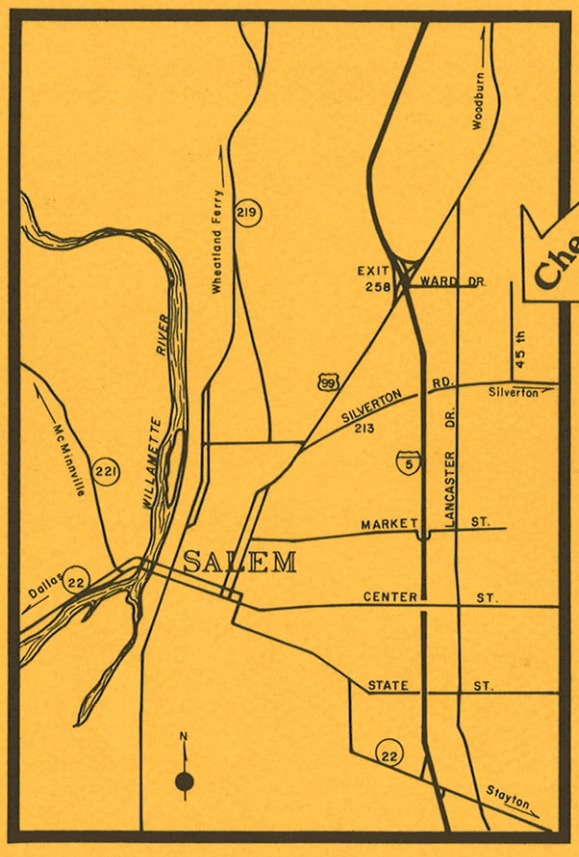
Chemeketa
Community College





1981-82 Catalog



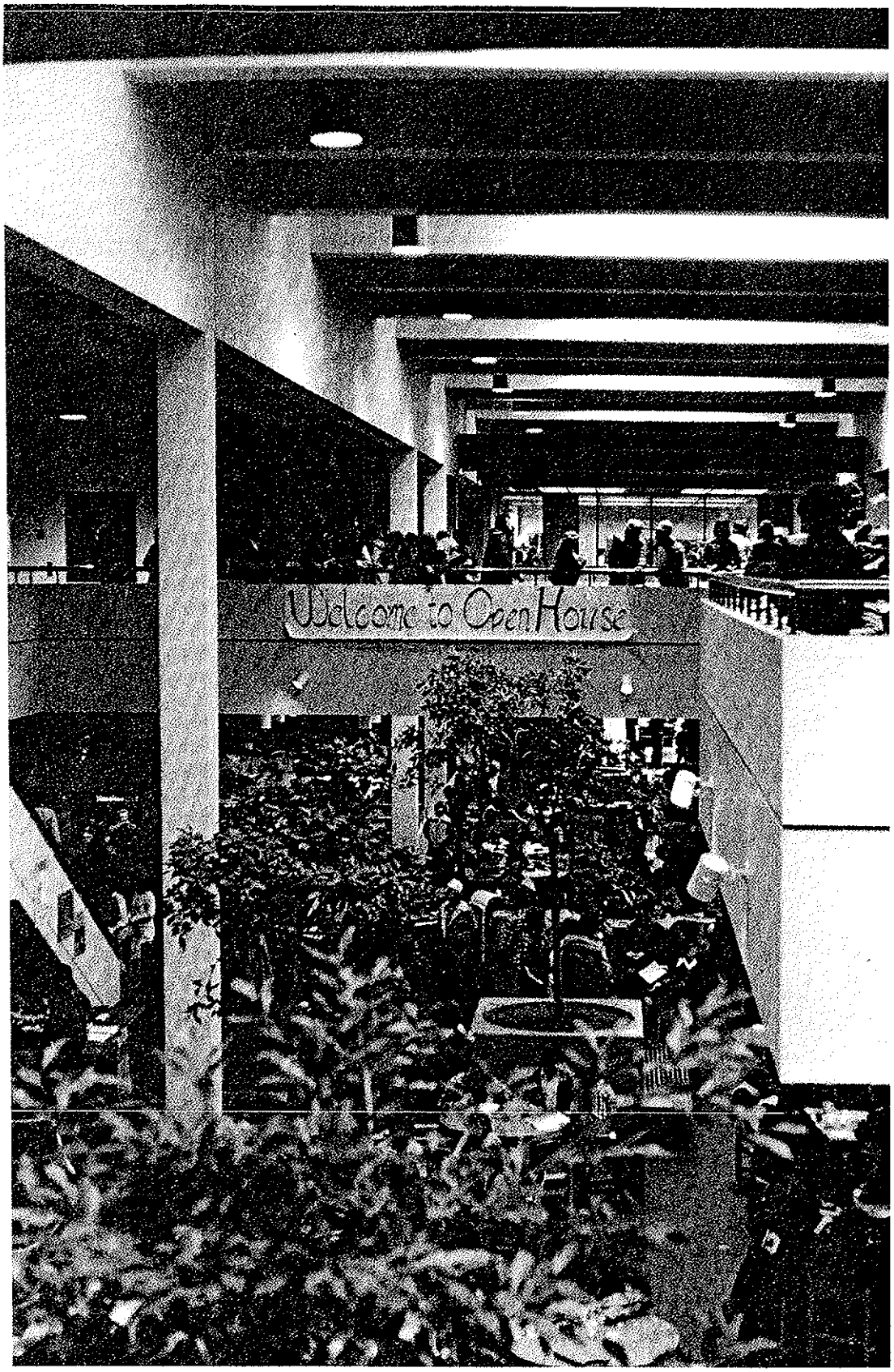
4000 Lancaster Drive N.E.
P.O. Box 14007
Salem, Oregon 97309

Affirmative Action Policy

It is the policy of Chemeketa Community College that discrimination on the grounds of race, color, sex, marital status, national origin, age or handicap will not exist in any area, activity or operation of the college. This policy implements various federal and state laws and regulations such as Federal Executive Orders 11246-11375, sections 503-504 of the Vocational Rehabilitation Act of 1973, Title IX of the Educational Amendments of 1972 and others which require that the college not discriminate on any of the prohibited bases. Persons having questions about the college's educational or employment practices relative to equal opportunity, or who feel that they have been discriminated against, may direct inquiries to the affirmative action coordinator, building 18, 399-5212.

About this Catalog

This catalog is published for information to the general public. Every effort is made to insure accuracy at the time of printing. However, the statements contained here are not to be regarded as an irrevocable contract between a student and the college. Chemeketa reserves the right to make any necessary changes in matters discussed herein, including procedures, policies, calendar, curriculum or course content or emphasis, and costs and to cancel any course if enrollment in it is below a minimum number.



CHEMEKETA COMMUNITY COLLEGE

1981-82 Catalog

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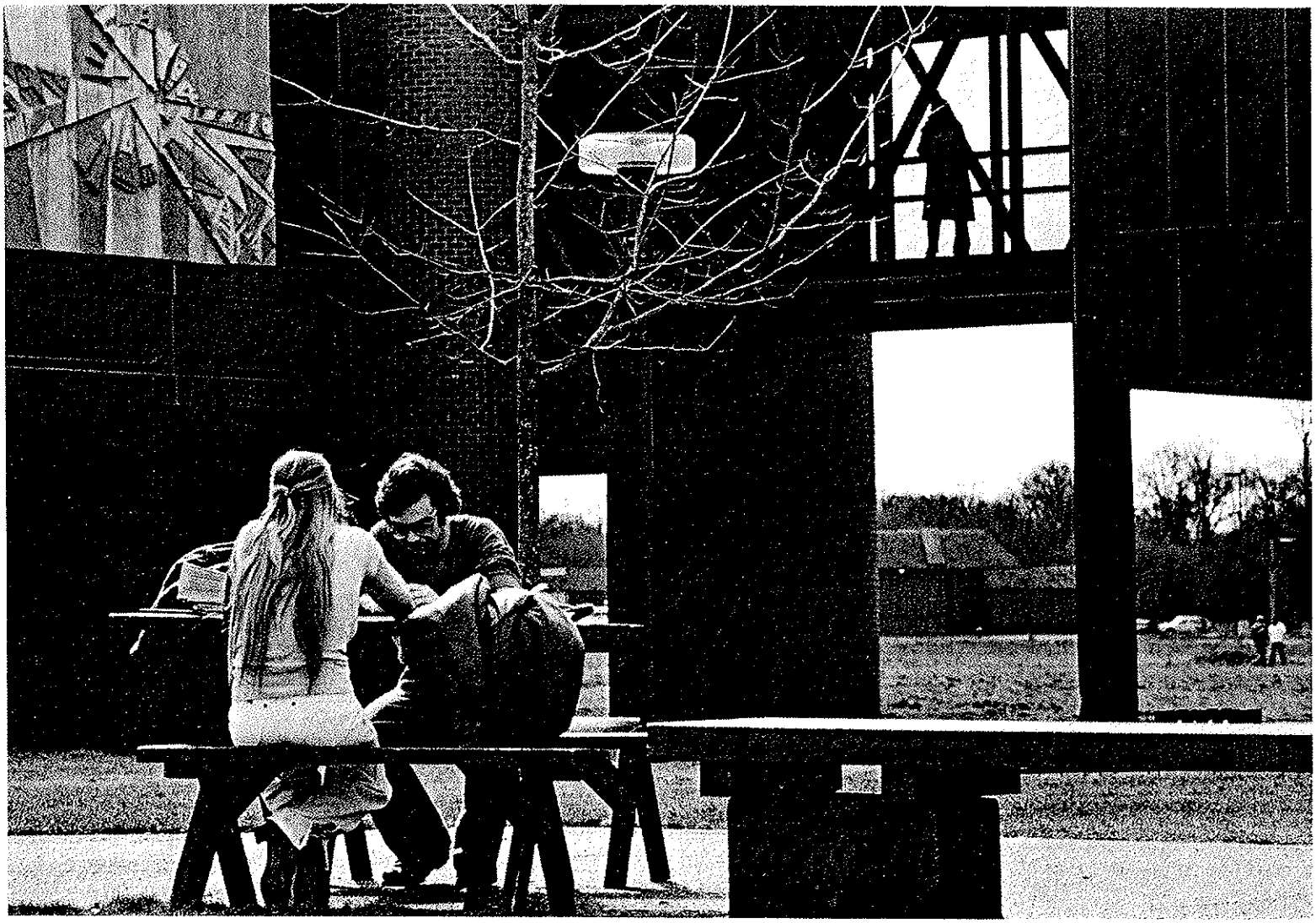


About Chemeketa . . .

Academic Calendar

	Summer 1981	Fall 1981	Winter 1982	Spring 1982
Registration	June 22	Sept. 21-25	Jan. 4	Mar. 29
Classes in regular session	June 23	Sept. 28	Jan. 5	Mar. 30
Holidays		Nov. 11 Nov. 26-27		May 31
Last day to withdraw from classes without responsibility for grades		Dec. 11	Mar. 12	June 4
Review and examination		Dec. 14-17	Mar. 15-18	June 7-10
End of term	Aug. 14	Dec. 18	Mar. 19	June 11
Graduation				June 11

About Chemeketa . . .

Chemeketa Community College is for people, for all the different kinds of people within its district boundaries. The college's goal is to meet the life-long educational needs of these citizens by offering them many educational opportunities. These range from vocational and academic training to personal development and life enrichment.

In planning its programs, Chemeketa responds to the expressed needs and desires of the citizens within the district which includes Marion, Polk, most of Yamhill, and part of Linn counties. This area of over 6,600 square kilometers (2,600 square miles) has a population of more than 290,000 persons. The college aims to offer instructional programs and services which are community based, comprehensive, accessible, and flexible without duplicating programs and services offered by other community agencies.

As a public institution, Chemeketa's financial support comes primarily from local taxes, state allocations, and tuition.

Chemeketa traces its origins to the local school district's Salem Technical Vocational School which was established in 1955 with ten full-time students. The college district was formed in September, 1969. In 1979-80, over 35,000 individuals enrolled in Chemeketa's various programs, classes, and workshops.

The college's 160-acre campus is at 4000 Lancaster Drive N.E., Salem. College centers are located in Dallas, McMinnville, Monmouth, Silverton, Stayton, and Woodburn. Classes are offered in almost 30 communities. They are scheduled days, evenings, and weekends.

Chemeketa received full accreditation by the Northwest Association of Schools and Colleges in December of 1972. In addition, all of Chemeketa's vocational-technical programs are accredited by the Oregon Board of Education. Programs requiring accreditation by professional associations have received those approvals. The Oregon Board of Education has approved Chemeketa's college transfer courses.

Who are Chemeketa's students?

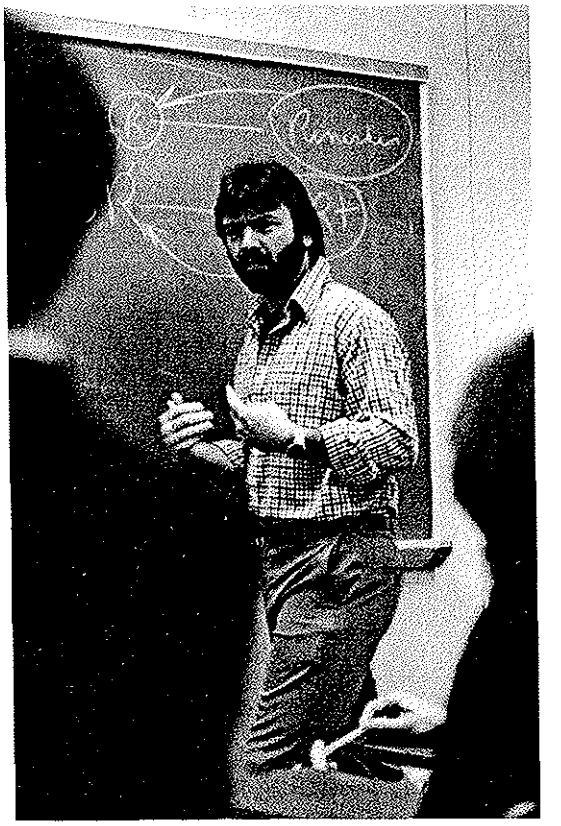
There is no typical Chemeketa student. Students are all ages (the median age in 1979-80 was 31 years) and have many different goals. These include training or re-training for careers, keeping up-to-date in their vocations, continuing their interrupted educations, expanding their knowledge, learning new skills, and getting to know more about themselves and others. As different as they are, Chemeketa's students have something in common – they come to the college to learn.

Some students attend Chemeketa full-time; others go part-time. Many combine work and school.

Approximately two-thirds of the students taking degree or certificate programs on the Salem campus are enrolled in vocational or technical courses. About one-third are taking college transfer classes.

Who are the teachers?

Almost half of Chemeketa's



532 full-time staff members are instructors. In addition, the college employs about 650 part-time teachers each year. Many of them are evening instructors who teach classes directly related to their full-time jobs in the community.

What kind of education does Chemeketa offer?

Chemeketa has three areas of learning opportunities:

Vocational-technical education is for students who want to qualify as workers in specific fields. Chemeketa has more than 40 programs which are planned to meet the needs and demands for workers within the college district.

Graduates receive certificates of completion after successfully completing certain one-year programs. Associate in Science degrees are awarded students who meet the requirements of programs which usually require two years. These time spans are for students attending full-time. However, many students go to Chemeketa part-time, extending their courses of study over a longer period. Through

the college Cooperative Work Experience program, many students work in fields related to their study.

College transfer courses. Chemeketa offers lower division credit courses which may be transferred to most four-year colleges and universities in Oregon. Students who successfully complete Chemeketa's two-year college transfer program may earn an Associate in Arts degree. Also, some of the college's vocational and technical programs include courses which may be transferred for college credit.

Community and continuing education is important at Chemeketa. The college offers credit and non-credit classes, workshops, and short courses to help people learn and improve technical, vocational, avocational, and academic knowledge and skills, to retrain for new positions, and to continue their personal development. These are also opportunities for people to complete high school, earn the equivalent of a high school diploma, and learn English as a second language. A special program helps deaf, hearing impaired, and visually impaired students.

Community and continuing education classes, scheduled in communities throughout the district as well as in Salem, meet during the day, evening, and on weekends. For more information, check the Community and Continuing Education section of this catalog.

Education of the whole person is one of Chemeketa's goals. In its programs, classes, and workshops, the college tries to help students develop their abilities and expand their minds. Therefore, general education classes are included in most of Chemeketa's occupational programs as well as in college transfer curricula.

The college hopes that as students study one subject area in depth, their general education classes will help them increase their self-awareness, appreciate the values of good physical and mental health, become competent in English and mathematics, and gain an understanding of history, governments, and economic systems.

Admission, Registration, Academic Information

Admission (399-5006)

Chemeketa has an "open door" policy. In general, persons may enroll if they are 18 years of age or older and can benefit from the instruction. Students 16 or 17 years of age who have not graduated from high school may enroll only if their high schools release them to come to Chemeketa.

The table on the next page lists the enrollment steps.

The college advises students to meet with a counselor, academic advisor or program staff member before registration. Together they can discuss academic and vocational plans and the requirements for the program in which the student is interested.

Placement Tests (399-5120)

Chemeketa requires all incoming and first-year students who enroll in seven or more credit hours, to take reading, English, and mathematics placement tests. The college also recommends the tests to other students before they register for their first Chemeketa English and math courses. The tests are free.

These are not admissions tests; they measure skill levels to help students choose and their advisors recommend courses suitable for students' abilities.

Enrollment Limitations

Despite Chemeketa's open door policy, the college does not guarantee that a student will be admitted to a particular program. Chemeketa may limit enrollment in a class or program because of lack of staff, space or equipment or may restrict the number of students in an occupational program to the number of workers needed to fill job demands in the college district. Some programs have special admission requirements.

Chemeketa urges interested students to apply early for these programs which may limit enrollment or have special admission requirements:

Automotive Technology
Dental Assisting
Emergency Medical Technology
Fire Protection Technology
Human Resource Technology
Machine Shop
Medical Office Assisting and Health Records
Nursing
Registered Nurse and Licensed Practical Nurse and refresher courses
Visual Communications
Welding
Welding and Fabrication

Applicants who are not accepted in one of these programs may still be admitted to the college. They may apply to enroll in a related pre-vocational program or some other program.

Transfer Credits From Other Colleges (399-5006)

A student may transfer credits from other colleges by requesting those colleges to forward a copy of his or her transcript to the admissions office. Students must then contact the admissions office to begin an evaluation of those transcripts.

Accepted transfer credits become a part of a student's permanent record at

How to Enroll at Chemeketa

Student classification	1. Academic and career decision-making	2. Application for admission	3. Mathematics, reading, and writing placement tests	4. Registration for classes
Full-or part-time Salem campus day students in certificate or degree programs	Contact counseling center (optional)	File application for admission with admissions office, building 22, or counseling center	Contact counseling center	Follow directions sent by admissions office 10 days prior to registration day; on registration day, consult with advisor about classes
Salem campus day students in limited enrollment programs*	Contact counseling center (optional)	Contact admissions office, building 22	Contact counseling center	Follow directions sent by admissions office 10 days prior to registration day; on registration day, consult with advisor about classes
Salem campus day students taking six credit hours or less and not in certificate or degree programs	Contact counseling center (optional)	Application for admission not required	Tests not required but advised if enrolling in English or mathematics; contact counseling center	Consult quarterly schedule of classes; ask about short registration process on registration day
Students attending evening, non-credit and/or weekend classes in Salem	Contact counseling center (optional)	Application for admission not required	Tests not required but may be taken free; contact counseling center	Consult quarterly schedule of classes for registration dates or register at first class session
Students attending classes outside of Salem	Call nearest Chemeketa center (optional)	Application for admission not required	Tests not required but may be taken free; contact nearest Chemeketa center	Consult quarterly schedule of classes; register at local Chemeketa centers

*The following instructional programs require special admission procedures:

Automotive Technology
Dental Assisting
Emergency Medical Technology
Fire Protection
Human Resource Technology
Machine Shop
Medical Office Assisting
(and Health Records)
Nursing (RN, LPN, refresher courses)
Visual Communications
Welding
Welding and Fabrication

Student's Check List

Before you register:

1. If you are a new student, have you
☐ applied for admission to the college? Contact the admission office, Salem campus, building 22, 399-5006.
☐ taken mathematics, reading, and writing placement tests? Contact the counseling center, Salem campus, 399-5120.
☐ checked to find out if there are special admission requirements for the program you want to enter? Contact the admissions office, Salem campus, building 22, 399-5006.

2. Do you know the costs of
☐ special tools, equipment, uniforms, etc. required by your program? Contact the admissions office, Salem campus, building 22, 399-5006.
☐ tuition and fees? Contact the registrar's office, Salem campus, building 22, 399-5001.

3. Have you made arrangements for
☐ transportation?
☐ child care?

4. ☐ Have you inquired about financial aid? Contact the financial aid office, Salem campus, building 22, 399-5018.

5. ☐ Have you checked on your eligibility for Veterans Administration educational benefits? Contact the registrar's office, Salem campus, building 22, 399-5004.

6. ☐ Have you read the term schedule of classes for registration information and class listings? Look in your mail box or contact the counseling center, Salem campus, 399-5120.

Chemeketa. Grades earned are not indicated; only course grades earned at Chemeketa are used in computing grade point averages.

Readmission (399-5006)

Former Chemeketa students who wish to return to the college may apply for readmission by filing a completed application form with the admissions office.

International Students (399-5006)

Students who are citizens of other countries may be asked to meet certain federal immigration and college requirements before being admitted to Chemeketa. They may be expected to maintain certain levels of academic achievement acceptable to the United States Immigration Service and to the college. The admissions office has special application materials for international students.

Members of both Chemeketa's counseling staff and bilingual program are available to help these students.

Registration (399-5001)

After a person has been admitted to Chemeketa he or she may register for classes at the beginning of a term. Registration dates are listed in the academic calendar on page iii. Detailed information is given in the schedule of classes published quarterly.

Registration is closed after the day listed in the academic calendar. (This does not apply to part-time evening classes.)

Class Loads (399-5001)

Students are limited to 22 credit hours per term. Any additional credit hours require special permission of the registrar. Students who are authorized to enroll for more than 22 hours pay additional fees at the designated rate per credit hour.

Class Changes (399-5001)

Students may make changes in their class schedules before the deadline indicated in the academic calendar. These changes should be approved by an academic advisor. Schedule change (add-drop) forms are available in the registrar's office, staff offices, and the counseling center.

Tuition (399-5011)

Tuition and fees are due in full at the time of registration unless a student has made special arrangements with the business office.

Students who carry 12 or more credit hours per term are considered full-time students academically, but when paying tuition, those enrolling in 10 or more credit hours are classified as full-time students.

Tuition rates for 1981-82 are
Full-time in-district students ..... $180 per term
Part-time in-district students.. $18 per credit hour
Full-time out-of-district but in-state students ..... $270 per term
Part-time out-of-district but in-state students.. $27 per credit hour
Full-time out-of-state students ..... $670 per term
Part-time out-of-state students.. $67 per credit hour
Non-credit and apprenticeship students ... $1 per class hour

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

1. Married and a resident of the college district at least three months prior to first registration.
2. Age 18 or over and a resident of the college district at least

three months prior to first registration.

3. A veteran who has established a permanent address inside the college district within three months of separation or discharge from the service.
4. A minor whose parents or legal guardians are bona fide residents of the college district.

Persons who do not meet in-district criteria and whose homes or permanent addresses are in Oregon but outside the Chemeketa Community College district are out-of-district students. Any student whose permanent address is outside Oregon is classed as an out-of-state student.

Certain courses, particularly some professional training classes such as the certified life underwriter series, may require separate registration and tuition. There may be additional charges for some classes to cover the cost of required materials.

Students without other kinds of financial assistance may make arrangements with the business office to defer tuition payments.

Students may not register if they have any financial obligations to the college from prior terms.

The college may cancel a course if enrollment is below a minimum number and the college will refund tuition in full. No refund is granted to a student who has been suspended from the college.

The college board reserves the right to change tuition rates without prior notice.

Books and Supplies (399-5131)

Books and supplies may be purchased at the college store. The cost varies with each program. Normally, the cost ranges from $200 to $350 a year or about $100 to $150 a term.

Other Fees

Locker fee (optional) . . . $2.50
Physical education locker and towel fee $5.00
Laboratory fees vary by the course.

In some programs there are special costs for tools, equipment, uniforms, etc. Contact the admissions office in building 22 on the Salem campus for more information.

Degrees, Certificates, and Graduation Requirements

Graduates of Chemeketa's two-year programs are awarded Associate in Arts or Associate in Science degrees. These are both nationally recognized degrees. Certificates of Completion are awarded to students who meet the requirements of certain one-year programs.

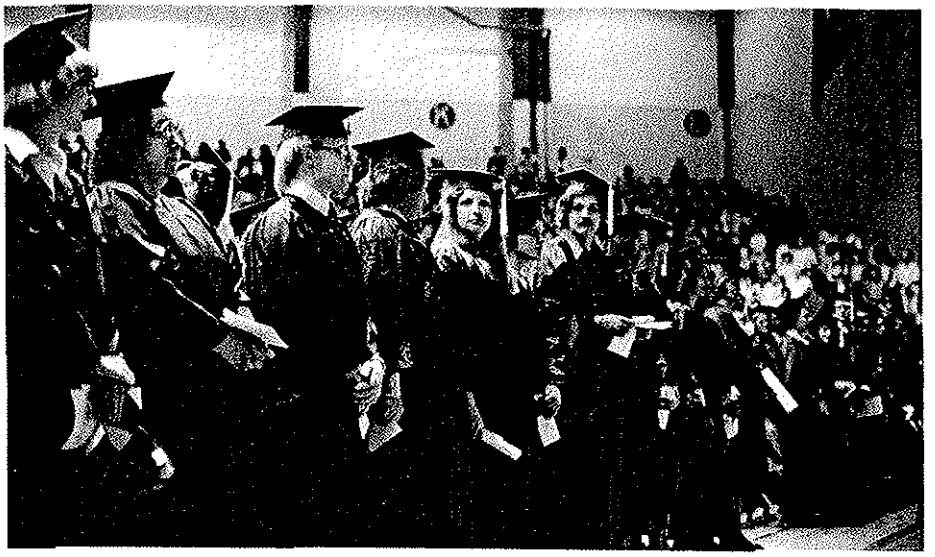
Associate in Arts Degree

To qualify for an Associate in Arts degree, a student must meet these requirements:

1) A minimum of 93 credit hours.
2) A cumulative grade point average 2.0 or above in all work to be applied to the degree.
3) Six credit hours of English composition.
4) One term in personal health.
5) Five terms of physical education (partial or total waiver is available under certain circumstances).
6) One sequence in humanities (English composition sequence does not meet this requirement).
7) One sequence in math or science.
8) One sequence in social science.
9) One additional sequence in humanities, math, science or social science.
10) Completion of a minimum of 30 credit hours at Chemeketa.

Specific course sequences satisfying the above requirements are listed on page 23.

Up to 12 credit hours earned in occupational programs may be applied toward the degree. (Students should be aware that these credit hours may not transfer to a four-year school.)



Associate in Science Degree

Chemeketa awards Associate in Science degrees to students in two-year vocational-technical programs who successfully meet these requirements:

1. Completion of the required courses and credit hours listed for each program (a minimum of 90 credit hours).
2. Completion of minimum of 30 credit hours at Chemeketa.
3. A cumulative grade point average of 2.0 or above for all course credits which apply toward the degree.

Associate in Science Degrees are available in the following areas:

Accounting
Agribusiness/Crop Production
Automotive Technology
Banking and Finance
Building Inspection
Business/Management
Chemical Technology
Civil/Survey Technology
Computer Programming
Criminal Justice
Drafting Technology
Early Childhood Education
Educational Aide
Electronics Technology
Emergency Medical Technology
Fire Protection Technology
Food Service Management
Forest Technology
Human Resource Technology
Industrial Technology
Insurance Technology
Machine Shop
Mechanical Design
Nursing
Real Estate
Secretarial Science
Visual Communications
Welding and Fabrication

Certificate of Completion

General requirements for the Certificate of Completion are:

1. Satisfactory completion of all required courses in the program.
2. A cumulative grade point average of 2.0 or above for all course work to be applied to the certificate.

Certificates of Completion are available in the following areas:

Auto Parts Sales
Building Inspection
Clerical Technology
Commercial Food Production
Computer Operations
Dental Assisting
Early Childhood Education
Educational Aide
Medical Office Assisting
Nursing
Office Occupations
Welding

Graduation

A student, with the guidance of his or her advisor, is responsible for fulfilling the requirements for graduation.

Candidates for graduation fill out applications for degrees or certificates and return the forms to the registrar's office by the fourth week of the academic term preceding the term in which they will meet the program requirements.

Under certain circumstances, a student is allowed to deviate from a prescribed curriculum and still meet graduation requirements. A student who wishes to substitute a course different than a required one may petition the registrar, but is advised to discuss the proposed substitution with his or her program director or academic advisor before filing a petition. If the director approves the substitution and a student can show that it will benefit him or her without detracting from the quality of his or her preparation, the registrar may grant the substitution.

Degrees and certificates are official when graduation information is recorded on a student's transcript. Degrees are conferred once a year at the close of spring term.

Students completing requirements for degrees during the summer term may be included in the preceding June graduation exercises.

Grading System

Final grades are issued at the end of each quarter. Letter grades are assigned points according to the following system:

A Excellent 4
B Good 3
C Average 2
D Below average 1
F Failed 0
P Pass 0
N No Grade Assigned 0
W Withdrawal 0
I Incomplete 0
X Audit 0

The grade point average is computed by dividing the total credit hours (except W, I, P, N, and X) into the total points earned.

An instructor may give an "Incomplete" when in his or her

judgement a student has failed to complete a minor portion of required class work although he or she has attended the class regularly. To remove an "Incomplete," a student must make up the required class work within one year following the term in which he or she received it. The grade is then recorded by the registrar.

Students who do not make up an "Incomplete" within one year must repeat the entire course in order to remove the "Incomplete" from their records. It is a student's responsibility to clear his or her record of "Incompletes" in courses required for graduation.

Repeating a Course

Students may repeat courses in which they earned D, F, W or I grades.

If a student makes a higher grade when he or she repeats the course, it will be substituted when the grade point average is computed. The college suggests that a student confer with an academic advisor before repeating a course.

Credit by Examination (399-5120)

An alternate way for students to earn credits for some courses is to prove their college level ability in them by passing examinations on them successfully. These challenge examinations are prepared by the college department directly responsible for the instruction of the course.

These written comprehensive tests cover all the basic information and skills required of a student who completes the course successfully. For some courses, a performance examination is also required.

For more information about earning college credits by challenge examinations, contact the counseling center.

Independent Study

Chemeketa has an independent study plan to encourage and assist students who show an interest in and readiness to become self-directed learners. Under the direction of a faculty advisor, a student selects a topic which relates to his or her career or program goal and enters into a learning contract.

Content of independent study may include 1) study of a topic not covered in an existing course; 2) in-depth coverage of a topic introduced in a course; 3) field studies; 4) study combined with tutoring sessions, regular meetings with instructors or seminars; 5) service activities.

Auditing Courses (399-5001)

Students who enroll in credit courses but do not wish to receive grades or credits may register as auditors. In order to audit a class, contact the registrar's office before the end of the third week of the term. Auditors pay full tuition fees.

Transcripts of College Credits (399-5001)

Graduates of Chemeketa are entitled to five free transcripts of credits from the registrar. Additional transcripts are available for a fee.

Withdrawal from College (399-5001)

Students who decide to withdraw from Chemeketa may obtain forms from the registrar, staff offices or the counseling center. Students who return the completed forms to the registrar's office within the first two weeks of the term will receive full refunds on the tuition and lab fees they have paid provided they have no outstanding obligations to the business office, library or other college department. Any obligations will be deducted from the refund.

Student insurance purchased through the college cannot be refunded. No refunds less than $5 will be made.

Refunds to students paying tuition with funds issued through Chemeketa's financial aid office will be credited to students' financial aid accounts. However, any outstanding obligations to the college will be deducted from those credits.

A student who leaves Chemeketa without filling out a withdrawal form is responsible for the final grades he or she receives. These will appear on the student's college transcript of credits.

Student Records

Permanent student records, grade reports, and requests for transcripts are processed and maintained by the registrar's office.

Questions?

Call Chemeketa's Salem campus information center.

399-5155

About Student Services

Counseling
(399-5120)

Persons interested in educational, vocational, and personal counseling may contact Chemeketa's counseling center on the Salem campus. People outside of the Salem area may make appointments with a counselor in Chemeketa centers in Dallas, McMinnville, Monmouth, Silverton, Stayton, and Woodburn.

Counselors also administer tests, including English, mathematics, and reading placement tests required for admission to the college, and give admissions information.

District residents may use career information services conducted by the center. These include use of a computer terminal which provides current information on hundreds of careers and includes job descriptions, pay ranges, job requirements, and hiring possibilities in specific areas of Oregon. Counselors also hold free career/life planning workshops.

Academic Advising
(399-5120)

Chemeketa's academic advisors help students plan and carry out their programs of study. At registration, each incoming day student on the Salem campus is assigned an academic advisor from the instructional staff of the program in which he or she is enrolled. Students who have not selected specific programs or major fields of study are assigned advisors from the counseling staff. Students who attend Salem campus classes only in the evening are encouraged to visit the counseling center periodically for academic advising.

Student-Instructor Conferences

Students may confer with their instructors regarding class assignments and methods of study. Office hours are posted in each faculty office area or on office doors. Faculty office directories are posted on main bulletin boards.

Tutoring Services (399-5093)

Chemeketa's center for developmental education on the Salem campus offers classes and tutoring to help students succeed in college classes and programs. In this program, students may discover and identify their skills and develop other skills. There are classes in reading, writing, mathematics, spelling, vocabulary development, study techniques, values clarification, and goal setting. Free tutoring is available.

Instructional help is available for persons who want to earn a high school certificate equivalent to a diploma and for students who want to earn the credits and competencies they need to earn their diplomas. This help is also offered at Chemeketa centers and in a number of towns throughout the college district.

Bilingual Assistance

Bilingual students with limited English skills may receive help at the center for developmental education in improving their knowledge and use of written and spoken English, making career choices, and developing their personal growth.

Services on the Salem campus which may help persons whose native language is not English are:

1. Counseling center, 399-5120, for admissions and career planning assistance.
2. Financial aid office, building 22, 399-5018.
3. English as a Second Language program, building 39, 399-5142.
4. Refugee training program, building 22, 399-5225.

Ethnic studies

Chemeketa offers a variety of courses, seminars, and workshops designed to increase awareness and appreciation of ethnic minorities, their cultures and contributions; and enhance the achievements of ethnic minority students by promoting a positive self-awareness and encourageing self-realization.

Ethnic studies courses employ a variety of approaches and formats. They may be interdisciplinary lower division college transfer courses or may be specifically designed for one or more occupational/technical programs. Chemeketa also offers short workshops to meet specific community requests. The focus of the courses varies according to the needs and requests of students.

Aid for Deaf and Hearing or Visually Impaired Students (399-5049)

Deaf, hearing impaired, and visually impaired students receive special help at Chemeketa. Support services for these students include counseling, interpreting, note taking, tutoring, reading, and special equipment.

Special classes for deaf and hearing impaired students include language development and basic reading. In addition, Chemeketa offers five levels of sign language classes.

Handicapped Students

Chemeketa's major buildings on the Salem campus are specially designed to provide access for handicapped students.

Veterans Services (399-5004)

Information on Veterans Administration policies, procedures, and approved programs of instruction is available from the veterans' clerk in the registrar's office. A veteran's application for certification and any necessary supporting documents (DD214, etc.) are processed according to VA regulations, and certification information is forwarded to the VA regional office in Portland. Usually this completes the application process for VA educational benefits. This application is separate from application for admission to the college.

Policy of Satisfactory Progress: In accordance with a Veterans Administration directive, persons who receive veterans' educational benefits who are enrolled half-time (six credit hours) to full-time (12 credit hours) must comply with the following regulations:

1. Must not exceed 44 deficiency course units over a two-year period.
2. Must accumulate a minimum grade point average of 2.0 in his or her program. GPA is based on A=4, B=3, C=2, D=1, and F=0.
3. Must make any changes which affect his or her certification status by the end of the fourth week of a term. After that veterans are responsible for completing all credit hours in which they are enrolled.

If veteran students fall below a 2.0 GPA or do not satisfactorily complete the required hours indicated above, the veterans' clerk advises them that they are on probation. If students fail to maintain the GPA and/or credit hour requirements for two consecutive terms, notice of unsatisfactory progress is recorded and forwarded to the VA regional office in Portland.

Once placed on unsatisfactory progress, veterans must enroll for and complete one term before the veterans' clerk will submit their records to the VA for re-certification. During this

term, veterans must maintain the same credit hour level as when certified and attain a minimum 2.0 GPA for the term.

Financial Aid (399-5018)

Students who cannot pay the full cost of attending Chemeketa may apply for loans, grants, and/or part-time jobs through Chemeketa's financial aid office in building 22 on the Salem campus.

Persons applying for government aid programs must file a Financial Aid form and must also fill out Chemeketa's financial aid forms. As funds are limited, students should apply at least three months before the start of a term.

Students applying only for Basic Educational Opportunity Grants are required to register for at least six credit hours. There is no charge for filing this application. Applicants for all other financial aid must register for 12 or more credit hours and pay a minimum fee of $9 for processing by the College Scholarship Need Analysis Service.

Applicants must prove their financial needs to be eligible for the following:

Basic Educational Opportunity Grants-$50 to $950 per year.

Oregon State Need Grants-$200 to $600 per year, may be transferred to other Oregon colleges and universities.

Supplemental Opportunity Grants-$200 to $1000 per year for exceptional need.

College Work Study-employment averaging 12 hours per week during school terms; pays minimum wage or higher.

National Direct Student Loan-long-term, low-interest loans up to $1500 per year; average, $600.

Nursing Loan-For first-year nursing students; apply before July 17, 1981.

Nursing Scholarship-For second nursing students; apply before July 17, 1981.

Guaranteed Student Loan-Low interest loans of up to $1500 per year.

Proof of need is not required for the following:

Law Enforcement Education Program-Tuition aid for working law enforcement personnel.

Chemeketa Tuition Grants-One grant for a graduating senior from each high school in the college district; apply in the spring. Contact high school counselors.

Chemeketa Endowment Loan Fund-$50 to $300 30-day loans.

Scholarship-Awards by local clubs, organizations, and individuals. Separate application may be required for these.

Deferred tuition-Three equal monthly payments arranged with the business office.

After a students's need and eligibility have been determined, the financial aid office offers him or her a financial support package which draws upon the following sources, as funds are available, in this order:

1. Basic Educational Opportunity Grant
2. Oregon State Scholarship Commission grant and cash awards
3. Nursing Scholarship
4. Nursing Loan
5. Other scholarships
6. National Direct Student Loans
7. College Work Study
8. Guaranteed or Federally Insured Student Loans
9. Supplemental Educational Opportunity Grants

In general, to continue receiving financial aid, students must remain enrolled for at least 12 credit hours and must maintain a 2.0 grade point average. Three-quarter-time students must maintain the 2.0 average in at least nine credit hours and half-time students in at least six credit hours.

If a student's GPA falls below 2.0, the financial aid office reviews his or her progress and may cut off the aid or may allow the student one more term to raise his or her GPA. If a student still does not meet this standard, the office will discontinue further help unless it decides extenuating circumstances caused the lower GPA.

Chemeketa's financial aid office provides information on procedures for applying for help, eligibility requirements, rights and responsibilities of students receiving help, methods and frequency of payments, terms of loans, sample loan repayment schedules, general conditions of employment provided as aid, and the criteria used for selecting recipients and determining and re-establishing their eligibility for financial help.

Job Placement (399-5026)

Students seeking part-time jobs while in school or employment after graduation may use Chemeketa's job placement service in the Work Related Experience office in building 22 on the Salem campus.

The office posts job openings, researches job markets, coordinates on-campus employment interviews, helps students prepare resumes and applications and keeps a placement file for each student looking for work.

Cooperative Work Experience (399-5026)

Cooperative Work Experience at Chemeketa is a personalized program which allows students to combine classroom studies with related job experiences. CWE coordinators work with students in this program.

Students may find jobs on their own or a CWE coordinator may help them locate positions. The college must approve work training sites. Job supervisors and students work together on individual training plans which relate to classroom studies.

The students may work either for pay or not.

This on-the-job training helps students establish references for future employment and gain firsthand looks at particular kinds of work while earning college credit. The number of hours on the job per week determines the number of credits earned.

Many of the college's vocational and technical programs include CWE either as an elective or as a graduation requirement as indicated in description of those programs in this catalog.

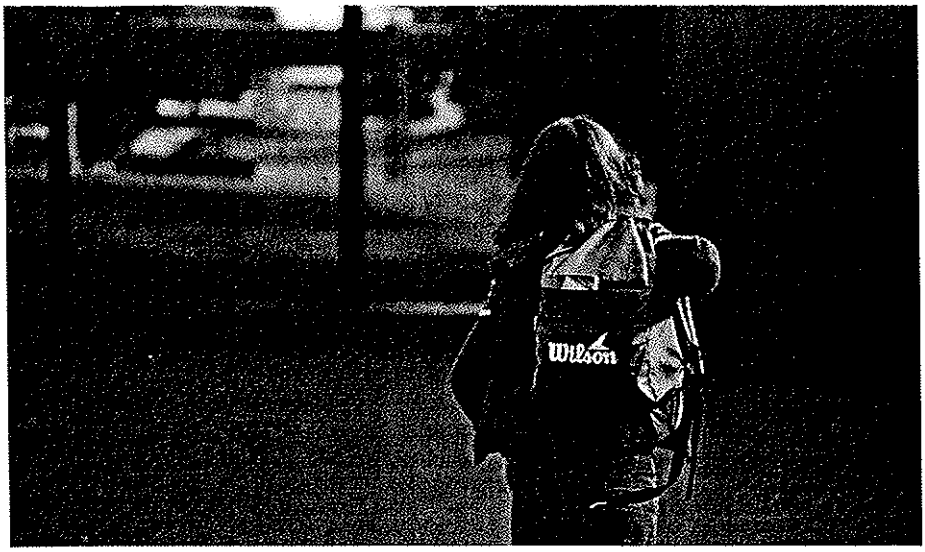
Library/Learning Center (399-5043)

Chemeketa's learning center on the Salem campus includes the library, audiovisual services, and the planetarium/multimedia theater.

The library contains about 47,000 books and over 1,400 periodicals. The audiovisual department houses the college's non-print collection plus a wide variety of media resources. There is a television studio for producing instructional videotapes.

Free programs for the public are presented in the planetarium/multimedia theater which also serves as a special classroom.

The college library is part of the Chemeketa Cooperative Regional Library Service, which includes 17 public libraries in the college district and the Oregon State Library. This cooperative tax-supported effort provides public library service to district residents who do not have access to a local library. Among the benefits are a "universal" library card which may be used at any participating library, courier book service between libraries, reference service, and books-by-mail for residents who do not have access to public libraries.



Miscellaneous Information

Motor Vehicles on Salem Campus (399-5023)

Chemeketa students and staff who own and/or drive motor vehicles on the Salem campus during the day are required to have college parking permits. These free permits are available at registration at the security office in building 22. Visitors may park in designated areas without permits.

Parking a motor vehicle on the campus without a proper permit may result in a fine. Students and staff are responsible for knowing the regulations for operating a motor vehicle on campus and are held responsible for any violations of those rules. This applies to any vehicle in their possession regardless of who is operating it.

Specific information on parking and traffic regulations is available at the security office.

Pets on Campus

Seeing-eye dogs are the only animals which may be brought on the college campus.

Child Care (399-5174)

Chemeketa has a short-term child care center for children of Chemeketa students.

Student Living Accommodations

Chemeketa does not provide living accommodations and assumes no responsibility for student living arrangements. However, the student activities office on the Salem campus lists some housing available to students in the Salem area.

Student Health Services (399-5023)

Chemeketa's first aid office is in building 22, room 113. Because the college has no physician, students must rely upon their personal physicians, dentists or clinics, to meet their medical needs.

Student Health and Accident Insurance (399-5011)

Health and accident insurance is available for students and their dependents. For information contact the counseling center or the business office.

About Student Life at Chemeketa

Student Activities (399-5116)

Chemeketa aims to meet the educational, recreational and social needs of students with an integrated program of student activities developed in response to expressed student interests and needs.

With the guidance of the student activities office and the assistance of faculty members, students assume most of the responsibilities for Salem campus activities. They establish and administer most co-curricular activities, determine campus social programs, and help maintain the discipline essential to an academic community. Activities vary throughout the year, depending upon student interests.

Each student is encouraged to participate in activities which interest him or her. For more information contact officers of student organizations and/or the student activities office on the Salem campus.

Student Government (399-5118)

All Chemeketa students are members of the Associated Students of Chemeketa Community College (ASCCC). Aware that student activities are an integral part of a total education, ASCCC encourages all its members to participate in its programs as much as possible. Each ASCCC officer has special areas of responsibilities.

The **president** works closely with the student senate and represents ASCCC at official functions.

The **vice-president** presides over the student senate and oversees activities of campus clubs.

The **activities coordinator** helps plan ASCCC-sponsored events.

The **publicity coordinator** works with the activities coordinator in promoting and publicizing ASCCC-sponsored and campus club activities.

The **executive secretary** prepares agendas and keeps minutes of all ASCCC meetings.

The **business manager** is responsible for ASCCC financial records and expenditures and prepares the budget.

The **historian/parlimentarian** keeps all ASCCC records, makes final parlimentary decisions, and conducts assigned research.

The **student senate,** composed of 19 students from various curricula, meets weekly. All students are encouraged to attend the open meetings.

ASCCC Activities

ASCCC sponsors films, dances, concerts, excursions, lectures, and a variety of entertaining, educational, recreational, and cultural activities, planned for a variety of age and interest groups, campus and community-wide.

Student Clubs and Organizations

The following clubs have been chartered by ASCCC and are active on the Chemeketa campus:

Agriculture Club - Open to students interested in agriculture.

American Society of Certified Engineering Technicians (ASCET) - Open to persons interested in careers in engineering technology. Members may continue to affiliate with the national organization after graduation.

American Welding Society, Student Chapter - Aims to increase student awareness of the welding industry and enhance student learning through studies of results of welding research and the development of welding processes.

Arab Club - For students of Arab descent or those interested in Arab culture.

Automotive Club - Sponsors special projects for students interested in the automotive field.

Bowling Club - Open to students, staff members, and their spouses.

Chemeketa Indian Club - Deals with problems peculiar to Native American students and organizes social activities which reflect and enhance Native American culture.

Chess Club - Promotes the game of chess and participation in tournaments. Open to students, staff members, and their spouses.

Chinese Club - Promotes interest in the Chinese language, culture, and a Chinese study program.

Christian Fellowship Association - Non-denominational Christian fellowship featuring guest speakers and music.

Data Processing Club - Endeavors to strengthen confidence, improve scholarship and hold group projects to develop data processing skills.

Drama Club - For students and staff members who want to participate in dramatic activities, mostly short plays.

Early Childhood Education Club - A service and social organization which holds social activities and publicizes Chemeketa's early childhood program through public service.

Fencing Club - Promotes the art of fencing, advances the skills of present and future fencers, and represents Chemeketa in fencing tournaments.

Fire Protection Club - Publicizes Chemeketa's fire protection program through public service and provides social activities for its members.

Foosball Club - Open to students and staff interested in learning and playing foosball. Promotes tournaments and other special activities.

Forestry Club - Promotes, publicizes, and tries to create public awareness of the forest technology program and industry. Represents and promotes the needs of Chemeketa's forest techonology students.

Fotographics Club - Open to students who are interested in the visual communications industry.

Gourmet Club - Promotes gourmet cooking, provides public service, encourages individual and group improvement, and brings together food service students and alumni.

Human Resouces Technology Club - Advocates the recognition, acceptance, and use of para-professionals in the human service field, both public and private.

International Conference of Building Officials (ICBO) - Open to students and staff interested in building inspection and its plans. Investigates and discusses safety principles in the construction, occupancy, and location of buildings and related structures.

International Student Association - Provides and promotes orientation for foreign students new on campus, and develops awareness of their particular cultures.

Juntos Club - For students of Spanish-American descent and anyone interested in the Chicano culture.

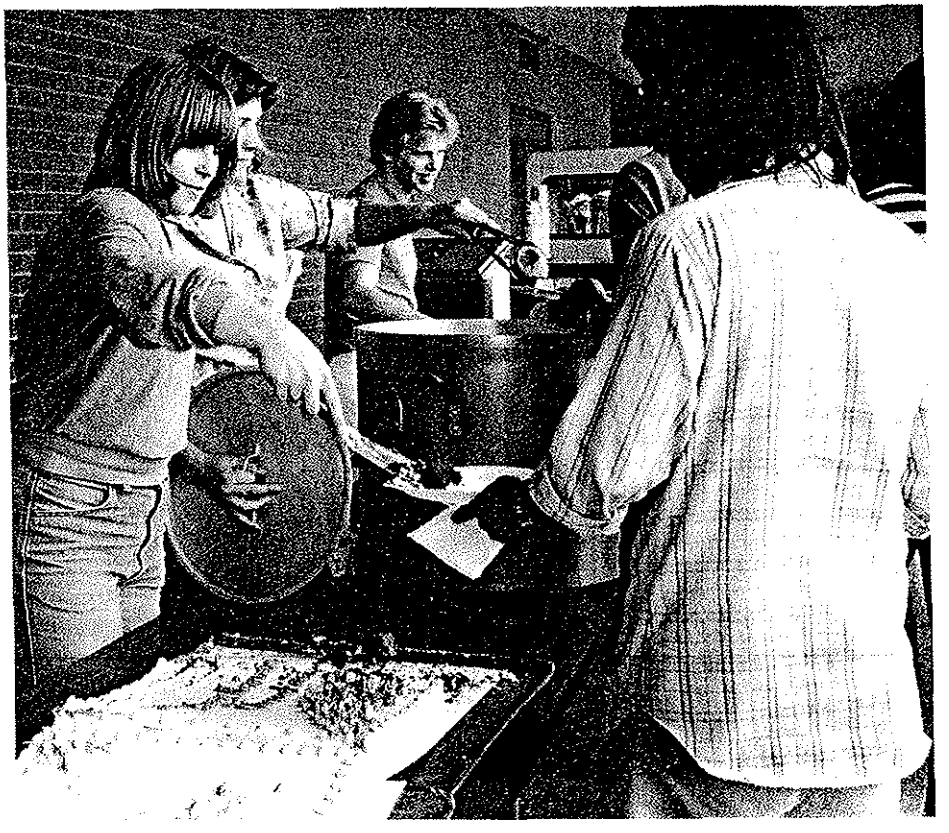
Karate Club - Promotes the sport of karate and holds social activities.

Latter Day Saints Organization - Organized for the fellowship of members of the Church of Jesus Christ of Latter Day Saints but open to anyone.

Medical Assistants Club - Promotes the medical assisting program, provides public service and employment opportunities, and promotes individual and group improvement.

Phi Beta Lambda - A national service organization for students in post-secondary schools, colleges or universities who are preparing for careers in business or business education.

Pool Club - For students and staff interested in learning and playing pocket billiards and promoting worthwhile competition.



Ski Club - Promotes interest and involvement in snow skiing. The club frequently organizes weekend ski trips.

Society of Manufacturing Engineers (SME) - Promotes interest in the advancement of the manufacturing sciences.

Sports Club - Promotes sports and spirit for Chemeketa's sports program and provides financial aid to encourage local athletes to attend Chemeketa.

Student Emergency Medical Technician Association of Chemeketa (SEMTAC) - Promotes emergency medical technology and Chemeketa's program, public service, individual and group improvement, and employment.

Student Nurses of Oregon (SNO) - The Salem chapter of Student Nurses of Oregon, open to students in the associate degree nursing program. Assists in preparing student nurses to assume professional responsibilities.

Table Tennis Club - Encourages participation in table tennis and promotes tournaments in the community and with other community colleges.

Veterans Club - A service and social organization open to any man or woman who has served in the armed forces of the United States.

Women for Change - A resource for women at Chemeketa. Provides programs of interest to women and of benefit to the community and offers support and assistance.

Writers Club - Publishes a journal, *Before the Sun,* each spring. Open to students and staff. Schedules frequent readings to allow members to share their work.

New Ideas Welcome

Students interested in organizing new clubs or organizations may contact the student activities office for information on abtaining a charter.

Ideas for activities and excursions are also welcome. Planning is done with students' interests foremost.

Student Newspaper (399-5134)

Chemeketa's student newspaper, *Courier 4,* is published weekly during fall, winter, and spring quarters. Written and prepared by journalism students and printed by students of the visual communications program, the newspaper has established a consistently high rating in national competition (Associated Collegiate Press). *Courier 4* is an associate member of the Oregon Newspaper Publishers Association.

Students interested in working on the student newspaper as reporters, editors or photographers may apply for staff positions through the newspaper advisor.

Athletics (399-5081)

Throughout the year, Chemeketa students participate in a variety of intramural activities including bowling, volleyball, softball, basketball, skiing, and golf.

Participation in intercollegiate sports is based on the requirements of the National Junior College Athletic Association. Chemeketa is a member of that association and of the Oregon Community College Athletic Association whose members abide by the rules of the NJCAA as a minimum standard. Chemeketa students participating in sports must be taking 10 credit hours and maintain a GPA of at least 1.5.

Interscholastic sports require special insurance coverage and a physical examination, provided by the college at no cost to the student. Participating students may obtain information at the physical education department office.

Student Rights and Responsibilities

The following Student Rights and Responsibilities document was approved by Chemeketa's Board of Education in 1977.

1.0 **Preamble**

Chemeketa Community College is dedicated to the philosophy that the greatest well-being accrues to the individual, the community and the society only when each individual is accorded the opportunity to define and pursue legitimate interests and discover and develop abilities to the maximum of individual potential.

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the larger community. Students should exercise their freedom with responsibility.

The College and students are members of a democratic society and are responsible to the laws, rights and responsibilities of the society. The college sets direction and solves problems on the campus according to the laws, rights and responsibilities of the society. When those documents are not specific, they will be supplemented by the decisions or policies adopted by the College Board.

2.0 **Definitions**

2.1 **College** shall mean Chemeketa Community College.

2.2 **College Board** shall mean the Board of Education.

2.3 **Staff** shall mean any employee of the College, both full-and part-time, management, professional staff, and classified.

2.4 **Student** shall mean any person enrolled in any class at Chemeketa Community College.

2.5 **Associated Students of Chemeketa Community College** (ASCCC) shall mean the official organization of the student body, made up of currently enrolled students at Chemeketa Community College.

2.6 **ASCCC Student Senate** shall consist of student representatives of the student body elected by the students according to the ASCCC Constitution and Bylaws.

2.7 **Official club** and **organization** shall mean a group of students and staff who have complied with the formal requirements of the College and ASCCC to gain recognition to operate on the campus as an official organization.

2.8 **The College Affairs Committee** shall be composed of students and staff and will conduct hearings on violations of rights and responsibilities.

3.0 **Rights**

3.1 Access to education

3.1.1 Within the limits of its resources and facilities Chemeketa Community College shall be open to applicants who are qualified according to current admission requirements.

3.1.2. Each student has the right to be informed about class requirements, College policy and procedures.

3.1.3 No student's access to education shall be inhibited by prejudiced or capricious academic evaluation. Students shall not be evaluated on the basis of opinions or conduct in matter unrelated to educational standards.

3.1.4 Each student shall have the right of participation in evaluation of course content and educational standards.

3.1.5 If a student is charged with a violation of law not related to his activities as a student, the matter shall be of no disciplinary concern to the College, unless the student is incarcerated and cannot comply with educational requirements.

3.2 Access to facilities

3.2.1 Students, official clubs, and organizations may utilize available College facilities according to College policy and procedures.

3.3 Provisions of confidentiality

3.3.1 Student records and information are protected and governed by federal and state laws and Chemeketa Community College Student Records Policy.

3.3.2 Information about student views, beliefs, private activities and political association which is acquired or learned in the course of their work is to be treated with professional judgment and confidentiality.

3.3.3 Professional evaluations and judgments of ability and character may be provided under appropriate circumstances, with the prior knowledge and consent of a student.

3.4 Provisions of association

3.4.1 Policy governing clubs and organizations shall be established by the College Board. Procedures for establishment, maintenance, and financial management of clubs and organizations shall be established by the College and ASCCC Student Senate.

3.4.2 Official club and organization membership shall be open to students without regard to race, national origin, sex, age, marital status, religion or handicap.

3.4.3 Students, clubs or organizations shall not speak or represent a point of view on behalf of the College without express authorization from the College President, or designee, or may not represent the views of ASCCC without express authorization from the ASCCC Student Senate.

3.5 Provisions of expression

3.5.1 Students may express their views on College policy or matters of general interest, and may support causes by any orderly means which does not disrupt the operation of the College.

3.5.2 In the classroom, a student may take exception to the information or views offered in the course of study and reserve judgment about matters of opinion, but is responsible for learning the content of the course.

3.5.3 Chemeketa Community College, as publisher, bears in conjunction with the staff of student publications, the responsibility for the content of the publication. The publication shall adhere to all applicable Oregon statutes, such as those regarding mass communications.

3.5.4 The student newspaper shall be governed by the "Student Newspaper Policies and

Procedures" and shall follow the Canons of Journalism (American Society of Newspaper Editors).

3.5.5 Student publications shall state that the opinions expressed are not necessarily those of the College or student body.

4.0 **Responsibilities**

4.1 Each student has the responsibility to obey and follow College policy and procedures and the ASCCC Constitution and Bylaws. The ASCCC Constitution, Bylaws, College policy and procedures, shall provide means for student involvement and participation in the formulation and alteration of College policies and procedures regarding academic and student affairs.

4.2 Students are responsible to respect the rights of others and not interfere with the exercise of those rights.

4.3 Each student is responsible for the effects of his/her decisions and behavior. Examples of decisions and behavior which become destructive to the educational goals and processes of Chemeketa Community College include, but are not limited to, the following:

4.3.1 Failure to maintain complete academic honesty, e.g., cheating, plagiarism, or knowingly furnishing false information.

4.3.2 Falsification, forgery, alteration or misuse of college documents, records, keys, ASCCC card or other student identification.

4.3.3 Unauthorized entry or use of College-owned or controlled property, equipment, facilities, and blocking access to or from such areas.

4.3.4 Hazing, physical or verbal, that injures, degrades, harasses, or disgraces another person.

4.3.5 Failure to comply with directions of College staff acting in the performance of their duties.

4.4 The student is responsible to maintain standards of academic performance and contribute to the learning environment of the College.

5.0 **Procedural Due Process for Violations of Rights and Responsibilities**

5.1 Student Violations

5.1.1 The persons involved shall attempt to resolve the issue by personal contact, if possible.

5.1.2 If no agreement is reached, the persons involved shall then consult with the Dean of Student Personnel Services who will then attempt to resolve the issue.

5.1.3 If unresolved, the charges concerning the alleged violations shall be referred to the College Affairs Committee for a hearing. The Committee shall proceed as follows:

5.1.3.1 The Committee chairperson must notify the charged person in writing within one week of the hearing time, place and date and must include the specific alleged violation.

5.1.3.2 The person charged with violation then has 48 hours in which to reschedule the meeting time.

5.1.3.3 The person may be represented by counsel and may present evidence and witnesses of his own choosing.

5.1.3.4 If the person charged fails to appear for the hearing or agrees not to contest the case, in writing, the Committee shall review the evidence and prescribe the appropriate action.

5.1.3.5 The Committee shall recommend appropriate action to the College President, such as:

A. Statement of fact: a written report of the facts indicating there has been no violation.

B. Admonition: an oral statement to a person that is violating, or has violated, College policy or procedures.

C. Warning: notice that continuation or repetition of conduct found wrongful may be cause for more severe sanctions.

D. Censure: a written reprimand for violations with or without stipulation regarding forfeiture of privileges.

E. Restitution: appropriate restoration or amends.

F. Suspension: dismissal from the College for a specified period of time.

G. Expulsion: permanent or conditional separation from the College. The conditions of readmission, if any, shall be stated in the order of expulsion.

5.1.3.6 An appeal must be requested within one week of the College President's action. Minutes of the College Affairs Committee hearing shall be forwarded to the College Board Chairperson. The College Board may schedule a hearing to determine final action.

5.2 College Violation

5.2.1 Students who feel they have been aggrieved by a policy, procedure, staff member, or College action, have the following procedural due process available to them:

5.2.1.1 If a student believes to have been unfairly treated and has a grievance against a policy, procedure, staff member, or College action, the student should first discuss the matter with the person or persons involved.

5.2.1.2 If the student feels that a satisfactory solution cannot be reached, assistance should be requested of the Dean of Student Personnel Services.

5.2.1.3 If the student is not satisfied with the attempted resolution, the person may request a hearing of the College Affairs Committee.

5.2.1.4 The committee shall proceed as follows:

A. The Committee Chairperson shall notify, in writing, the members of the College Community involved within one week of the hearing time, place and date, and must include the specific alleged violation.

B. The hearing must be rescheduled within 48 hours.

C. Evidence and witnesses may be presented and heard.

D. The Committee shall recommend appropriate action to the College President.

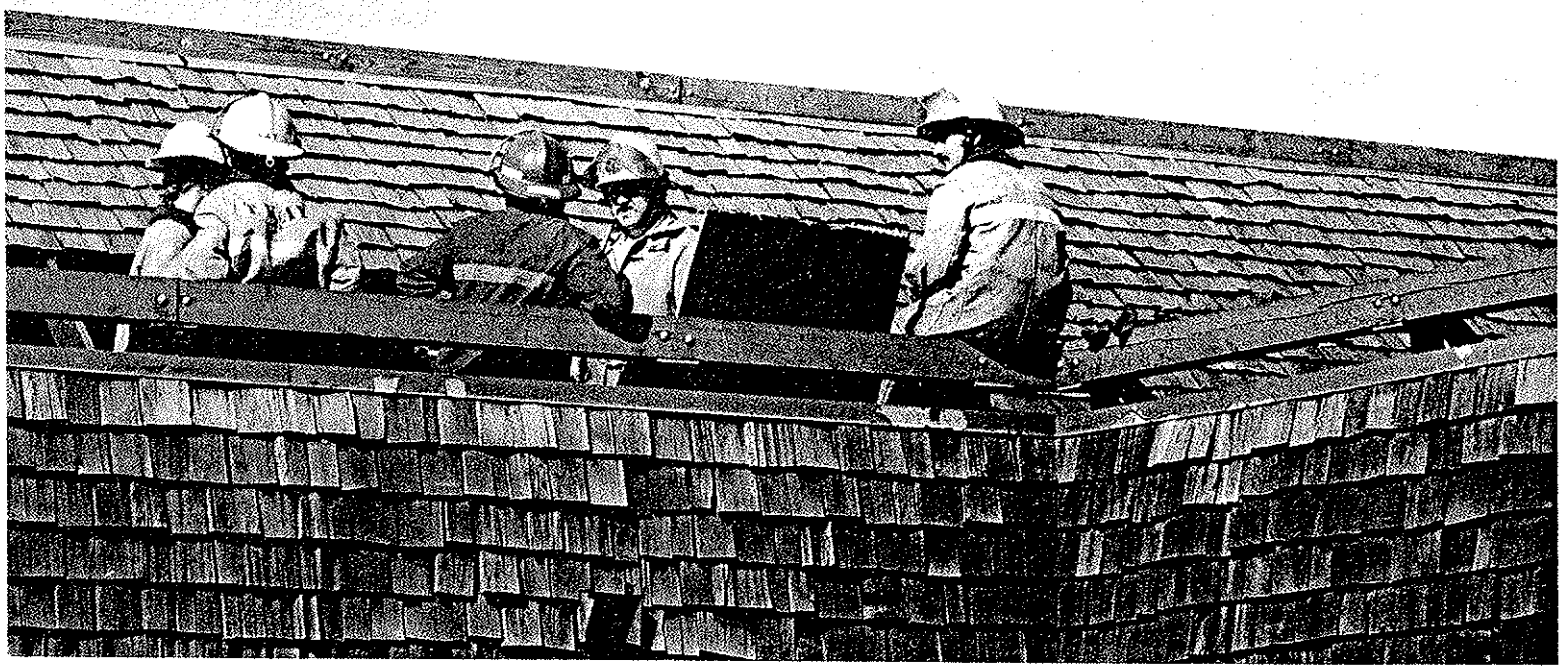
5.2.1.5 An appeal must be requested within one week of the College President's action. Minutes of the College Affairs Committee hearing shall be forwarded to the College Board Chairperson. The College Board may schedule a hearing to determine final action.

6.0 **Amending Procedures**

6.1 This Policy shall be amended through the following procedure:

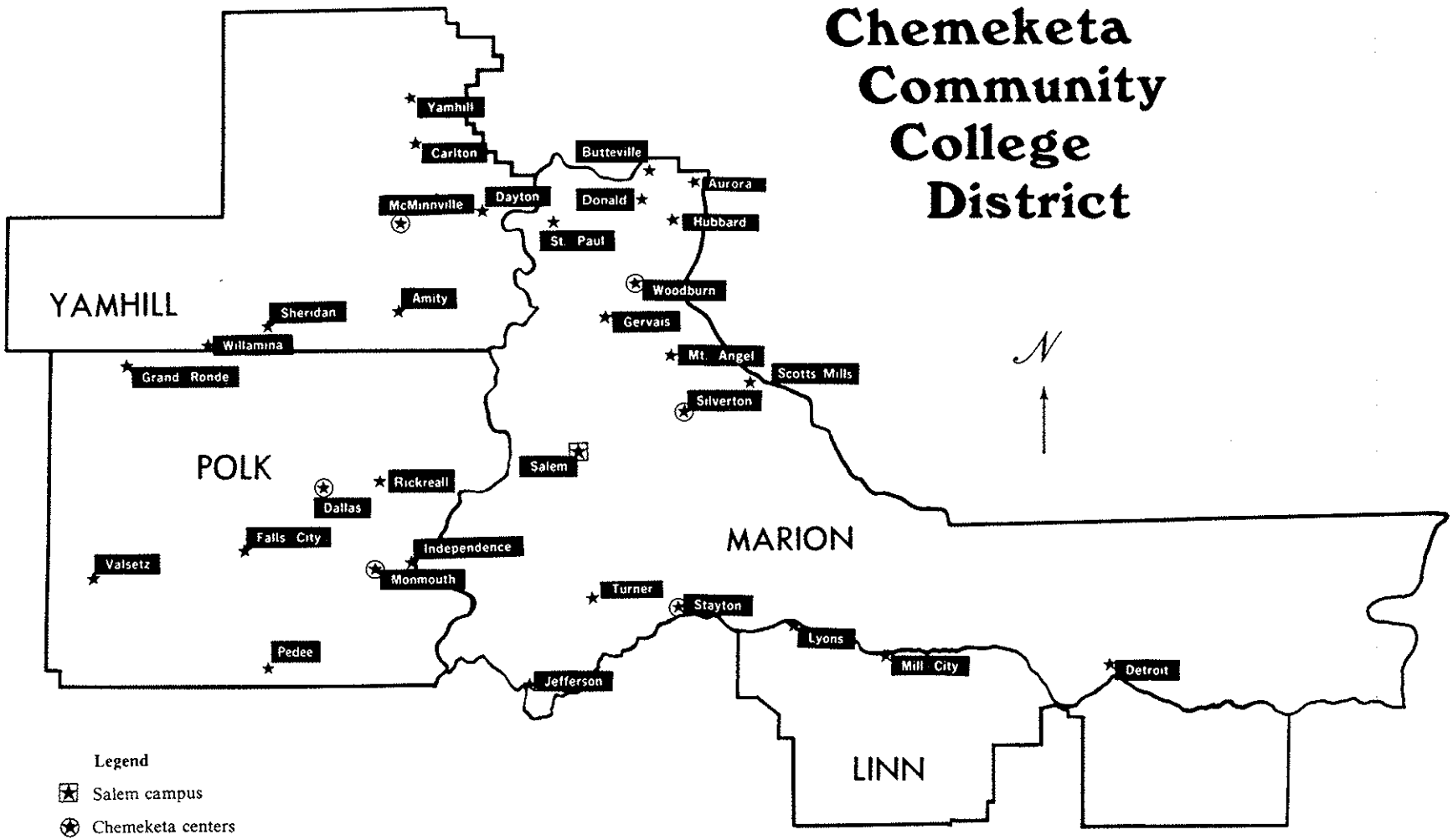
6.1.1 Proposed amendments will be submitted to the Dean of Student Personnel Services. The amendments shall be reviewed by on-campus groups and responses forwarded to the College President.

6.1.2 The College Board shall review and take action on amendments.



Community and Continuing Education

Chemeketa Community College District



Legend

- Salem campus
- Chemeketa centers
- ★ Other communities where Chemeketa classes are held.

The college district is the college campus. In addition to the Salem campus, Chemeketa has centers in six towns and offers classes in many communities in the district.

About Community and Continuing Education

Chemeketa's campus is the entire college district and it is the Community and Continuing Education division which carries the college's instruction to people where they live.

The division, committed to helping adults find self-fulfillment through education, offers a variety of credit and non-credit classes in many locations. These classes, workshops, seminars and special programs meet on the Salem campus and at other locations in Salem; Chemeketa centers at Dallas, McMinnville, Monmouth-Independence, Silverton, Stayton, and Woodburn schedule classes in their towns and in other communities in their areas.

Community and continuing education classes meet during the day, evening, and on weekends. More that 30,000 persons enrolled in these classes during the 1979-80 academic year. Many classes are offered in response to requests.

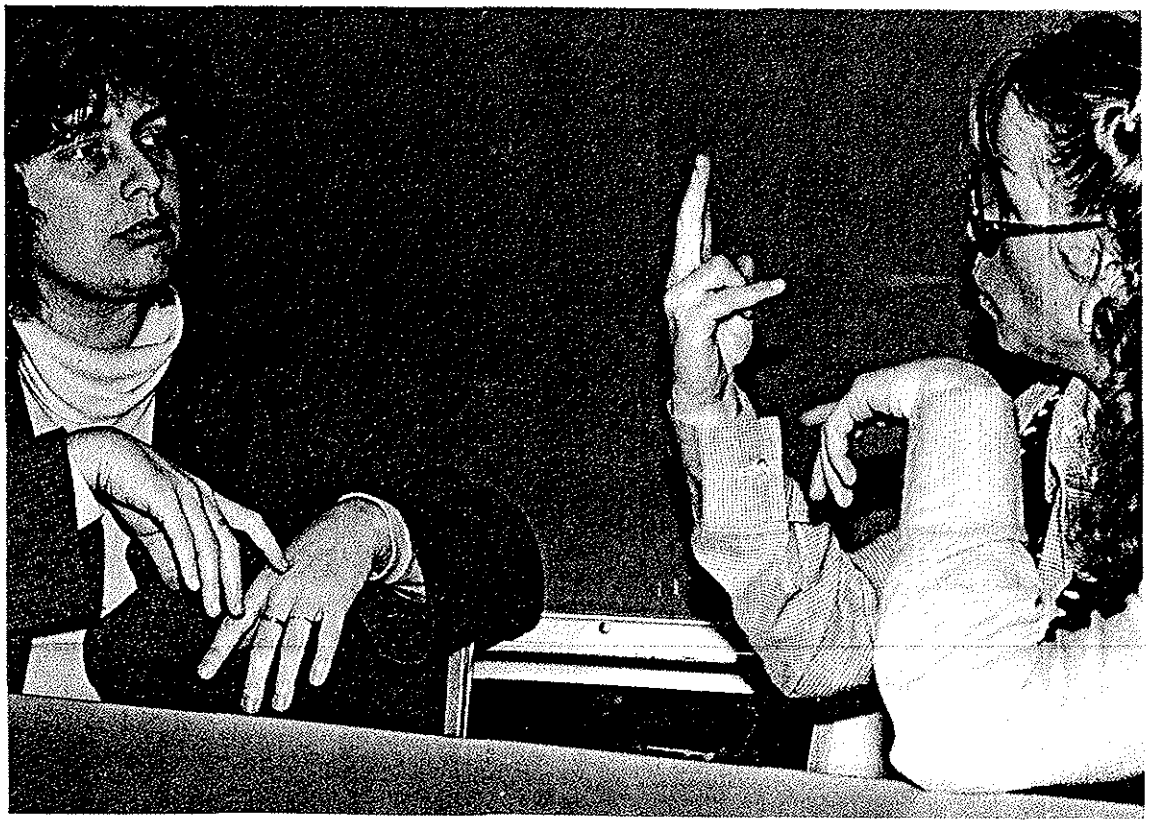
Classes and Services

The following are among the kinds of classes and services offered:

Career preparation and advancement for persons interested in learning new job skills or in upgrading their skills as employees or managers may choose from a variety of courses in many areas of instruction. Many are non-credit classes but some may be taken for credit toward a degree or certificate.

The division also offers a three-year farm business management program for farmers and their spouses, a three-year small business management program, and a one-term nursing assistant program.

College transfer courses for students who may wish to go on



to four-year colleges and universities, are available in many fields. General studies and liberal art courses meet throughout the college district for the convenience of part-time students.

A counselor visits Chemeketa centers regularly. Contact the nearest center for information.

Contact services for special programs and courses for business, industry, government, and civic and social groups. Many agencies use this service to provide specialized training for employees at minimal cost. The division encourages business and industrial employees to request specialized training and educational programs.

Classes for older adults are held during daytime hours and at convenient locations.

The college issues Golden Age cards to district citizens 62 year of age and older, allowing reduced tuition for classes and free or reduced admission to college-sponsored films, dramas, concerts, and athletic events.

Eligible adults may apply for Golden Age cards at the community and continuing education office in building 17 on the Salem campus, at Chemeketa centers outside Salem, or at the first class they attend.

Special events include one-day workshops, mini-series, tours, field trips, and informal noon brown bag lectures.

Registration

Persons enrolling in community and continuing education classes may register at the first class session, except for limited enrollment courses which require early registration. For the 1981-82 academic year, tuition for credit classes is $18 per credit hour, and for non-credit classes approximately $1 for each hour a class meets.

Call for information

Community and Continuing Education Division, 399-5135, building 17, Salem campus

Chemeketa centers:
Dallas, 623-5567
1251 Main Street

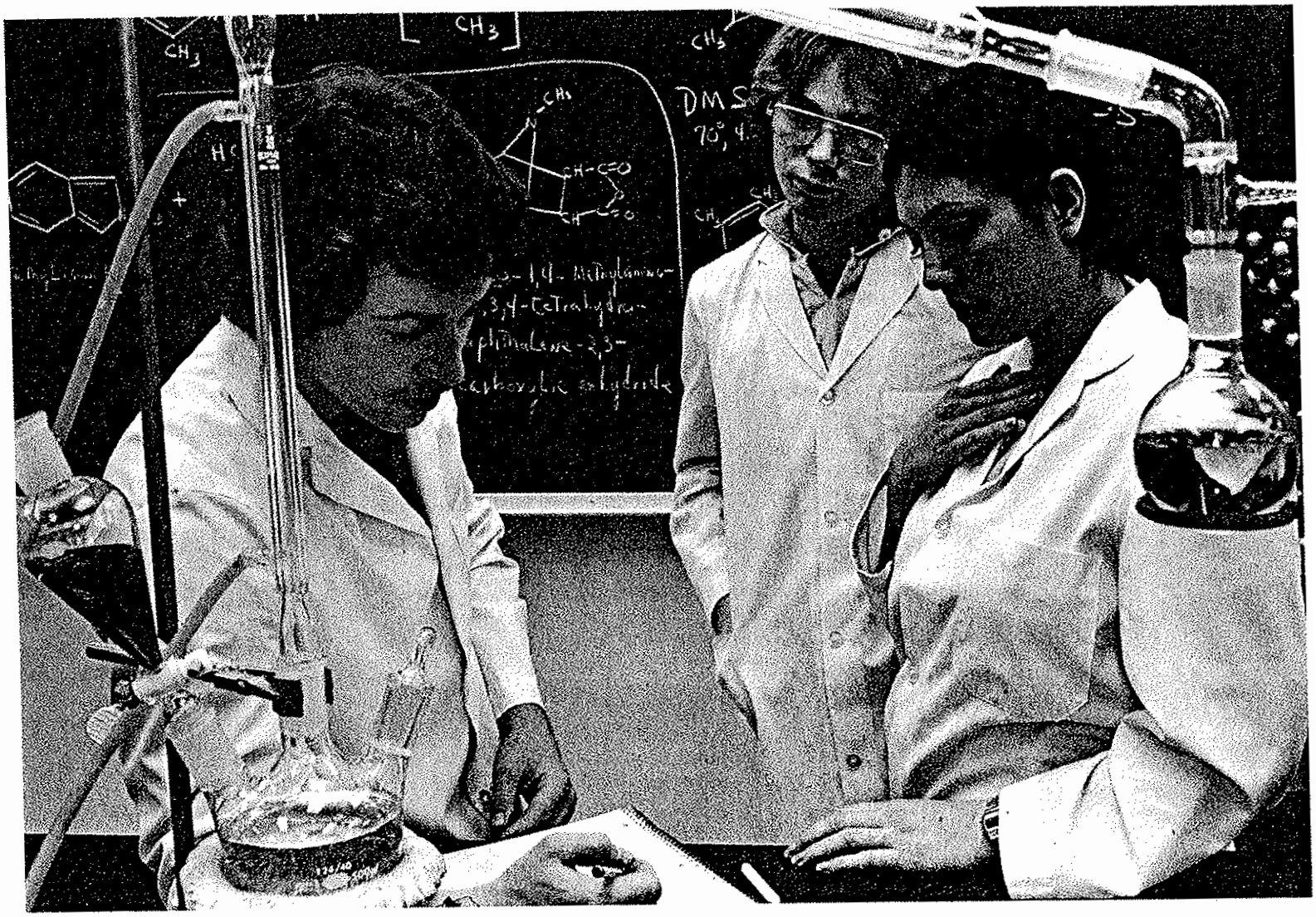
McMinnville, 472-9482
711 East 15th Street

Monmouth, 838-4238
283 E. Main St.

Silverton, 873-8354
205 High Street

Stayton, 769-7738
756 W. Locust St.

Woodburn, 981-8820
965 Boones Ferry Road



Programs of Study

Adult Basic Education

Chemeketa's **adult basic education** program offers instruction in basic academic skills and/or an opportunity for a person to earn a high school diploma or its equivalent.

These programs are for adults. Students between 16 and 18 years of age are admitted only with releases from the high school districts in which they reside.

General Educational Development (GED)

Free developmental skills classes are taught in many communities in the college district and in the three county jails. Persons who lack the equivalent of a high school diploma and/or need to improve their English language skills may enroll any week and progress at their own pace with individual instruction. Those who pass GED tests receive high school diploma equivalency certificates.

Call for information

Salem campus:

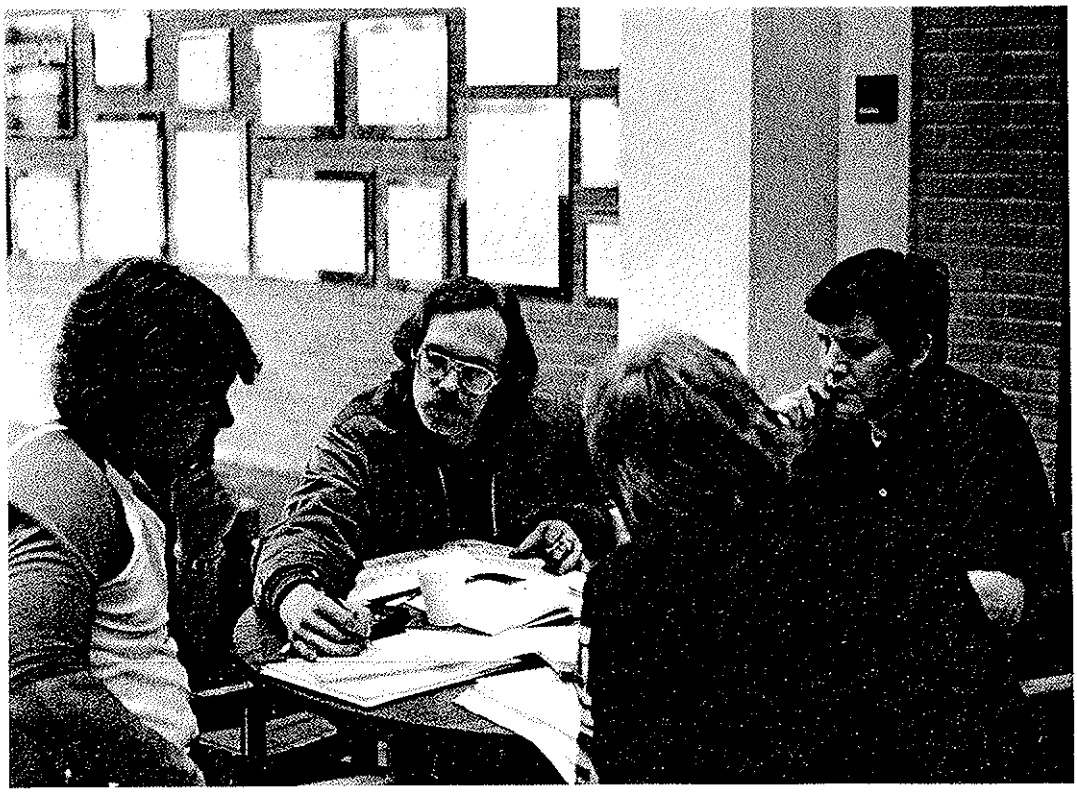
English as a Second Language, 399-5142
GED classes, 399-5093
GED testing and information, 399-5120
High school completion, 399-5115
or
call a local Chemeketa center

Adult high school completion classes are for persons who wish to earn credits toward a high school diploma. Some of these classes also carry college credits, but students usually receive more individual help and take more lab hours than in college level classes.

Persons in this program may transfer credits and competencies from former high schools. They may also receive credits for some of their life experiences. Among these might be skills and knowledge they learned on a job, doing volunteer work, managing a home, and serving in a branch of military service. Chemeketa staff evaluate these experiences to award credits.

Twenty-one credits and 44 competencies are required to complete the high school diploma program.

English as a second language courses are for adults interested in learning to understand, speak, read, and write English or improve those skills. Emphasis is on pronunciation, vocabulary development, and English structure. Chemeketa offers free day and night classes throughout the district.



College Transfer Courses

A number of Chemeketa's credit classes may be transferred to higher education institutions in Oregon.

Students planning to continue at Oregon four-year colleges and universities may transfer lower division credit hours from Chemeketa. (Some of the college's vocational and technical programs also include college transfer credit courses.)

Some suggested courses of study are included in alphabetical order in the outlines of college programs in this catalog. The curricula are adapted from the most recent edition of the publication entitled "Transfer Programs," which has been approved by the Oregon State System of Higher Education. However, it is recommended that students inquire at the college they plan to attend to be sure that the information is up-to-date.

Students wishing to pursue a field not listed in this catalog may be able to work out a satisfactory program of study by consulting with a Chemeketa counselor and the four-year institutions to which they plan to transfer.

Students planning to transfer credits toward bachelor's degrees should

1) Contact the senior college they plan to attend to check entrance requirements and the suggested freshman and sophomore courses required in their chosen fields.
2) Confer with counselors and advisors at Chemeketa prior to registration.
3) Check with the senior college a term or two before completing work at Chemeketa to make sure they are meeting all the requirements.
4) Apply for admission and transfer credits to the senior institution.

Four-year colleges and universities will accept up to 108 lower division credits. In most cases, all of these may be transferred from Chemeketa. The college tries to keep courses current with those at Oregon's four-year institutions.

Associate in Arts Degree

Students taking college transfer classes may also wish to earn an Associate in Arts degree at Chemeketa. The requirements for the Associate in Arts degree are listed on page 5.

Classes which meet AA degree course requirements include:

English composition - six credit hours Wr121, 122, 123 or 227

Personal health - one term He250

Physical education - five terms any PE180, 185, 190, 194, and 294 classes. Students should enroll in only one PE class per term as some four-year institutions accept no more.

Humanities - one sequence
Art195, 196, 197
Art201, 202, 203
Art204, 205, 206
Art255, 256, 257
Art231, plus any six hours of Art280s and/or Art290s
Eng101, 102, 103
Eng104, 105, 106
Eng107, 108, 109
Eng201, 202, 203
Eng253, 254, 255
Eng256, 257, 258
Eng105, 106, 261
FA255, 256, 257
J224, 225, 256
MS251, 252, 253
Mus111, 112, 113
Mus201, 202, 203
Phl201, 202, 203
R201, 202, 203
RL101, 102, 103
RL107, 108, 109
RL201, 202, 203
RL207, 208, 209
Sp111, 112, 113
Sp112, 113, 114
TA111, 112, 113
Wr241, 242, 243

Mathematics or science - one sequence
Mth95, 101, 102, 103, 106, 133B (three make a sequence)
Mth200, 201, 202, 203 (three make a sequence)
Bi101, 102, 103
Bi121, 122, 124
Bot201, 202, 203
Ch204, 205, 206
Ch101, 102, 103
Ch104, 105, 106
Ch204, 205, 206
Ch226, 227, 228
G101, 102, 103
G201, 202, 203
GS104, 105, 106
GS207, 208, 209
Ph201, 202, 203
Zoo201, 202, 203

Social science - one sequence
Anth101, 102, 103
Anth207, 208, 209
BS202, 203, 204
Ec201, 202, 203
Geog105, 106, 107
Hst107, 108, 109
Hst157, 158, 159
Hst201, 202, 203
Hst257, 258, 259
PS201, 202, 203 or 205
Psy201, 202, 203
Soc204, 205, 206
WS101, 102, 103

Occupational Programs

Chemeketa emphasizes vocational and technical education. The college offers occupational training in more than 40 areas. In most of these fields students may earn Associate in Science degrees by meeting requirements of two-year programs. There are also a number of one-year programs leading to Certificates of Completion.

These occupational programs are listed on the following pages along with college transfer curricula.

Accounting
Agribusiness/Crop Production
Automotive Technology
Banking and Finance
Building Inspection
Business/Management
Chemical Technology
Civil/Survey Technology
Clerical Technology
Commercial Food Production
Computer Operations
Computer Programming
Criminal Justice
Dental Assisting
Drafting Technology
Early Childhood Education
Educational Aide
Electronics Technology
Emergency Medical Technology
Farm Business Management
Fire Protection Technology
Food Service Management
Forest Technology
Human Resource Technology
Industrial Technology
Insurance Technology
Machine Shop
Mechanical Design
Medical Office Assisting
Nursing
Office Occupations
Real Estate
Records Management
Secretarial Science
Small Business Management
Visual Communications
Welding
Welding and Fabrication

Accounting

The Accounting curriculum offers a core of accounting, business, and general education courses to train graduates for entry level positions as full cycle bookkeepers, accounting clerks or junior accountants in government or private industry. The program emphasizes specialized knowledge of accounting plus a general knowledge of business. All of the classes may be taken at night as well as during the day.

Students in the program must reach certain required proficiencies in English, mathematics, and typing. Initial placement in English and mathematics is determined by results of tests administered by Chemeketa's counseling center.

Ac280 Cooperative Work Experience is recommended strongly for second-year students. Up to six CWE credits may be applied toward graduation requirements.

Students may earn an Associate in Science degree upon successful completion of the required 99 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable	3
4201	Business Mathematics	
	or	
	College Transfer Math Elective	3
	Psychology or Sociology Elective	3
BA211	Financial Accounting I	4
BA101	Business Environment	4
2658	Introduction to Calculators	2
Term 2		
BA214	Business Communications	3
BA212	Financial Accounting II	4
	Psychology of Sociology Elective	3
SS121	Typing I	3
6918	Applied Business Math	
	or	
	College Transfer Math Elective	3
Term 3		
BA252	Office Support Systems	3
BA213	Managerial Accounting	4
	Psychology or Sociology Elective	3
2559	Governmental Accounting	
	or	
	Business Elective	3
BA131	Introduction to Data Processing	3
Term 4		
2551	Intermediate Financial Accounting I	4
BA226	Business Law	3
BA216	Income Tax Accounting	3
Ec201	Principles of Economics	
	or	
Ec100	Outline of Economics	3
	Business Elective	3
Term 5		
2552	Intermediate Financial Accounting II	4
BA222	Financial Management	3
BA206	Business Management Principles	3
BA215	Cost Accounting	3
Ac280	Cooperative Work Experience	
	or	
	Business Elective	3
Term 6		
2553	Intermediate Financial Accounting III	4
2555	Auditing	3
Wr227	Technical Report Writing	3
Sp111	Fundamentals of Speech	
	or	
Sp130	Business and Professional Speaking	3
Ac280	Cooperative Work Experience	
	or	
	Business Elective	3

Agribusiness/ Crop Production

The Agribusiness/Crop Production program offers training for a number of jobs in agriculture. These include assistant crop and seed processors, irrigation and drainage planners, farm chemicals salespersons, and farm machinery and agricultural agents for banks, insurance companies, lending agencies, and farmer groups.

Students take 54 required credit hours of core curriculum the first year, then specialize in either agribusiness or crop production. Part of Chemeketa's 160-acre Salem campus is used as an agricultural laboratory, supplementing classroom instruction. After successfully completing an additional 49 required credit hours during the second year, a graduate earns an Associate in Science degree.

Cooperative Work Experience may be used instead of selected courses to complete program requirements. Appropriate summer employment may qualify as CWE through arrangements made before the end of spring term. CWE requires departmental approval.

Course No.	Course Title	Credit Hours
Term 1		
4200	Mathematics	3
6531	Agriculture Career Survey	3
6530	Introduction to Oregon Soils	4
6532	Plant Science	4
1101	Communication Skills	3
Term 2		
4202	Mathematics	3
6536	Soil Management	4
6923	Accounting Procedures I	4
6533	Basic Orchard Practices	4
	Technical Electives	3-4

Term 3

6537	Pesticide Safety and Regulations	3
6538	Weed Identification and Control	3
6539	Farm Survey and Measurement	3
6540	Irrigation and Drainage	4
6542	Plant Identification (Agricultural and Ornamental)	3
	Technical Electives	3

Second Year -Agribusiness Option

Term 4

6543	Agricultural Economics and Farm Management	3
Psy101	Psychology of Human Relations	3
6544	Orchard Production	3
6548	Field Crop Production	3
BA238	Salesmanship	3

Term 5

4190	Industrial Accident Prevention	3
BA131	Introduction to Data Processing	3
6550	Agricultural Marketing	3
1104	Communication Skills	3
	Technical Electives	6

Term 6

BA214	Business Communications	3
6552	Agricultural Finance and Banking	3
6553	Vegetable Crop Production	3
6554	Agriculture Seminar	1
	Technical Electives	7-9

Second Year - Crop Production Option

Term 4

6548	Field Crop Production	3
6544	Orchard Production	3
6556	Fertilizers and Plant Nutrition	4
4172	Power Systems	4
	Technical Electives	3

Term 5

1104	Communication Skills	3
4190	Industrial Accident Prevention	3
6557	Farm Equipment Repair and Maintenance	3
	Technical Electives	7-9

Term 6

6553	Vegetable Crop Production	3
6558	Agricultural Insects	4
6559	Plant Diseases	4
6554	Agriculture Seminar	1
	Technical Electives	4

Technical Electives

4172	Power Systems	4
6571	Seed Crop Production	4
6564	Elevator Operations	2
6572	Seed Quality and Testing	4
6561	Construction of Farm Buildings and Farm Building Codes	3
4150	Welding	2
6562	Crop Improvements and Certification Programs	3
6574	Soil Preparation Equipment Operation, and Maintenance	3
6575	Spray Equipment, Operation, and Maintenance	3
6576	State Agriculture Laws, Grades, and Standards	3
6577	Nursery and Greenhouse Operations	3
6566	Grape Production and Management	3
6573	Small Fruit Production	4
6560	Christmas Tree Production	3
6570	Plant Propagation	4

6568	Nursery and Greenhouse Problems	3
6569	Plant Clinic	2
6567	Introduction to Agricultural Microbiology	4
6563	Current Agriculture Problems and Environment	2
6565	Farm Records	3

Other Related Courses

Ch104	General Chemistry	5
Ch226	Organic Chemistry	5
Bi101	General Biology	4
Ch228	Biochemistry	3
6543	Agricultural Economics and Farm Management	3
BA226	Business Law	3
BA101	Business Environment	4
2105	Merchandising	4
BA211	Accounting	4
Ag280	Cooperative Work Experience	

Agriculture

(college transfer)

These courses have been suggested by the school of agriculture of Oregon State University. Students may transfer these college credits into most of the major curricula offered by the school of agriculture at the junior level and complete baccalaureate degree programs within an additional two years. Students who wish to major in fisheries science, food science and technology, and wildlife science, should transfer at the end of the first year at Chemeketa.

The following recommendations are based on

information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Ch204, 205, 206 General Chemistry	4-5	4-5	4-5
Mathematics (per placement test)	4	4	4
Bot201, 202, 203 General Botany or Bi101, 102, 103 General Biology or Zoo201, 202, 203 General Zoology	3-4	3-4	3-4
Physical Education	1	1	1
Electives in humanities and Social science	3	0-3	3
Second Year	**4**	**5**	**6**
Physical science electives	3-4	3-4	3-4
Ec201, 202, 203 Principles of Economics	3	3	3
Sp111, 112, 113 Fundamentals of Speech	3	3	
Mathematics	4	4	4
Electives in humanities and social science	3	3	3

Anthropology

(college transfer)

These courses have been approved by the University of Oregon, Oregon State University, and Portland State University for students who plan to transfer college credits into a major program in anthropology, and by Eastern Oregon State College for students planning to transfer into a combined major in anthropology and sociology.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Anth101, 102, 103 General Anthropology	3	3	3
Bi101, 102, 103 General Biology	4	4	4
Physical Education	1		1
He250 Personal Health		3	
Electives		3	3
Second Year	**4**	**5**	**6**
Second-year foreign language	4	4	4
General education-Science	3-4	3-4	3-4
General education-Social Science	3	3	3
Soc204, 205, 206 General Sociology (EOSC) or General education-Humanities (UO, OSU, PSU)	3	3	3
Physical Education	1	1	1
Electives	3	0-3	0-3

Art

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in art at the University of Oregon, Oregon State University, Portland State University, Eastern Oregon State College, Southern Oregon State College or Oregon College of Education. Students who satisfactorily complete these courses may be able to complete requirements for a bachelor of arts or bachelor of science degree within two additional years.

A five-year program in art leading to the bachelor of fine arts (BFA) degree is offered at the University of Oregon (ceramics, visual design, jewelry and metal-smithing, painting, printmaking, sculpture, weaving) and a four-year program leading to a BFA in applied visual arts is offered at Oregon State University (advertising design, crafts design or individually approved combinations of areas offered).

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Art115, 116, 117 Basic Design (OSU, OCE-4 hours; UO, PSU, SOSC, EOSC-6 hours)	3	3	3
Art231, 232, 233 Drawing (PSU-6 hours; OSU-4 hours; UO, OCE, SOSC, EOSC-3 hours)	3	3	3
Additional art courses: Art281, 284, 255, 256, 257, 244, 271, 291, 292, 293		3	3
Science or mathematics sequence	3-4	3-4	3-4
Humanities sequence (non-art)	3	3	3
Physical Education	1	1	1
Electives		0-3	0-3
Second Year	**4**	**5**	**6**
Social Science sequence	3	3	3
Studio art courses: choose from Art244, 255, 256, 257, 271, 281, 284 291, 292, 293 (See college transfer guide for limits)	3	3	3
Art204, 205, 206 Introduction to History of Art	3	3	3
Physical Education	1	1	
He250 Personal Health			3
Electives	6	6	3

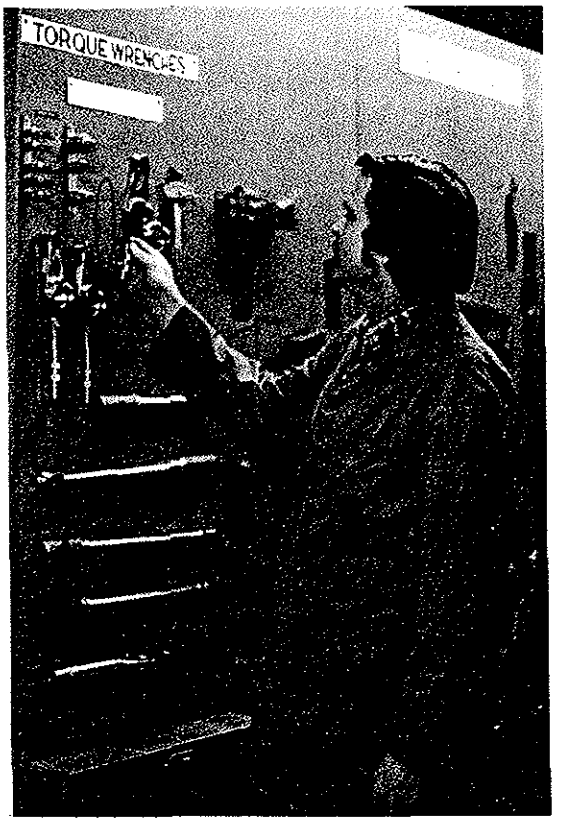
Automotive Technology and Auto Parts Sales

The Automotive Technology program offers training for automotive maintenance and repair workers and for auto parts salespersons. The classes emphasize technical training and development of skills through the study of the various systems of the automobile.

To help students work effectively with people, the program also includes written and oral communications classes and general education electives. Cooperative Work Experience credits may be applied with departmental approval. The curriculum emphasizes related scientific, mathematical, and general mechanical principles.

To earn an Associate in Science degree, automotive technology students must successfully complete 94 required credits.

Course No.	Course Title	Credit Hours
Term 1		
3300	Internal Combustion Engines	6
3303	Automotive Shop Safety	1
4153	Welding	2
1101	Communication Skills	3
3306	Applied Fluid Mechanics	3
Term 2		
3305	Power Trains	5
3309	Technical Diagram Interpretation	2
1104	Communication Skills	3
4200	Basic Mathematics	3
3307	Automotive Chassis	3
Term 3		
3301	Fuel Systems and Carburetion I	3
3327	Automotive Repair I	4
3308	Automotive Machine Shop	3
3304	Automotive Electrical Systems I	4
Term 4		
3316	Fuel Systems and Carburetion II	4
3325	Automatic Transmission	4
3328	Automotive Repair II	4
	General Education Elective	3
Term 5		
3329	Automotive Repair III	4
3317	Automotive Electrical Systems II	4
3319	Automotive Auxiliary Systems	4
3320	Automotive Service Operations	2
	General Education Elective	3



Term 6		
3330	Tune Up and Diagnosis	6
3326	New Automotive Developments	3
Psy100	Introduction to Psychology	3
3302	Automotive Materials	2
	General Education Elective or	
AT280	Cooperative Work Experience	3

Automotive Parts Sales

The Automotive Parts Sales program explores aspects of jobber store management in addition to the sales of automotive parts. A Certificate of Completion is awarded upon successful completion of 49 required credits.

Term 1		
3340	Engine Theory	3
3341	Chassis Theory	3
1101	Communication Skills I	3
4200	Basic Mathematics	3
3335	Auto Parts I	4
Term 2		
3343	Power Train Theory	3
3344	Auto Electrical Theory	3
1104	Communication Skills II	3
4201	Business Mathematics	3
3338	Auto Parts II	4
Term 3		
3345	Auxiliary Systems	3
3348	Fuel Systems	3
6923	Accounting Procedures I	4
3339	Auto Parts III	4
	General Education Elective	3

Banking and Finance

The Banking and Finance program is for persons seeking training to enter the banking field and for bank clerks and tellers who want to become eligible for advancement or promotion to officer trainee or officer positions. There are banking career opportunities in auditing, personnel administration, public relations, and operations research and control.

The basic core of the curriculum includes general education and general business courses. Students have three options; they may specialize in banking, credit union or savings and loan programs.

In addition, Chemeketa and two financial organizations, the Willamette chapter of the American Institute of Banking and the Salem chapter of the Institute of Financial Education, interchange credits for specified courses.

The Banking and Finance program has specific English and mathematics requirements. Initial placement in these courses is determined by results of tests administered by Chemeketa's counseling center.

Students are encouraged to enroll in Cooperative Work Experience. A maximum of six CWE credit hours may be applied toward graduation requirements. CWE requires departmental approval.

An Associate in Science degree is granted upon successful completion of the required 94 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable (based on placement test)	
	or	
	General Education Elective	3
	Math Variable (based on placement test)	3
BA211	Financial Accounting I	
	or	
6923	Accounting Procedures I	4
BA101	Business Environment	4
	Social Science Elective	3
Term 2		
	English Variable (based on placement test)	
	or	
	General Education Elective	3
6918	Applied Business Math	3
	Social Science Elective	3
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II	4
	Objective Elective (from Banking, Credit Union or Savings and Loan)	3
Term 3		
BA214	Business Communications	3
BA213	Managerial Accounting	
	or	
6925	Accounting Procedures III	4
BA223	Principles of Marketing	3
	Objective elective (from Banking, Credit Union or Savings and Loan)	3
	Business Elective	3

Second Year Courses

Required Core Courses:		
BA226	Business Law I	3
Ec201	Principles of Economics	3
Wr227	Technical Writing	
	or	
1106	Technical Report Writing	3
2685	Personnel Principles and Supervision	3
BA250	Small Business Management	3
BA238	Salesmanship	3
BA222	Finance	3
BA131	Introduction to Data Processing	3
	Objective electives (from Banking, Credit Union or Savings and Loan)	9
BF280	Cooperative Work Experience	
	or	
	Business Elective	3
	Social Science Elective	6
	Business Elective	3

Objective Electives

Banking Objective:		
BA269	Principles of Banking	3
BA270	Money and Banking	3
BA278	Law and Banking	3
BA280	Bank Management	3
BA281	Installment Credit	3
Credit Union Objective:		
BA286	Credit Union Accounting	3
BA287	Credit Union Directorship	3
BA288	Credit Union Management	3
BA289	Credit Union Law	3
BA290	Financial Counseling	3
Savings and Loan Objective:		
2408	Real Estate Appraisal I	
	or	
2423	Escrow Procedures I	3
BA291	Savings and Loan Accounting	3
BA260	Real Estate Principles I	3
BA263	Real Estate Law	3
BA292	Savings Operations	3
Suggested Business Electives:		
BA227	Business Law II	3
BA229	Consumer Finance	3
BA277	Business Ethics	3
BA217	Business Machines	3
SS121	Typing	3
2429	Public Relations in Business	3
9263	Agricultural Finance	3
2408	Real Estate Appraisal I	3
2423	Escrow Procedures I	3
BA232	Introduction to Business Statistics	3

Suggested Social Science Electives:

Psy201	General Psychology	3
Psy202	General Psychology	3
Soc204	General Sociology–Introduction	3
Soc205	General Sociology–Institutions	3

Biology, Botany, Zoology

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in biology at the University of Oregon, Portland State University, Eastern Oregon State College, Southern Oregon State College or Oregon College of Education; or into a major program in botany, entomology, general life science, microbiology, zoology or biology at Oregon State University. Students may complete the requirements for the baccalaureate degree within two additional years.

Students planning to transfer to UO or to OSU with a major in microbiology, will find some advantage in transferring at the end of the freshman year, although combining general botany and general zoology courses with appropriate chemistry and mathematics classes makes a second year of science study at Chemeketa practical.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Mathematics (by placement test)	4	4	4
Ch201, 202, 203 General Chemistry	5	5	5
Humanities or social science	3	3	3
sequence	3	3	3
Physical Education	1	1	1
He250 Personal Health			3
Second Year	**4**	**5**	**6**
Bot201, 202, 203 General Botany; Zoo201, 202, 203 General Zoology (SOSC, EOSC) or Bot201, 202; Zoo201, 202, 203; Bi123 Microbiology (OSU) or Ph201, 202, 203 General Physics (UO)	4-8	4-8	4-8
Ch226, 227 Organic Chemistry	5	5	
Social science or humanities sequence	3	3	3
Physical Education	1	1	1
Electives (including additional mathematics if needed through 1 term calculus; 2 for OSU)	3-4	3-4	3-4

Building Inspection

The Building Inspection program has two options. There is a one-year plan for students with experience in the building trades and a two-year option for those new to the field. Graduates of both programs may qualify for state of Oregon certification as building inspectors at the C level or higher, depending upon experience.

There is an increasing need for certified building inspectors working for public agencies. With some experience in the field, graduates of the program also may become construction managers or clerks-of-the-works or perform similar functions in other jobs.

The curriculum covers technical and general education courses. Classes on various codes, plans inspection techniques, and construction materials are complemented by courses in mathematics, communication skills, and public relations.

Students in the one-year program are awarded Certificates of Completion upon successful completion of the required 54 credit hours. Those in the two-year program may gain experience through the Cooperative Work Experience plan. Up to 18 CWE credit hours may be substituted for certain technical courses approved by the department. The Associate in Science degree is awarded after successful completion of the required 101 credit hours.

One-Year Certificate Program

Course No.	Course Title	Credit Hours
Term 1		
1101	Communication Skills I	3
Psy199	Introduction to Industrial Psychology	3
6423	Introduction to Uniform Building Code	3
4200	Mathematics	3
6116	Building Code I	3
5101	Fire Prevention Fundamentals	3
Term 2		
1104	Communication Skills II	3
4202	Mathematics	3
6119	Building Codes II	3
6129	Materials of Construction	3
6127	Zoning Enforcement and Administration	3
4120	Print Reading	3

Term 3		
6430	Building Department Administration	3
6126	Building Codes III	3
4204	Mathematics	3
1106	Technical Report Writing	3
6420 or 6421	Techniques of Inspection I or II	3
6121	Dwelling Construction Under the UBC	3

Two-Year Associate in Science Degree

Term 1		
1101	Communication Skills I	3
4200	Mathematics	3
Psy199	Introduction to Industrial Psychology	3
5101	Fire Prevention Fundamentals	3
6423	Introduction to Uniform Building Code	3
Term 2		
1104	Communication Skills II	3
4202	Mathematics	3
4120	Print Reading	2
6127	Zoning Enforcement & Administration	3
6129	Materials of Construction	3
6139	Environmental Quality Control	3
Term 3		
6122	Soil Mechanic Fundamentals	3
4204	Mathematics	3
1106	Report Writing	3
4121	Advanced Print Reading	2
6121	Dwelling Construction under the UBC	3
6281	Building Materials	3
Term 4		
6116	Building Codes I	3
6411	Engineering for the Building Inspector	3
6424	Structural Inspection-Concrete	3
6426	Structural Inspection-Wood	3
5108	Hazardous Materials	3
6405	Plumbing Code and Inspection I	3
Term 5		
6119	Building Codes II	3
6415	Structural Inspection-Masonry	3
5114	Fire Protection for Buildings	3
6422	Structural Inspection-Steel	3
6120	Mechanical Code and Inspection I	3
6409	Structural Plan Review	3
Term 6		
6126	Building Codes III	3
6410	Non-Structural Plan Review	3
6421	Techniques of Inspection II	3
6425	Electrical Code and Inspection I	3
6430	Building Department Administration	3
FE205	Creative Job Search	1

Business Administration

(college transfer)

Chemeketa offers college credit transfer courses which satisfy lower division requirements in business administration programs. The courses listed below are typical of those accepted by Oregon institutions of higher education. However, students are advised to consult the current catalogs of those institutions to which they wish to transfer and to consult an academic advisor before making final course selections.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
BA101 Business Environment	4		
Wr121, 122, 123	3	3	3
Mth101, 103, 106	4	4	4
BA131, Introduction to Data Processing		3	
Psy201, 202 General Psychology	3	3	
Soc204, 205 General Sociology		3	3
He250 Personal Health			3
Physical Education	1	1	1
Second Year	**4**	**5**	**6**
Sp111 Speech	3		
BA211, 212, 213 Accounting	4	4	4
Ec201, 202, 203 Economics	3	3	3
BA214 Business Communications	3		
BA226 Business Law		3	
BA232 Business Statistics			3
Humanities Sequence	3	3	3
CS213 Introduction to Symbolic Language		3	
Elective			3
Physical Education	1	1	

Business Education

(college transfer)

Chemeketa offers a selection of college transfer credit courses which satisfy the lower division requirements of business education degree programs at Oregon State University and Portland State University. The courses listed below are typical of those accepted by Oregon institutions of higher education. However, students are advised to consult the current catalogs of the institutions to which they wish to transfer and to consult an academic advisor at Chemeketa before making final course selections.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, BA214 (PSU)			
Wr123 (OSU)	3	3	3
Physical Education	1	1	1
Humanities sequence	3	3	3
SS111, 112, 113 Shorthand	3	3	3
SS101 Office Careers Survey	1		
SS122, 123 Typing		3	3
Mth95, 101 (PSU)			
or			
Mth161, 162 (OSU)	4	4	
2658 Introduction to Calculators			2
Second Year	**4**	**5**	**6**
BA211, 212, 213 (PSU)	4	4	4
2641 Office Procedures	3		
BA251 Office Management		3	
Science Sequence	3	3	3
SS211, 212, 213 Shorthand (OSU)			
or			
Ec201, 202, 203 (PSU)	3	3	3
BA217 Business Machines	3		
BA131 Introduction to Data Processing		3	
BA101 Business Environment			4

Business/ Management

Graduates of Chemeketa's two-year Business Management program may become management trainees or other entry level employees of small business or large retail firms.

The curriculum offers a core of business courses. Included also are specific mathematics and English levels of achievement which students must meet in order to graduate.

Initial placement in English and mathematics courses is determined by results of tests administered by Chemeketa's counseling center.

Mgt280 Cooperative Work Experience is recommended for second-year students. This program combines work experience with class studies. Up to 12 CWE credit hours may apply toward graduation.

An Associate in Science degree is awarded upon successful completion of 97 required credit hours.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable or General Education Elective (based on placement test)	3
	Math Variable (based on placement test)	3
BA211	Financial Accounting I	
	or	
6923	Accounting Procedures I*	4
BA101	Business Environment	4
BA131	Introduction to Data Processing	3
Term 2		
BA214	Business Communications	3
SS121	Typing I	3
6918	Applied Business Math	3
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II*	4
	Psychology or Sociology Elective	3
Term 3		
BA213	Managerial Accounting	
	or	
6925	Accounting Procedures III*	4
	Psychology or Sociology Elective	3
BA223	Marketing Principles	3
BA206	Business Management Principles	3
	Approved Business Elective	3
Term 4		
	Psychology or Sociology Elective	3
BA226	Business Law I	3
BA215	Cost Accounting	3
	Approved Business Electives	6
Term 5		
	Elective	3
BA222	Finance	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
	Approved Business Electives	6
Mgt280	Cooperative Work Experience	
	or	
	Business Elective	3
Term 6		
	Elective	3
2685	Personnel Principles and Supervision	3
Sp130	Business and Professional Speaking	
	or	
Sp111	Fundamentals of Speech	3
	Approved Business Elective	3
Mgt280	Cooperative Work Experience	
	or	
	Approved Business Elective	3

*Students who take the Accounting Procedures sequence must enroll in BA213 before they take BA215.

Chemical Technology

The Chemical Technology program offers training in analytical testing, product development, and research techniques used in chemical laboratories. There are occupational opportunities in industrial laboratories of metal refiners, forest product suppliers, electronics firms, food processors, and pharmaceutical companies and in government laboratories dealing with consumer and environmental concerns, waste water treatment, and development of natural resources.

The curriculum includes a basic core of courses dealing with laboratory principles and techniques using modern equipment. These courses

cover the major disciplines of chemistry plus mathematics and communications classes.

With the approval of an advisor, students may also select a number of related science or technical courses to meet their individual educational goals. Students planning to continue their education at four-year institutions may acquire college transfer credit in certain courses including first year chemistry.

The program has two levels of entry. Students with no previous chemistry background take the Ch104, 105, 106 series, while those with enough math and chemistry are placed in the Ch204, 205, 206 series. A student with college chemistry credits may be eligible for advanced term placement. Placement in mathematics courses is determined by results of tests administered by Chemeketa's counseling center.

An important aspect of the program is Cooperative Work Experience. With departmental approval, students may earn up to 12 credit hours as technical electives while working in a commercial laboratory. A number of industrial and governmental labs in the area are involved in the program.

An Associate in Science degree is granted upon successful completion of the 105 required credit hours.

Course No.	Course Title	Credit Hours
Term 1		
Ch104	General Chemistry	
	or	
Ch204	General Chemistry	5
6327	Chemical Lab Methods I	1
1101	Communication Skills	
	or	
Wr121	English Composition	3
	Mathematics*	4
	Science or Technical Electives**	4
Term 2		
Ch105	General Chemistry	
	or	
Ch205	General Chemistry	5
6328	Chemical Lab Methods II	1
1104	Communication Skills	
	or	
Sp111	Fundamentals of Speech	3
	Mathematics*	4
	Science or Technical Electives**	4
Term 3		
Ch106	General Chemistry	
	or	
Ch206	General Chemistry	5
6329	Chemical Lab Methods III†	1
6339	Glass Blowing	1
1106	Technical Report Writing	
	or	
Wr122	English Composition	3
	Mathematics*	4
	Science or Technical Electives**	4
Term 4		
6330	Organic Chemistry I	4
6333	Analytical Chemistry	4
BA131	Introduction to Data Processing	
	or	
Mth133B	Introduction to Programming, Basic	3
	Science or Technical Elective	4
	General Education Elective	3
Term 5		
6331	Organic Chemistry II	4
6334	Instrumental Analysis	4
6345	Radiation Measurements	3
	Science or Technical Elective	4
	General Education Elective	3
Term 6		
6332	Synthetic Polymers and Natural Products	4
6336	Instrumentation and Special Techniques	4
	Science or Technical Electives	6
	General Education Elective	3

*Required math sequences are Technical Mathematics 6261, 6262, 6266, or Mth95, Mth101, and one of the following: Mth102, 103 or 106.

**Approved science and technical electives are:

First Year Sequences	Credit Hours
Bi101, 102, 103 General Biology	4
Bi123, Microbiology	4
Bi124 Medical Microbiology	4
(Any three of the above courses)	
or	
G201, 202, 203 Geology	3
G204, 205, 206 Geology Laboratory	1
or	
6200 Electrical Theory DC	4
6202 Electrical Theory AC	4
6210 Transistor Fundamentals	4

Second Year Sequences and/or Courses

Ch228 Introduction to Biochemistry	3
Math courses-see above requirements	4
Ph201, 202, 203 General Physics	4
Ph211, 212 Engineering Physics	4
Wr227 Technical Writing	3
6109 Applied Mechanics	3
6105 Strength of Materials I	3
6128 Strength of Materials II	3
6211 Transistor Circuits	5
6212 Electronic Circuit Concepts	4
6220 Electronic Instruments	3
6370, 6371 Applied Physics	4
CT280 Cooperative Work Experience	maximum 12

†Students enrolled in Ch206 are not required to take 6329.

Chemistry, Physics

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in chemistry or physics at Oregon State University, the University of Oregon, Portland State University, Eastern Oregon State College, or Southern Oregon State College.

Upon satisfactory completion of these courses, students may qualify to enter the second year of chemistry or physics studies at UO, OSU, PSU, and EOSC and the third year of studies at SOSC. They should be able to complete a baccalaureate

degree program within three (two at SOSC) additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Humanities sequence	3	3	3
Mathematics (by placement test)	4	4	4
Ch104, 105, 106 or Ch204, 205, 206 General Chemistry	4-5	4-5	4-5
Physical Education	1	1	
He250 Personal Health			3
Electives (SOSC: Computer programming)			0-3
Second Year	**4**	**5**	**6**
Mathematics	4	4	4
Ph201, 202, 203 General Physics	5	5	5
Social science sequence (Psy201, 202, 203 for teachers)	3	3	3
Physical Education	1	1	1
Electives	2-3	2-3	2-3

Civil/Survey Technology

Civil/Survey Technology offers two options for entry into careers in civil engineering and survey technology. The first two terms, students share a common core of classes so that they may explore, gain insight, and consult with their advisors, to make knowledgeable decisions about their career goals. Each student then selects the option which best fits his or her needs, interests, and career goals.

Through Cooperative Work Experience, eligible students may earn credits while working in local businesses. A student makes this arrangement with a CWE instructor-coordinator in the program. Cooperative Work Experience may be used instead of selected technical courses to complete the program requirements. CWE requires departmental approval.

Civil-Structural Engineering Technology Option

This option offers practical training in applying current theory and practices common to the field of civil engineering. Through course work and field experiences students may develop the skills expected of competent engineering technicians for entering and advancing in various related civil-structural fields, such as highway and other construction. On construction projects, these technicians may assist in estimating costs or preparing specifications for materials or they may participate in surveying, drafting, or design work. During the construction phase of such projects, civil-structural engineering technicians may assist contractors or engineers in scheduling construction activities and inspecting work for conformance with blueprints and specifications.

An Associate in Science degree in awarded upon successful completion of the required 100 credits.

Course No.	Course Title	Credit Hours
Term 1		
6101	Plane Surveying	4
4101	Drafting	2
6261	Technical Mathematics I	4
6136	Engineering Technician Orientation	2
1101	Communication Skills I	3
Psy100	Introduction to Psychology	3
Term 2		
6370	Applied Physics	4
4120	Print Reading	2
6103	Plane Surveying	5
6262	Technical Mathematics II	4
6109	Applied Mechanics	3
Term 3		
6500	Surveying Computations	3
6105	Strength of Materials I	3
6266	Technical Mathematics III	4
1106	Technical Report Writing	3
6139	Environmental Quality Control	3
Term 4		
6335	Land Division and Mapping	3
6128	Strength of Materials II	3
4123	Project Development	3
6281	Building Materials	3
6118	Contracts and Specifications	3
Term 5		
6110	Construction Estimating	3
4236	Civil Engineering Drafting	3
6113	Hydraulics	4
6125	Timber and Steel Construction	4
1104	Communication Skills II	3
Term 6		
6123	Concrete Construction and Design	3
6140	Sanitary Engineering	3
6124	Soil Mechanics	3
6507	Route Surveying	4
4287	Methods of Supervision	3

Survey Technology Option

The survey technology option focuses on the basic concepts, rules and technical skills associated with surveying and inspection. Graduates may qualify to work as surveyor technicians on location on roads or highways and building locations, surveying property, making office computations, and preparing maps. Graduates may also become construction inspectors who represent engineers on job sites and inspect construction work as it progresses to assure its compliance with plans and specifications.

An Associate in Science degree is awarded upon successful completion of the required 108 credits.

Course No.	Course Title	Credit Hours
Term 1		
6101	Plane Surveying	4
6261	Technical Mathematics I	4
1101	Communication Skills I	3
4101	Drafting	2
6136	Engineering Technician Orientation	2
	Psychology Elective	3
Term 2		
6103	Plane Surveying	5
6262	Technical Mathematics II	4
6109	Applied Mechanics	3
4120	Print Reading	2
6370	Applied Physics	4
Term 3		
6500	Survey Computations	3
6266	Technical Mathematics III	4
1106	Technical Report Writing	3
4123	Project Development	3
4131	Mapping and Platting	3
3605	Tools and Equipment	2
Term 4		
6118	Contracts and Specifications	3
4236	Civil Engineering Drafting	3
4190	Industrial Accident Prevention	3
3600	General Forestry	3
	Geology Elective	3
	Science Elective	3
Term 5		
6132	Survey Law	3
6134	Public Land Survey	3
6110	Construction Estimating	3
4235	Photogrammetry I	3
6113	Hydraulics	4
3610	Tree Identification	2
Term 6		
6507	Route Surveying	4
4237	Photogrammetry II	3
4287	Methods of Supervision	3
6122	Soil Mechanics Fundamentals	3
3611	Tree Identification	2
	Speech Elective	3

Clerical Technology

The Clerical Technology curriculum offers practical training for students interested in working as general office clerks, receptionists, typists, file clerks, transcribing machine operators, and accounting clerks. The program is recommended for students who wish to prepare themselves for work in a minimum amount of time.

An advisor works with each student to develop a program to fit the student's needs for a desired position. Approved electives allow flexibility for students to specialize for work in such offices as law, real estate, insurance, accounting, medical, engineering, data processing, and word processing.

A minimum of 18 credit hours of electives is included in the curriculum. Career-oriented electives may be selected from business courses, general education courses or Cooperative Work Experience. Electives must be approved by an assigned advisor. CWE is recommended for a minimum of three credit hours and a maximum of six credit hours. Students are eligible for CWE if they have a grade point average of 2.5 or better and have completed 24 credit hours of the program.

A Certificate of Completion is awarded upon successful completion of the required 48 credits.

Course No.	Course Title	Credit Hours
Term 1		
4201	Business Mathematics	3
SS121	Typing I	3
SS101	Office Careers Survey	1
	Approved Electives	6
	English Variable or General Education Elective	3
Term 2		
2709	Typing Skillbuilding	3
2658	Introduction to Calculators	2
	Social Science Elective	3
	Approved Electives	6
	English Variable or General Education Elective	3
Term 3		
BA214	Business Communications	3
2641	Office Procedures	3
SS122	Typing II	3
	Electives*	6

*SS1280 Cooperative Work Experience is recommended.

Commercial Food Production

The one-year Commercial Food Production program is designed primarily for training food service personnel in quality food production and service.

The program includes preparatory training for students planning to enter the food trades industry and supplementary training for persons already employed in the occupation who wish to increase their knowledge and skills.

Graduates may find work in restaurants, hotels, hospitals, country clubs, military installations, institutions, fast foods and other large food complexes.

A Certificate of Completion is awarded upon successful completion of the required 52 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
3200	Basic Food and Nutrition	2
3201	Quantity Foods Production I	8
3204	Dining Room Operation I	2
3210	Sanitation and Safety	2
1104	Communication Skills	
	or	
3216	Math for Food Service	3
Term 2		
3211	Menu Planning and Culinary Terms	2
3202	Quantity Foods Production II	8
3205	Dining Room Operation II	2
3212	Purchasing and Store Control	3
1104	Communication Skills	
	or	
3216	Math for Food Service	3
Term 3		
3213	Elementary Food Cost Analysis	2
3203	Quantity Foods Production III	8
3206	Dining Room Operation III	2
3214	Food Production Organization and Planning	2
FS280	Cooperative Work Experience	3

Computer Operations

The one-year Computer Operations program features concentrated study and practical experience in all positions of a computer center operation. These include control clerk, console operator, scheduler, peripheral equipment operator, librarian, and operations supervisor. The student-oriented computer center is equipped with unit record equipment and an IBM/370 Model 125 computing system.

The program emphasizes professional performance by students. This includes advanced operating standards and techniques, problem solving, recovery procedures, and working in coordination with other people to help students become efficient and obtain reliable results.

Students must demonstrate proficiency in English on a level equal to completion of 1101 Communications Skills. This may be shown by successfully completing 1101 or Wr121 English Composition or by achieving a comparable score on an English placement test administered by Chemeketa's counseling center.

During the second and third terms, students may be eligible for DP280 Cooperative Work Experience which allows them to gain computer operations experience at local firms while earning credit hours. Students may qualify for CWE if they have grade point averages of 2.5 or better in all the data processing courses they have completed and are recommended by the CWE instructor-coordinator for computer operations.

A Certificate of Completion is awarded upon satisfactory completion of 50 required credits. This certificate meets the minimum education/experience requirements to qualify for state of Oregon employment classification as a Computer Operator I.

Course No.	Course Title	Credit Hours
Term 1		
1101	Communications Skills	
	or	
Wr121	English Composition	
	or	
	General Education Elective	3
6923	Accounting Procedures	4
BA131	Introduction to Data Processing	3
6979	Keypunch I	3
6950	Computer Center Operation I	5
FE205	Job Search Techniques	1
Term 2		
1106	Technical Report Writing	
	or	
Wr227	Technical Writing	3
6956	System 370 Concepts and Facilities	3
6951	Computer Center Operations II	3
6993	Computer Center Lab II	
	or	
6991	Computer Center Lab II (3 cr. hrs.) and FE201 Cooperative Work Experience (3 cr. hrs.)	6
Term 3		
6952	Computer Center Operations III	3
6975	DOS/VS Utility and Librarian Programs	3
6994	Computer Center Lab III	
	or	
6992	Computer Center Lab III (3 cr. hrs.) and FE201 Cooperative Work Experience (3 cr. hrs.)	6
2679	RPG for Operators	4

Computer Programming

Chemeketa's Computer Programming curriculum is for men and women who wish to become professional computer programmers. The two-year program includes theory and technical information as well as experience in actual programming tasks. The curriculum emphasizes accounting and management principles, problem solving, and how to work effectively with people.

The program includes:

English: Students must reach a proficiency level equal to completion of 1101 Communications Skills or Wr121 English Composition. Proficiency may be shown by a comparable score on an English placement test administered by Chemeketa's counseling center. After meeting this requirement, students may take a three-credit hour general education elective.

Mathematics: Before enrolling in 6941 Fundamentals of Computer Programming II, students must show a math proficiency level equal to satisfactory completion of Mth10 Beginning Algebra. They may do so by achieving a comparable score on a math placement test also administered by the college's counseling center. Students may then take an advanced math course.

During the second year, students, may be eligible for DP280 Cooperative Work Experience. This allows them to gain computer programming experience at a local firm while earning credit hours. CWE requires approval of an instructor-coordinator.

An Associate in Science degree is awarded upon successful completion of the required 95 hours. This degree meets the minimum education/experience requirement to qualify for state of Oregon employment classification as a Computer Programmer I.

Course No.	Course Title	Credit Hours
Term 1		
1101	Communication Skills	
	or	
Wr121	English Composition	3
Mth10	Beginning Algebra	3
6923	Accounting Procedures I	4
BA131	Introduction to Data Processing	3
6948	Fundamentals of Computer Programming I	3
Term 2		
6924	Accounting Procedures II	4
6941	Fundamentals of Computer Programming II	4
6956	System 370 Concepts and Facilities	4
BA231	COBOL I	4
Term 3		
6963	COBOL II	5
6969	Assembler I	5
6944	Systems Analysis I	3
FE205	Job Search Techniques	1
Term 4		
6945	Systems Analysis II	3
6971	OS/VS Job Control and Utilities	4
6988	RPG for Programmers	4
6925	Accounting Procedures III	4
	Business Elective	
	or	
DP280	Cooperative Work Experience	3
Term 5		
6976	Data Communications	2
6964	COBOL III	5
1106	Technical Report Writing	
	or	
Wr227	Technical Writing	3
	Social Science Elective	3
DP280	Cooperative Work Experience	
	or	
	Business Elective	3
Term 6		
	Programming Elective	3
	General Education Elective	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
DP280	Cooperative Work Experience	
	or	
	Business Elective	3
Sp111	Fundamentals of Speech	
	or	
Sp114	Interpersonal Communications	3

Computer Science

(college transfer)

Chemeketa offers transfer college credit courses which satisfy the lower division requirements of the computer science degree program at Portland State University, Oregon State University, or University of Oregon.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 (OSU)	3	3	3
Humanities sequence	3	3	3
Science (non-math) sequence	4	4	4
Mth95, 101, 102	4	4	4
Physical Education	1		1
BA131 Introduction to Data Processing		3	
BA211 Financial Accounting I			4
Second Year	4	5	6
Mth200, 201, 202	4	4	4
BA231, 6963, 6964 COBOL	4	5	5
Social Science	3	3	3
BA212, BA213 Financial Accounting	4	4	
BA232 Introduction to Business Statistics			3
or			
Science sequence (OSU)	3	3	3
Physical Education	1	1	1
Social Science			
or			
Humanities sequence	3	3	3

Criminal Justice

The Criminal Justice program is both for persons who want to enter the field and for employees seeking further training. There are five career options: criminal justice administration, corrections, law enforcement, law enforcement technician (criminalistics), and security

systems management. The curriculum has been developed in cooperation with the Oregon Department of Education and the State Board on Police Standards and Training.

Students may enter the program any term and complete the course in two full-time years. Both day and evening classes are scheduled to accommodate working students who may attend part-time.

Students are required to meet with an academic advisor before registering for the second term. College transfer students should meet with the program manager for program planning and course approval before completing the first term.

Students may gain practical experience and additional credits through CJ280 Cooperative Work Experinece. In some cases, these credits may satisfy a student's elective requirements. Such credits require departmental approval. Students may be eligible for financial assitance from certain grants and loans which are available in this program.

An Associate in Science degree is awarded upon successful completion of the required credit hours for each career option.

Students in all five options must meet the same 34 credit hours of general education and certain core course requirements. There are additional professional course requirements and electives for each option.

General Education Requirements (34 hours)

English/Communication Skills
- Speech 3
- Writing 6

Math/Science 4
P.E./Health 3
Social Science/Humanities 18

Core Course Requirements*

Course No.	Course Title	Credit Hours
CJ100	Survey of Criminal Justice System	3
CJ101	Introduction to Criminology	3
CJ110	Introduction to Law Enforcement	3
CJ140	Introduction to Criminalistics	5
CJ201	Juvenile Delinquency	3
CJ210	Introduction to Criminal Investigation	3
CJ220	Introduction to Substantive Law	3
CJ223	Rules of Evidence	3

*All core courses are required in all options except CJ140 which is not required in the corrections option.

Corrections Option

Professional Course Requirements (21 hours)

CJ131	Introduction to Penology	3
CJ132	Introduction to Probation and Parole	3
CJ215	Criminal Justice Administration	3
CJ227	Introduction to Constitutional Law	3
CJ230	Introduction to Juvenile Corrections	3
CJ231	Introduction to Corrections Process	3
CJ232	Introduction to Corrections Casework	3

General Education Electives (21 hours)
(see academic advisor)

Total credit hours required 97

Criminal Justice Administration Option

Professional Course Requirements (15 hours)

CJ200	Introduction to Community Relations	3
CJ215	Criminal Justice Administration	3
CJ221	Criminal Law II	3
CJ227	Introduction to Constitutional Law	3
CJ231	Introduction to Corrections Process or	
CJ230	Introduction to Juvenile Corrections	3

General Education Electives (21 hours)
(see academic advisor)

Total credit hours required 96

Law Enforcement Option

Professional Requirements (21 hours)

CJ200	Introduction to Community Relations	3
CJ204	Seminar in Criminal Justice	3
CJ215	Criminal Justice Administration	3
CJ211	Criminal Law II	3
CJ227	Introduction to Constitutional Law	3
CJ228	Moot Court	3
CJ230	Introduction to Juvenile Corrections	3

General Education Electives (15 hours)
(see academic advisor)

Total credit hours required 96

Law Enforcement Technician Option

Science Requirements (29 hours)

Bi103	General Biology	4
Ch204	General Chemistry	5
Ch205	General Chemistry	5
Ch206	General Chemistry	5
Ch226	Organic Chemistry	5
Ch227	Organic Chemistry	5

General Education Electives (9 hours)
(see academic advisor)

Total credit hours required 98

Security Systems Management Option

Professional Course Requirements (18 hours)

CJ150	Security Administration	3
CJ251	Embezzlement and Shoplifting	3
CJ252	Educational Security	3
CJ254	Transportation Security	3
CJ256	Personnel Screening and Investigation	3
CJ258	Communications Security	3

General Education Electives (18 hours)
(see academic advisor)

Total credit hours required 96

Dental Assisting

The Dental Assisting program offers technical training necessary for persons to qualify for jobs in dental offices, laboratories, and clinics. The program is accredited by the American Dental Association, Council on Dental Education.

The program includes instruction in assisting dentists in private offices or dental health clinics and clinical and field trip experiences.

Typical duties of dental assistants are preparation of patients for treatment, mixing restoration materials and dental cement, checking and sterilizing equipment, taking inventory and ordering supplies. Laboratory duties include pouring study models of teeth, fabricating custom trays and temporary crowns, and exposing and developing X-ray films. As office manager, the dental assistant acts as receptionist, schedules appointments, keeps accounts and records, prepares statements, and is responsible for the general appearance of the office.

In order to graduate, students must be able to type at least 35 words per minute and must show a competency in mathematics equivalent to 4200 Basic Mathematics. State certificate of radiological proficiency is required prior to graduation.

A Certificate of Completion is awarded upon successful completion of the required 60 credit hours. Graduates are eligible to take the national American Dental Assistants Association certification examination.

Course No.	Course Title	Credit Hours
Term 1		
5601	Basic Science Principles	3
5405	Dental Anatomy and Physiology	4
5411	Introductory Concepts in Dental Assisting	4
5404	Dental Materials and Instrumentation	4
5415	Dental Sciences I	3
Term 2		
5403	Chairside and Basic Lab Procedures	3
5416	Dental Sciences II	4
5401	Expanded Duties I	2
5410	Dental Office Management	3
5408	Principles and Basic Application of Dental Radiology	4
Term 3		
5407	Advanced Lab	4
5402	Expanded Duties II	2
5413	Applied Radiography II	2
5417	Dental Office Practicum I	3
Sp114	Interpersonal Communications	3
5513	Multimedia First Aid	1
He261	Cardiopulmonary Resuscitation	1

Term 4		
5409	Dental Office Practicum II	5
5418	Dental Assistant Review	2
Psy111	Processes in Living	3

Drafting Technology

Drafting Technology offers two paths of entry into careers in drafting—Technical Drafting and Mechanical Design. During the first year students in both areas share many courses so they may explore, gain insight, and consult with advisors to make knowledgeable decisions about their career goals. The selection of either Technical Drafting or Mechanical Design should be made as soon as possible in the first year of college.

Through Cooperative Work Experience, eligible students may earn credits while working in local businesses. A student makes this arrangement with a CWE instructor-coordinator in the program. TD280 Cooperative Work Experience may be used instead of selected technical courses to complete the program requirements. CWE requires departmental approval.

Technical Drafting

Technical Drafting offers training in mechanical drafting, design, technical illustration, and other drafting-oriented jobs in engineering. The curriculum centers around occupational skills which usually cannot be learned through experience alone, such as principles of design, materials and processes, mathematics, and physical science concepts as applied to technical drafting.

An Associate in Science degree is awarded upon successful completion of the required 94 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
1101	Communication Skills I	3
6606	Manufacturing Processes	3
4202	Introduction to Algebra and Geometry	3
4118	Sketching	1
4221	Machine Drafting	4
Term 2		
1104	Communication Skills II	3
4222	Machine Drafting	4
4204	Introduction to Trigonometry with Geometry	3
Psy100	Introduction to Psychology	3
4226	Architectural Drafting	3
Term 3		
	General Education Elective*	3
4126	Drafting Room Computations	1
4131	Mapping and Platting	3
6101	Plane Surveying	4
6261	Technical Mathematics I	4
Term 4		
4115	Descriptive Geometry	3
6370	Applied Physics	4
6103	Plane Surveying	5
Mth133B	Introduction to Programming, BASIC	3
4100	Electronic Drafting or	
4227	Architectural Drafting	3
Term 5		
4236	Civil Engineering Drafting	3
4111	Structural Drafting	3
6371	Applied Physics	4
1106	Technical Report Writing	3
4228	Technical Illustration or	
4235	Photogrammetry I or Selected course from Mechanical Design curriculum by consent of instructor and advisor	3
Term 6		
4102	Introduction to Specification	3
4224	Pipe and Flow Systems Drafting	3
	General Education Elective*	3
	Select two:	
4234	Architectural Design and/or	
4229	Technical Illustration and/or	
4237	Photogrammetry II and/or Selected course from Mechanical Design curriculum with consent of instructor and advisor	6

*SS121 Typing is recommended.

Mechanical Design

Mechanical Design is a comprehensive drafting curriculum with a practical approach to engineering concepts. Courses are offered to train technicians in machine, electronics, pipe and flow systems; control systems; and sheet metal drafting. Design instruction stresses the use of manufacturers' technical catalogs and handbooks and practical applications of concepts from theoretical and mathematical subjects.

An Associate in Science degree is awarded upon satisfactory completion of the required 95 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
1101	Communications Skills I	3
4221	Machine Drafting	4
4118	Sketching	1
6261	Technical Mathematics I	4
4802	Machine Shop I	3
	Physical Education Elective*	1
Term 2		
1104	Communication Skills II	3
4222	Machine Drafting	4
4126	Drafting Room Computation	1
6262	Technical Mathematics II	4
4170	Industrial Materials and Processes	3
	Physical Education Elective*	1
Term 3		
4115	Descriptive Geometry	3
6109	Applied Mechanics	3
1106	Technical Report Writing	3
6266	Technical Mathematics III	4
	Physical Education Elective*	1
	General Education Elective	3
Term 4		
4100	Electronic Drafting	3
4230	Pattern Development	3
Mth133B	Introduction to Programming/BASIC	3
6105	Strength of Materials I	3
6370	Applied Physics	4
Term 5		
4232	Machine Design Lab	3
4231	Tool Design Lab I	3
4175	Power Transmission Design	3
6602	Metallurgy	3
6128	Strength of Materials II	3
Term 6		
4233	Machine Design Lab	3
4220	Tool Design Lab II	3
4178	Industrial Control Systems Design Lab	3
4224	Pipe and Flow Systems Drafting	3
	General Education Elective	3

*Three additional credits from general education areas may be substituted for the three physical education electives.

Early Childhood Education

The Early Childhood Education curriculum is a training program for persons who want to work with young children as child care aides, assistants, and teachers. Many of the courses may be helpful to parents of pre-school age children.

Graduates may work in nursery schools, kindergartens, Head Start programs, and day care centers or as team members in schools. National trends indicate increasing employment opportunities with the increase of a greater understanding of the importance of early development.

A student who successfully completes 60 required credit hours may be awarded a Certificate of Completion. Students who successfully complete 95 required credit hours will earn Associate in Science degrees.

Course No.	Course Title	Credit Hours
Term 1		
7119	Development in Childhood I	3
7129	Introduction to Early Childhood Education	3
1101	Communication Skills	
	or	
Wr121	English Composition	3
Psy100	Introduction to Psychology	
	or	
Psy201	General Psychology	3
7131	Observing and Recording in the Preschool	3
Term 2		
7120	Development in Childhood II	3
FL199	Personal Dynamics	3
7132	Observing and Guiding Behavior	3
1104	Communication Skills	
	or	
Wr122	English Composition	3
Psy101	Psychology of Human Relations	
	or	
Psy202	General Psychology	
	or	
Psy111	Processes in Living	3
Term 3		
7115	Child Nutrition	3
	or	
FN225	Nutrition	4
7136	Creative Activities	3
7134	Supervised Field Experience I	3
	Physical Education Elective	1
	General Education Elective*	5
He264	Childhood Emergencies	1
	(valid First Aid card required as prerequisite)	
Term 4		
7117	Children's Literature	3
7123	Environments for Young Children	3
FL223	Family Living	
	or	
FL222	Partner Relationships	3
7135	Supervised Field Experience II	4
	General Education Elective*	3
Term 5		
7125	The Exceptional Child	3
7130	Music for Young Children	3
7124	Learning Experiences for Young Children	3
7121	Directed Participation I	7
Term 6		
7126	Home, School, Community	3
7113	Administration of Child Care Centers	3
7122	Directed Participation II	8
	General Education Elective*	3

*Suggested electives: personal health, art, Spanish, speech, ethnic history, sociology, ECE280 Cooperative Work Experience, consumer finance, science.

Economics

(college transfer)

The curriculum below is recommended for students who plan to transfer college credits into a major program in economics at the University of Oregon, Oregon State University, Portland State University, Southern Oregon State College, or Oregon College of Education. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	Term 2	Term 3
Wr121, 122, 123 or 227 English Composition	3	3	3
Humanities sequence (OCE: Eng104, 105, 106 or Eng107, 108, 109)	3	3	3
Mathematics (by placement score)	4	4	4
Social Science sequence (OCE: Hist107, 108, 109)	3	3	3
Physical Education	1		1
He250 Personal Health		3	
Electives	0-3	0-6	3-6
Second Year	**4**	**5**	**6**
Ec201, 202, 203 Principles of Economics	3	3	3
BA211, 212, 213 Principles of Accounting (SOSC, PSU 1 term) or Humanities sequence	3	3	3
Science (PSU 1 term; fill out year with humanities)	4	4	4
Physical Education	1	1	1
Electives (SOSC: Mth103 or BA232)	6	6	6

Education (Elementary)

(college transfer)

Upon successful completion of these courses students may transfer college credits to any institution of the Oregon State System of Higher Education offering a program in elementary education and, upon admission to the professional teacher education program, they may complete the requirements for a baccalaureate degree within two additional years. Programs in elementary education are offered at Eastern Oregon State College, Oregon College of Education, Oregon State University, Portland State University, Southern Oregon State College, and the University of Oregon.

Admission to the professional program is based upon several qualifications, including academic background and demonstrated ability to speak and write adequately. Application procedures and admission criteria are given in the Oregon college transfer guide.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Mth191, 192, 193 Mathematics for Elementary Teachers (EOSC, OCE, SOSC, PSU: 9 hours; OSU: 6 hours; UO: third term equivalent			
or			
Physical Science sequence	4	4	4
Humanities sequence	3	3	3
Physical Science sequence	4	4	4
Humanities sequence	3	3	3
Physical Education		1	1
He250 Personal Health			
Recommended Electives (see transfer guide)		2-6	2-8
Second Year	**4**	**5**	**6**
Psy201, 202, 203 General Psychology (all but UO, SOSC, EOSC; OSU one term only)	3	3	3
Sp111 Fundamentals of Speech (all but UO, EOSC)			3
Social science sequences (PSU: 9 hours history or geography; OSU: Hist201, 202, 203, Geog105, Soc204; OCE: Psy201, 202, 203	6	6	6
Bi101, 102, 103 General Biology	4	4	4
Physical education	1	1	1
Electives (except UO) See transfer guide.	3-6	3-6	3-6

Education (Secondary)

(college transfer)

Students planning to become junior or senior high school teachers should enroll in the transfer program for the subject they plan to teach, adding one term of Fundamentals of Speech. Admission to the professional program in education is based upon several qualifications, including academic background and demonstrated ability to spead and write adequately. Application for admission should be made immediately upon transfer to the four-year institution. See the Oregon college transfer guide for admission information.

All students interested in becoming teachers are urged to discuss career planning and placement with a counselor in order that they may make informed career decisions in view of the job market.

Educational Aide

The Educational Aide program offers training for persons who wish to become classroom aides. There is also a one-term orientation course for students who are exploring education as a career.

First year students take a core of required courses, including a practicum. Classes are in four general areas: instruction, non-instructional support, human relations, and communication/computation. Students are also required to demonstrate certain competencies in writing, speaking, mathematics, and typing.

Second year students specialize in working with children at certain grade levels (kindergarten, elementary or secondary) or in helping with bilingual or handicapped children or in working in vocational-technical education.

The program is planned so that a student may continue to work toward earning a baccalaureate degree and a professional teaching certificate. A number of the courses may be transferred for credit to four-year colleges and institutions in Oregon.

After successfully completing the required 48 credit hours in the one-year program, a student may earn a Certificate of Completion. An Associate in Science degree is awarded upon successful completion of 96 required credits in the two-year program.

Course No.	Course Title	Credit Hours
Term 1		
Ed131	Teaching Techniques	3
Ed133	Instructional Media and Materials	3
Ed207	Seminar; Educational Aide Orientation	3
Ed209	Practicum; Introductory Observation and Experience	3
	Writing Course or Elective*	3
Term 2		
Ed123	Tutoring and Instructional Practices for Paraprofessionals I	3
Ed110	Psychology of Learning	3
Ed210	Education Practicum, Theory and Practice	6
5513	Multimedia First Aid	1
	Speech Course or Elective*	3
Term 3		
Ed124	Tutoring and Instructional Practices for Paraprofessionals II	3
Ed111	Contemporary Education	3
Ed211	Advanced Practicum	6
	Mathematics Course or Elective	3
	Typing Course or Elective*	2

*Students in the Educational Aide Program are required to demonstrate competencies in reading, writing, speaking, typing, and mathematics equivalent to the following courses: 1110, Wr121 or 1101, Sp114, SS121 and 4200.

Second Year Options

Second year students complete the general courses for all options (nine credits) and 18 hours of general education courses. They also take 15 credits in the option they select, including at least six credits in practicum experience.

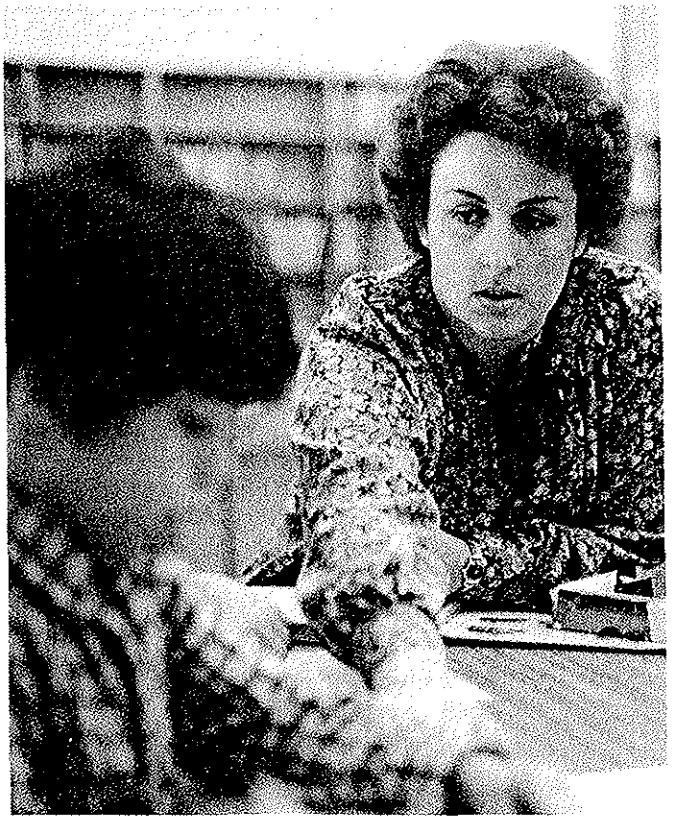
General Courses for all options:

5442	Community Resources	3
Ed251	Introduction to Special Learner Problems	3
Psy299	Growth and Development	3

Classroom Aide

Kindergarten/Lower Elementary

Mth191	Math for Elementary Teachers	3
Mth192	Math for Elementary Teachers	3
Mth193	Math for Elementary Teachers	3
Ed221	PE/Playground Activities	3
Ed212	Practicum Specialized Education	6-18
7136	Creative Activities	3
7119	Development in Childhood I	3
7120	Development in Childhood II	3
7123	Environments for Young Children	3
7124	Learning Experiences for Young Children	3
7130	Music for Young Children	3
7117	Children's Literature	3
7140	Kindergarten Education	3



Junior/Senior High
Subject Matter Courses

	Social Science Sequence	9
	Humanities Sequence	9
Ed212	Practicum Specialized Education	6-18

Bilingual/Bicultural

Ed257	Second Language Teaching Techniques for Paraprofessionals	3
Ed258	Multicultural Children's Activities and Literature for Paraprofessionals	3
Ed259	Bilingual Methodology for Paraprofessionals	3
	Language Requirement	9-12
Ed212	Practicum Specialized Education	6-18
Hst257	Ethnic History	3
Hst258	Ethnic History	3
Hst259	Ethnic History	3
Eng256	Minority Literature	3
Eng257	Minority Literature	3
Eng258	Minority Literature	3

Handicapped Learner Aide

Deaf/Blind

1116		
1125		
1126	Manual Communication for the Deaf	9
1127	Conversational Sign	3
1128	Beginning Interpreting for the Deaf	3
1129	Studies in Deafness	3
Ed212	Practicum Specialized Education	6-18

Mentally Retarded, Physically Disabled, Emotionally Disturbed

Ed267	Introduction to the Education of Mentally Retarded, Physically Handicapped and Emotionally Disturbed	3

Ed268	Introduction to Classroom Management of the Mentally Retarded and Physically Handicapped	3
Ed269	Introduction to Classroom Management of the Emotionally Disturbed	3
Ed212	Practicum Specialized Education	6-18

Vocational-Technical Education Aide

Ed281	Introduction to Vocational Technical Education	3
Ed292	Occupational Analysis and Curriculum Development	3
Ed212	Practicum Specialized Education	6-18

Electronics Technology

Electronics Technology offers three options for persons who want to enter the broad area of electronic engineering, electromechanical, and the electronic servicing/communication technologies. Students in all the options share a common core of classes for three terms so they may explore, gain insight, and receive an advisor's help in making knowledgeable decisions about their career goals. Students then select the option which best fit their needs, interests, and career goals.

Through Cooperative Work Experience, eligible students may earn credits while working in local businesses. A student makes this arrangement with the CWE instructor-coordinator in the program. Cooperative Work Experience may be substituted for selected technical courses to complete program requirements. CWE requires departmental approval.

Course No.	Course Title	Credit Hours
Term 1		
6200	Electrical Theory DC	4
6204	Applied Electronic Calculations I	
	or	
6261	Tech Mathematics I	4
1101	Communication Skills I	3
6194	Engineering Orientation	1
4260	Introduction to Electronics	1
4124	Basic Drafting for Electronics	2
Term 2		
6202	Electrical Theory AC	4
6217	Transistors	5
6205	Applied Electronic Calculations II	
	or	
6262	Tech Mathematics II	4
6138	Engineering Problems	1
Term 3		
6206	Electrical Circuits	4
6209	Introduction to ICs	4
6237	Semiconductors	3
6234	Wave Generation and Shaping	3
6267	Digital Applications	3

Second-Year Options

Electromechanical Technology Option

This option offers courses in technical knowledge and engineering technology skills so that graduates may assist in designing and developing electromechnical devices or systems; work as field engineers; design and install industrial control systems; and operate, maintain, and repair equipment. Other job opportunities exist in field engineering, research, quality control, technical writing, industrial control, automation, sales technical representation, instrumentation, medical devices, and automatic production. An Associate in Science degree is awarded upon successful completion of the required 94 credit hours.

Term 4		
6240	Electronic Data Processing	3
6212	Electronic Circuits Concepts	4
6243	Electromechanical Devices I	3
6218	Industrial Electronics	4
Term 5		
6370	Applied Physics	4
1104	Communication Skills II	3
6612	Electromechanical Devices II	4
6269	Computer Programming	3
6251	Linear IC Applications	2
6196	Fluid Systems	3
Term 6		
6371	Applied Physics	4
6249	Microprocessor Systems	3
6216	Advanced Electronic Circuits	2
6259	Measurement and Instrument Systems	3
6256	Servos and Regulator Systems	3

Electronic Engineering Option

This option offers students a comprehensive program balancing theory with techniques so they may enter the diverse, specialized technician positions in the electronics industry. Graduates may be employed as radio communications technicians, electronics technicians, electronic laboratory technicians, electronic instrument technicians, electronic computer technicians, microwave radio technicians, and electronic engineering technicians. An Associate in Science degree is awarded upon successful completion of the required 98 credit hours.

Term 4		
6212	Electronic Circuit Concepts	4
6240	Electronic Data Processing	3
6218	Industrial Electronics	4
6269	Computer Programming	3
6231	Antennas and Transmission Lines	2
Term 5		
6370	Applied Physics	4
1104	Communications Skills II	3
6219	Video Display Circuits	5
6251	Linear IC Applications	2
6266	Tech Mathematics III	
	or	
GS200	Computer Applications in Science and Technology	4

Term 6		
6371	Applied Physics	4
1106	Technical Report Writing	3
6249	Microcomputer Systems	3
6216	Advanced Electronic Circuits	2
6242	Telecommunications	3
	Approved Electronics Elective	3

Electronic Servicing/ Communication Technician Option

This option offers students broad technical training, theory, and skills development. Graduates may be employed as technicians in home electronics and two-way radio communications servicing and maintenance, and other servicing areas in the electronics field. This includes employment in electronics service shops, electronics industries, and in areas such as technical writing, sales engineering, service training, and self-employment. An Associate in Science degree is awarded upon successful completion of the required 96 credit hours.

Term 4		
6240	Electronic Data Processing	3
6212	Electronic Circuit Concepts	4
6250	Communication Systems	3
6219	Video Display Circuits	5
6231	Antennas and Transmission Lines	2
Term 5		
1104	Communication Skills II	3
6269	Computer Programming	3
4274	Logical Trouble Shooting	4
6258	Consumer Electronics Systems	4
6251	Linear IC Applications	2
Term 6		
6249	Microcomputer Systems	3
6252	Advanced Servicing	4
6203	Analysis of Electronic Systems	4
6229	FCC License Preparation	3
	Approved Electronic Elective	3

Emergency Medical Technology

The Emergency Medical Technology program offers continuous training to practicing Emergency Medical Technicians for their personal development and career advancement and entry level training for students who want to become EMTs. Efforts are made to keep the program up-to-date with current community practices and with new technology.

Trained workers may be employed by police and fire departments, ambulance companies, and industries.

Students take training in three areas: clinical skills defined by state law into four levels of certification (EMT I, II, III, and IV), organizational skills (management of finance, personnel, supplies, and equipment), and public interactive skills (laws, public agencies, and community relations). The program emphasizes the relationship of EMT to other health care and emergency services providers and the role and responsibilities of the EMT in the community.

An Associate in Science degree is awarded upon successful completion of the required 101 credit hours. This usually takes two full-time years. Satisfactory completion of clinical courses helps prepare students for certification examinations administered by the Emergency Medical Services section of the Oregon State Board of Health and by the State Board of Medical Examiners. Further information on current regulations regarding eligibility in Oregon or other states is available from appropriate state agencies.

Course No.	Course Title	Credit Hours
Term 1		
5129	Emergency Medical Technology I	6
5142	Rescue Fundamentals	3
5615	Body Structure and Functions I	3
	or	
Bi121	Human Anatomy and Physiology	4
5600	Medical Terminology I	3
	Communication Elective	3
Term 2		
He268	Pharmacodynamics	3
5130	Emergency Medical Technician III-A	5
5144	Dispatching and Radio Communications	2
5616	Body Structure and Functions II	3
	or	
Bi122	Human Anatomy and Physiology	4
5610	Medical Terminology II	3
4200	Mathematics	3
Term 3		
5132	Emergency Medical Technician III-B	5
5611	Medical Law and Ethics	3
BA101	Business Environment	4
	Social Science Elective	3
5120	Fire Service Rescue	4
Term 4		
5133	Emergency Medical Technician III-C	6
5145	Introduction to Emergency Medical Services	4
5150	Survey of Human Disease	
	or	
5605	Introduction to Medical Science	3
Term 5		
5134	Emergency Medical Technician III-D	5
5700	Health Occupations Overview	1
	Psychology Elective	3
BA206	Business Management	
	or	
BA250	Small Business Management	3
He262	CPR Instructor	1
5143	Emergency Response Driving	1
Term 6		
5141	Emergency Medical Technician IV	8
FE205	Job Search Techniques	1
	Business Electives	6
5147	Crisis Intervention	3

Six credit hours of EMT280 Cooperative Work Experience may be granted as business electives. A student must have a valid driver's license and be a certified EMT I.

Communication Electives

Sp114	Interpersonal Communication	3
Sp130	Business and Professional Speaking	3
Wr121	English Composition, Exposition	3
1101	Communication Skills I	3
1104	Communication Skills II	3

Psychology Electives

Psy101	Psychology of Human Relations	3
Psy111	Processes in Living	3
Psy114	Career Development, Personal Perspective	3
5436	Survival in the Bureaucracy, HRT-1	3

Social Science Electives

Ec100	Outline of Economics	3
Ec201	Principles of Economics	3
Ec202	Principles of Economics	3
PS199	Political Power and Political Action	3
PS201	American Government	3
PS203	State and Local Governments	3
WS101	Introduction to Women's Studies	3
5149	Disaster Planning and Management	3

Business Electives

BA226	Business Law I	3
BA227	Business Law II BA226 required	3
BA211	Financial Accounting I	4
BA212	Financial Accounting II	4
BA227	Business Law II (BA226 required)	3
PA250	Introduction to Public Administration	3
PA255	Public Personnel Administration	3
PA266	Public Personnel Supervision	3
2429	Public Relations in Business	3
2685	Personnel Principles and Supervision	3
5149	Disaster Planning and Management	3
5442	Community Resources	3
EMT280	Cooperative Work Experience	6

EMT Electives

AH199C, D, E, F EMT Issues, 1,2,3,4

Engineering

(college transfer)

These courses are recommended for students who plan to transfer to a four-year college or university and earn a bachelor of science degree in engineering or applied science.

Acceptance to the Professional Engineering Program at Oregon State University, beginning the junior year, is competitive and certain preprofessional engineering course requirements must be completed before admittance will be considered, and various universities have different requirements. Therefore, students are advised to consult with a science advisor at Chemeketa before enrolling in elective and physical education courses so they may meet a particular university's elective and physical education requirements.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Mathematics (per placement test)	4	4	4
Ch104, 105, 106 General Chemistry (Ch204, 205, 206 for Chemical and Physics Engineering)	5	5	5
Wr121 English Composition	3		
Ph211, 212 General Physics for Engineers		4	4
Physical Education	1	1	1
Social science or humanities sequence	3	3	3

English

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in English at the University of Oregon, Oregon State University, Portland State University, Eastern Oregon State College, or Southern Oregon State College or into a major program in English or humanities at Oregon College of Education. Requirements for the baccalaureate degree may be completed within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 English Composition	3	3	3
Literature sequence	3	3	3
Science sequence	4	4	4
Foreign Language sequence	4	4	4
Physical Education	1	1	1
Electives	0-3	0-3	0-3
Second Year	**4**	**5**	**6**
Eng201, 202, 203 Shakespeare	3	3	3
Hst107, 108, 109 History of World Civilization	3	3	3
Social Science sequence (Psy 201, 202, 203 for teachers)	3	3	3
Foreign Language sequence (second year)	4	4	4
Physical Education	1		1
He250 Personal Health		3	
Electives (Sp111 for teachers)	2-3		2-3

Farm Business Management

The three-year Farm Business Management program assists farm operators with the financial aspects of farm management. Farm operators and their spouses who lease or manage a farm and who have access to the financial records of the farm, may enroll.

Instructors make farm visitations and hold monthly class sessions on basic farm records, annual computer analyses, cost production summaries, and applications of analysis information for improving the management and organization of each business.

Tuition covers instruction, record book, farm visits, and a year-end computer farm business analysis. For information, contact the Community and Continuing Education office in Salem (399-5135) or the McMinnville Chemeketa Center (472-9482).

The program includes the following:

9820 Farm Management I
Includes a survey of farm management skills and family goals, uses of farm records-net worth statements, enterprise record keeping, inventories and depreciation, farm income and espenses budgeting, cash flow projections, business principles, closing account books for analysis, credit planning, tax management, and development of profit and loss statements.

9821 Farm Management II
Covers monitoring achievement of goals, interpreting and analyzing farm records, monitoring cash flow, measuring efficiency and business size, crop and livestock costs and return, labor costs and return, understanding government regulations affecting payroll, capital costs and returns, legal aspects of farm management – contracts, rental agreements, liabilities, use of computerized farm records system and tax management, closing accounts for analysis, profit and loss statements, and the process of making decisions.

9822 Farm Management III
Includes evaluating the farm business, net worth, credit planning and budgeting, optimum production levels, studying income possibilities, developing crop and livestock plans, planning investments in building and equipment, purchasing or leasing land. Begins considerations of wills and estate planning, farm business organization (proprietorship vs. partnership vs. corporations), use of futures, hedging, future contracting or marketing tools, developing alternative farm plans, and closing accounts for analysis.

9825 Farm Management IV
Focuses on analyzing effects of farm reorganization, updating current year's income tax laws, re-evaluating farm and family goals, treating farm real estate as an investment, risk and uncertainty, and using programmable calculators in decision-making.

9828 Farm Management V
Emphasizes advanced estate planning, income tax management strategies, use of supplementing records, computers in farm management, advanced cash flow analysis, and role of government agencies and programs in farm management.

Fire Protection Technology

The Fire Protection program includes two options for persons interested in careers in protecting life and property from fire. The program offers training for those wanting to enter the career field and for those already employed, who want to expand their knowledge.

The fire suppression option offers training for firefighters. Instruction focuses on developing required skills, attitudes, and work habits. Students work a 24-hour shift, each sixth day, each term. Students enrolled in Fire Incident Related Experience courses respond to actual fires, under the supervision of district fire officers. Public fire departments are the chief employers of firefighters.

The fire prevention option offers training for inspectors who may be employed by insurance companies, industrial plants, and some public fire departments. Students gain experience with both public and private organizations through Chemeketa's cooperative work experience program.

An Associate in Science degree is awarded upon satisfactory completion of 106 required credit hours in the option selected. Course work is accredited by the Oregon Fire Standard and Accreditation Board.

Fire Suppression Option

Course No.	Course	Credit Hours
Term 1		
	General Education Elective	3
4200	Basic Mathematics	3
5100	Introduction to Fire Protection	3
5122	Fire Incident Related Experience	3
5135	Emergency Medical Technology I Part A	2
PE185FM	Fitness Appreciation	1
1101	Communication Skills or	
Wr121	English Composition	3
Term 2		
4202	Introduction to Algebra and Geometry	3
5103	Elementary Science for Firefighters	4
5104	Fire Service Hydraulics	4
5123	Fire Incident Related Experience	3
5136	Emergency Medical Technology I Part B	3
PE185FM	Fitness Appreciation	1
Term 3		
1104	Communication Skills or	
Sp111	Fundamentals of Speech	3
6995	Fire Science I	4
5105	Fire Pump Construction and Operation	3
5120	Fire Service Rescue Practices	4
5124	Fire Incident Related Experience	3
PE185FM	Fitness Appreciation	1
Term 4		
6996	Fire Science II	4
	Technical Elective	3
1106	Technical Report Writing or	
Wr227	Technical Writing	3
5101	Fundamentals of Fire Prevention	3
5108	Hazardous Materials	3
5125	Fire Incident Related Experience	3
PE185CA	Conditioning-Beginning	1
Term 5		
5109	Hazardous Materials II	3
5126	Fire Incident Related Experience	3
5131	Building Construction for Fire Suppression	3
PE185FM	Fitness Appreciation	1
	Technical Electives*	6
Term 6		
Psy101	Psychology of Human Relations	3
5127	Fire Incident Related Experience	3
PE185FM	Fitness Appreciation	1
	Technical Electives*	9

***Technical Electives**

5106	Fire Protection Systems and Extinguishers
5107	Fire Investigation
5110	Fire Training Programs and Techniques
5111	Fire Insurance Principles and Grading Schedules
5112	Fire Department Organization and Management
5113	Fire Fighting Tactics and Strategy
5116	Fire Codes and Ordinances
5117	Water Distribution Systems
5118	Evidence Photography for Fire and Arson Investigators
5128	Aircraft Crash/Fire Rescue
5137	EMT I Practicum
5151	Natural Cover Fire Protection
5162	Fire Fighters Law
5168	Fire Service Instructor Training
5169	Introduction to Training Programs
6120	Mechanical Code and Inspection I
He262	CPR Instruction

Fire Prevention Insurance Risk Inspection Option

Term 1		
4200	Basic Mathematics	3
1101	Communication Skills	3
5100	Introduction to Fire Protection	3
5160	Fire Prevention Fundamentals	3
6423	Introduction to Uniform Building Code	3
	General Education Elective	3
Term 2		
4202	Introduction to Algebra and Geometry	3
1104	Communication Skills	3
5103	Elementary Science for Firefighters	4
5106	Fire Protection Systems and Extinguishers	3
5116	Fire Codes and Ordinances	3
6410	Non-structural Plan Review	3
Term 3		
Psy101	Psychology of Human Relations	3
5107	Fire Investigation	3
5162	Firefighters' Law	2
5117	Water Distribution Systems	3
6995	Fire Science I	4
FP280B	Cooperative Work Experience	2
Term 4		
5108	Hazardous Materials I	3
6116	Building Code I	3
6996	Fire Science II	4
5164	Building Construction-Fire Protection	3
5161	Fire Prevention Inspection	3
Term 5		
5109	Hazardous Materials II	3
5165	Industrial Fire Protection	3
6119	Building Code II	3
FP280C	Cooperative Work Experience	3
	Technical Electives	6
Term 6		
1106	Technical Report Writing	3
5166	Advanced Detection and Prevention System	3
5167	Fire Insurance Fundamentals	3
6120	Mechanical Code Inspection I	3
FP280C	Cooperative Work Experience	3
	Technical Elective*	3

***Technical Electives:** FP280C Cooperative Work Experience, 5110 Fire Training Programs and Techniques, 5111 Fire Insurance Principles and Grading Schedules, 5112 Fire Dept. Organization and Management, 5113 Firefighting Tactics and Strategy, 5131 Building Construction for Fire Suppression, 5151 Natural Cover Fire Protection, 5118 Evidence Photography for Fire and Arson Investigators.

Food Service Management

Food Service Management is a preparatory program for persons who want to enter food service occupations and eventually become managers. It is open to persons without any previous training or experience in food services and to employees seeking supplementary training.

Graduates of the program may become managers or assistant managers of food service establishments or fill positions in one of four specialty areas: 1) management, including personnel managers, purchasing agents, merchandising supervisiors or cost control clerks; 2) dining room supervisors, hosts or hostesses; 3) food production managers, kitchen stewards, pantry supervisors, and sanitation supervisors; and 4) production chefs or sous chefs.

It is strongly recommended that students enroll in FS280 Cooperative Work Experience during their second year of training. To be eligible, a student must have completed 48 credit hours of the program and have a minimum 2.0 grade point average. Students not meeting these qualifications may choose elective courses with an advisor's approval. A minimum of six credit hours of CWE may be applied toward graduation.

Upon successful completion of the required 92 credit hours, an Associate in Science degree is awarded.

Course No.	Course Title	Credit Hours
Term 1		
3250	Survey of Food Service Industry	1
3200	Basic Food and Nutrition	2
3201	Quantity Food Production I	8
1101	Communication Skills	3
3210	Sanitation and Safety	2
Term 2		
4200	Basic Mathematics	3
3211	Menu Planning and Culinary Terms	2
3202	Quantity Food Production II	8
6923	Accounting I	4
Term 3		
3203	Quantity Food Production III	8
3206	Dining Room Operations III	2
BA131	Introduction to Data Processing	3
He252	First Aid	1
He261	Cardiopulmonary Resuscitation	1
Term 4		
3212	Purchasing and Store Control	3
3214	Food Production, Organizing and Planning	2
2673	Business English	3
3255	Advanced Menu Planning	3
3256	Dining Room Supervision	3
Term 5		
2672	Business Communication	3
	Social Science Elective	3
BA206	Business Management Principles	3
3260	Organization and Management of Institutional Food Service	
	or	
3261	Restaurant Management	3
FS280	Cooperative Work Experience	3
Term 6		
3262	Purchasing for Institutions	
	or	
BA223	Marketing	3
BA226	Business Law	3
	Social Science Elective	3
3263	Inventory Control	3
FS280	Cooperative Work Experience	3

Foreign Languages

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in foreign languages at the University of Oregon, Portland State University, or Oregon State University; into a major program in Spanish at Southern Oregon State College; or into a program for the preparation of foreign language teachers at Oregon College of Education, Southern Oregon State College, or Eastern Oregon State College. Students may complete requirements for the baccalaureate degree within two additional years.

Although foreign language students may begin their study of language in college, it is more common and desirable for prospective language majors to begin their studies with two to four years of work in high school, since major requirements stipulate 30-45 hours in the language beyond the second-year course. Students completing second-year course work in language their first year should transfer to a four-year institution for their sophomore year. Students should not plan to transfer more than 24 lower-division hours of credit in any one language.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Humanities sequence	3	3	3
Science sequence	4	4	4
Foreign language sequence	4	4	4
Physical Education	1	1	
He250 Personal Health			3
Electives	0-3	0-3	0-6
Second Year	**4**	**5**	**6**
Foreign language sequence (second year)	4	4	4
Social science (Hist107, 108, 109 History of World Civilization recommended)	3	3	3
Social science or humanities sequence (Psy201, 202, 203 for teachers) (PSU, UO)	3-5	3-5	3-5
Physical Education	1	1	1
Electives (Sp111 for teachers)	0-3	0-3	0-3

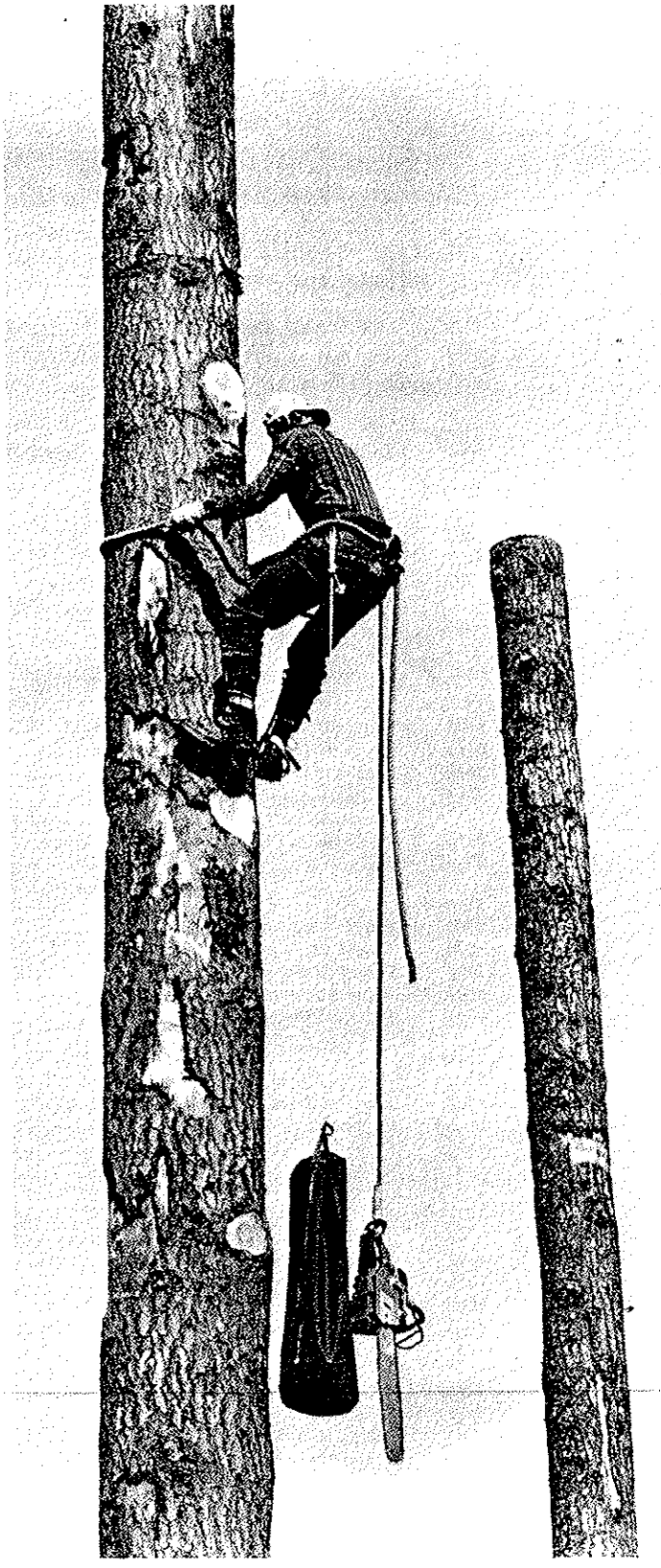
Forestry

(college transfer)

Students who complete these courses may qualify to enter the professional curricula in forestry or the program in resource recreation management offered by the School of Forestry at Oregon State University at the sophomore level. Students planning to enter a professional program of forestry at OSU or another institution, should transfer immediately upon completion of the one-year pre-forestry program at Chemeketa. Students who complete this program, followed by at least three years at a professional school of forestry may earn a baccalaureate degree. The program outlined below is especially recommended for students who begin their study at a community college, and takes full advantage of course work available there to provide the broadest possible transferability. The program does not necessarily parallel programs recommended for students who begin their work at a four-year institution.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Bot201 and 202 General Botany or Bi101, 102 and 103 General Biology	4	4	4
Ch104, 105, 106 General Chemistry	4-5	4-5	4-5
Mth201, 202, 203 Calculus (per placement test)	4	4	4
Wr121, 122, 123 or 227 English Composition	3	3	3
Physical Education	1	1	1
Electives (Sp111 or BA101)			0-4



Forest Technology

The Forest Technology curriculum includes instruction in the basic knowledge and technical skills required for employment as a forest technician.

There are job opportunities in log scaling, timber management, fire control, recreation, timber stand improvement, and forest engineering.

Cooperative Work Experience may be used instead of selected technical courses to complete program requirements. CWE requires departmental approval.

Upon satisfactory completion of the required 109 credit hours the student is awarded an Associate in Science degree.

Course No.	Course Title	Credit Hours
Term 1		
3600	General Forestry	3
1101	Communication Skills I	3
4101	Drafting	2
4202	Introduction to Algebra and Geometry	3
3605	Tools and Equipment	2
3611	Tree Identification	2
6192	Introduction to Engineering Calculators	1
Term 2		
1104	Communication Skills II	3
4135	Project Graphics	2
3610	Tree Identification	2
4204	Introduction to Trigonmetry with Geometry	3
5513	Multimedia First Aid	1
Psy100	Introduction to Psychology	3
Term 3		
6300	Forest Mensuration I	4
3624	Forest Photogrammetry	3
3626	Forest Sciences	3
6101	Plane Surveying	4
4302	Practical Physics	4
Term 4		
5151	Natural Cover Fire Protection	4
4282	Logging Practices	4
Ec100	Outline of Economics	3
6103	Plane Surveying	5
6301	Forest Mensuration II	4
Term 5		
6280	Wood Structure and Identification	3
3617	Scaling Practices	4
4286	Wood Industry Economics	3
3660	Forestry Reports	3
3601	Forestry Seminar	1
3630	Silviculture	3
Term 6		
3614	Wood Products Marketing	3
4287	Methods of Supervision	3
4172	Power Systems	4
6510	Forest Road Survey	4
4190	Industrial Accident Prevention	3
	General Education Elective	3

General Studies

(college transfer)

The general studies program emphasizes either the humanities, the sciences, or social sciences. Upon completion of this Associate in Arts degree program, students may transfer college credits into many general studies programs and complete requirements for baccalaureate degrees within two additional years. The Associate in Arts degree requires 93 credit hours.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123, 227 English Composition	3	3	3
Social science sequence	3-4	3-4	3-4
Math or science sequence	4-5	4-5	4-5
Physical Education	1	1	
He250 Personal Health			3
Electives (Foreigh language if bachelor of arts degree desired)	3-4	3-4	0-4
Second Year	**4**	**5**	**6**
Humanities sequence	3	3	3
Second sequence in humanities (for humanities emphasis) or Mathematics or science (for math-science emphasis) or social science (for social science emphasis)	3-5	3-5	3-5
Physical education	1	1	1
Electives (see an advisor for options–may include up to 12 hours career program credits)	8-10	8-10	8-10

Geography

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in geography at the University of Oregon, Southern Oregon State College, Portland State University, Oregon State University, or Oregon College of Education. Students may complete requirements for a baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press.

Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Geog105, 106, 107 Introductory Geography	3	3	3
G201, 202, 203 Geology (not required at SOSC) or Humanities sequence (SOSC)	3	3	3
G204, 205, 206 Geology Laboratory (not required at SOSC)	1	1	1
Mathematics (per placement test)	3-4	3-4	3-4
Physical Education	1		1
He250 Personal Health		3	
Electives	0-3	0-3	0-6
Second Year	**4**	**5**	**6**
Science sequence (SOSC, PSU, UO)	4-5	4-5	4-5
Social Science sequence (SOSC: Ec201, 202, 203)	3	3	3
Humanities sequence	3	3	3
Bi101, 102, 103 or social science sequence (PSU) or Foreign language (UO) or			
Bi101, 102, 103 (OSU)	3-4	3-4	3-4
Physical Education	1	1	1
Electives	0-3	0-3	0-3

Geology

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in geology at the University of Oregon, Oregon State University, Southern Oregon State College, or Portland State University. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institutions to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Humanities Sequence	3	3	3
Mathematics (per placement test)	4	4	4
G201, 202, 203 Geology	3-4	3-4	3-4
G204, 205, 206 Geology Laboratory	1	1	1
Physical Education	1		1
He250 Personal Health		3	
Electives		0-3	0-3
Second Year	**4**	**5**	**6**
Social Science Sequence (SOSC: Ec201, 202, 203)	3	3	3
Ph201, 202, 203 General Physics	4	4	4
Ch204, 205, 206 General Chemistry	5	5	5
Physical Education	1	1	1
Electives (OSU, UO, SOSC, Bi101, 102, 103)	3-4	3-4	3-4

Health, Health Education

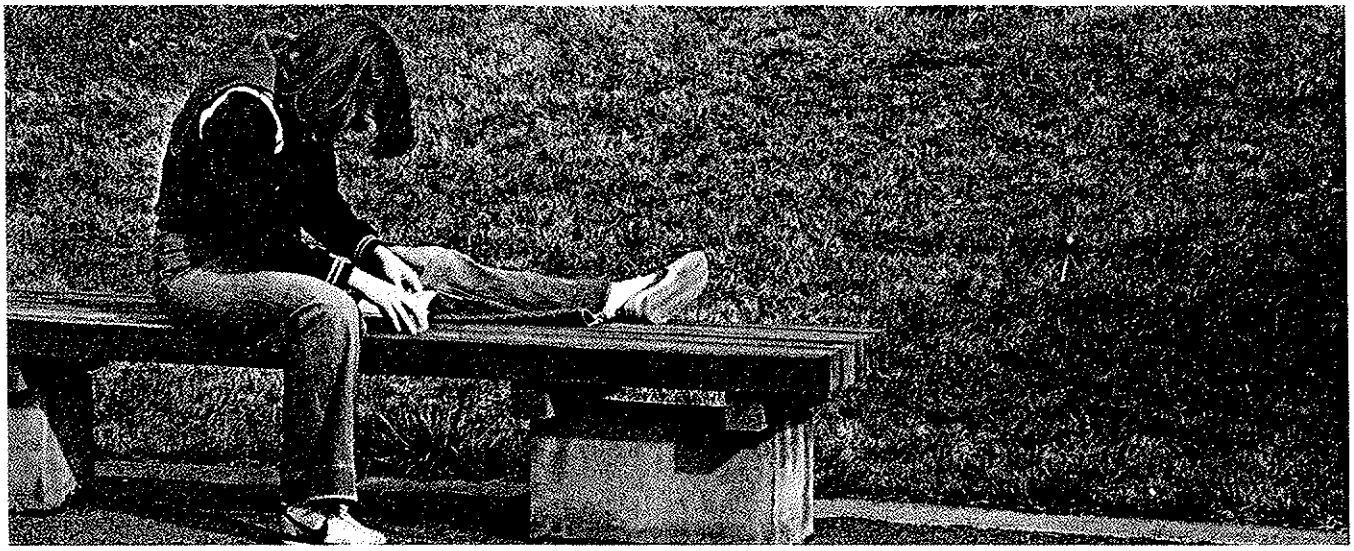
(college transfer)

These courses are recommended for students interested in completing a major program in health or health education at Oregon State University, Portland State University, the University of Oregon or Oregon College of Education. All of these programs lead to teacher certification in health.

The OSU program in health also offers major options in community health, environmental health, school health and safety and safety studies. The PSU program, combined with PSU's certificate program in public health studies, prepares students in community health. The UO program offers opportunities for specialization in community health, gerontology, traffic safety, school health, and comprehensive health. The Oregon college transfer guide lists course recommendations for these options. Students completing the appropriate program outlined below may complete a major program of study within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Compositon	3	3	3
Bi101, 102, 103 General Biology	4	4	4
Ch104, 105, 106 or Ch204, 205, 206 General Chemistry	4-5	4-5	4-5
Mth106 (OSU environmental health major)	4		
He252 First Aid		3	
FN225 Nutrition			3-4
Physical Education	1	1	1
Electives	0-3	0-3	0-3



Second Year - UO, PSU, OCE	4	5	6
Psy201, 202, 203 General Psychology	3	3	3
Soc204, 205, 206 General Sociology	3	3	3
Humanities sequence (UO, OCE-literature sequence)	3	3	3
Phl201, 202 or 203 Philosophy (any one course-PSU)	3		
Sp111 Fundamentals of Speech (PSU, OCE)			3
Physical Education	1	1	1
He250 Personal Health (UO, OCE)			3
Electives	0-6	3-6	0-6

Second Year - OSU	Term		
	4	5	6
Psy201, 202, 203 General Psychology	3	3	3
Soc204, 205, 206 General Sociology	3	3	3
PS202 American Governments (school health, community health) or Anth101, 102 or 103 General Anthropology (environmental health)			3
Ch226 Organic Chemistry (environmental health)	5		
Ph201, 202, 203 General Physics (environmental health)	4	4	4
Sp111 Fundamentals of Speech			3
He250 Personal Health			3
Electives	0-9	0-9	0-6

History
(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in history at the University of Oregon, Oregon State University, Portland State University, Eastern Oregon State College, Southern Oregon State College or Oregon College of Education. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemekets's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Hst107, 108, 109 History of World Civilization	3	3	3
General Education-Science sequence	4	4	4
Humanities or Foreign Language sequence	3-4	3-4	3-4
Physical Education	1		1
Electives	0-3	0-3	0-3

Second Year	4	5	6
Hst201, 202, 203 History of the United States	3	3	3
General Education-Humanities sequence (UO, EOSC, SOSC) or Humanities or Social Science sequence (OSU) or Humanities sequence (PSU) or Psy201, 202, 203 General Psychology (PSU)	3	3	3
Social Science sequence other than history or Second year Foreign Language	3-4	3-4	3-4
Physical Education	1	1	1
Electives	0-3	0-3	0-3

Home Economics

(college transfer)

These courses are recommended for students attending Chemeketa who plan to transfer into a major program in home economics at Oregon State University. Students may complete requirements for the baccalaureate degree with three additional years of work at the four-year institution.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	Term 2	Term 3
Wr121 English Composition	3		
Mth95 Intermediate Algebra		4	
Art115, 116 Basic Design	2	2	
Social science or humanities electives (See OSU catalog)	3	3	3
Sp111 Fundamentals of Speech			3
Ch104, 105, 106 General Chemistry	5	5	5
Physical Education	1	1	
Electives	0-3	0-3	2-6

Human Resource Technology

The Human Resource Technology program offers training for entry-level positions in human service agencies. The program combines academic work with five terms of practicum (supervised field work in human service agencies).

The curriculum includes courses in basic skills in observation, interviewing, and counseling (individual and group) and students may gain a working knowledge of the various health, social, and welfare services in the community.

Students must meet admission criteria for both the college and the Human Resource Technology program. The program has a limited enrollment and early application is encouraged.

The Associate in Science degree is awarded upon successful completion of the required 93 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
Psy201	General Psychology	3
Wr121	English Composition	3
5436	Self-Awareness and Interpersonal Skills	3
5442	Community Resources	3
5450	Introduction to Field Experience	3
Term 2		
Psy202	General Psychology	3
He261	Cardiopulmonary Resuscitation	1
4200	Basic Mathematics	3
5437	Interviewing Theory and Techniques	2
5443-8	Practicum Experience	3-8
Term 3		
Psy203	General Psychology	3
Psy229	Growth and Development	3
Sp111	Fundamentals of Speech	3
5438	Group Dynamics	3
5443-8	Practicum Experience	3-8
Term 4		
	Vocational Electives*	3-6
5513	First Aid	1
Soc204	General Sociology	3
5440	Major Models of Personality	3
5443-8	Practicum Experience	3-8
Term 5		
	Vocational Electives*	3-6
Soc205	General Sociology	3
5441	Intervention Strategies	3
5443-8	Practicum Experience	3-8
Term 6		
	Vocational Electives*	6
SSc102	Minority Experience in Contemporary America	3
FE205	Job Search Technique	1
5443-8	Practicum Experience	3-8

*Vocational Electives (14 hours total) to be selected from classes in mental retardation, gerontology, educational aide, early childhood education, juvenile corrections, sign language or independent studies, etc. or PSA199 A, D, G, H, I to be approved by Human Resource Technology advisor.

Industrial Technology/ Apprenticeship

Industrial Technology

Chemeketa Community College grants an Associate in Science degree in industrial technology. Credit may be earned for on-the-job training and related instruction. The degree is awarded to students who meet the following requirements:

1. Be a journeyman level tradesman in a skilled occupation.
2. Complete a minimum of 30 credit hours at Chemeketa Community College.

3. Complete at least 18 credit hours of general education courses.
4. Complete at least 6 credit hours of communication skills.
5. Compile a total of at least 90 credit hours. Up to 45 credit hours may be awarded for journeyman status and 27 credit hours may be awarded for trade-related training.

Apprenticeship

Apprenticeship training as a method of vocational education is administered by the Oregon Bureau of Labor. It combines full-time, on-the-job work experience with trade-related theoretical instruction.

The instruction at Chemeketa is for persons working at particular trades who need to improve their knowledge of trade theory. Classes generally consist of apprentices registered with Oregon Bureau of Labor, journeyman tradesmen who wish to upgrade their skills and knowledge, pre-apprenticeship students, and others as approved by local committees.

Currently Chemeketa has apprenticeship classes for these trade areas: plumber, industrial manufacturing, electrician, electrical inside wiring, sheet metal, radio-TV, automotive, machinist, welding, baker, and mechanical systems.

Insurance Technology

The Insurance Technology curriculum emphasizes a broad knowledge of the insurance industry and a general knowledge of business. It is designed for men and women seeking lifetime careers serving the needs of the insurance-buying public.

There are employment opportunities for graduates in sales, in office operations and administration, claims work, entry level risk management, and in certain government offices.

The curriculum also provides continuing education for persons active in the insurance industry and allows them an opportunity to reinforce and sharpen their knowledge and skills. Insurance Institute of America courses and other society-sponsored courses assist insurance personnel with the professional preparation required for a successful career.

A maximum of six credit hours of Cooperative Work Experience may be applied toward graduation.

Upon successful completion of the required 100 credit hours an Associate in Science degree is awarded.

An agreement between Oregon College of Education and Chemeketa Community College provides for the transfer and acceptance of 45 credit hours of selected vocational-technical course credits from this insurance technology program to apply toward the BA/BS degree curriculum in interdisciplinary studies. This transfer credit is possible only for students who have been formally admitted to Oregon College of Education.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable	
	or	
	General Education Elective	3
4201	Business Mathematics	3
BA211	Financial Accounting I	
	or	
6923	Accounting Procedures	4
BA101	Business Environment	4
BA241	Risk and Insurance	3
2344	Insurance Occupational Survey	1
Term 2		
BA214	Business Communications	3
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II	4
6918	Applied Business Math	3
SS121	Typing	3
2119	Insurance-Property and Casualty	3
Term 3		
BA213	Managerial Accounting	
	or	
6925	Accounting Procedures III	4
BA223	Marketing Principles	3
	Psychology or Sociology Elective	3
BA206	Business Management Principles	3
2343	Insurance-Life and Health	3
	or	
2241	Security and Individual Life Insurance-CLU301	4
Term 4		
BA226	Business Law I	3
Sp111	Speech	3
	Psychology or Sociology Elective	3
	Approved Insurance Elective*	4
5600	Medical Terminology	3
Term 5		
BA222	Finance	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
BA227	Business Law II	3
2231	Risk Mangement	3
	Approved Insurance Elective*	4
Ins280	Cooperative Work Experience	
	or	
	Approved Elective	3
Term 6		
2685	Personnel Principles and Supervision	3
	Psychology or Sociology Elective	3
	Approved Insurance Elective*	4
2226	Regulations and Law	2
Ins280	Cooperative Work Experience	
	or	
	Approved Elective	3

*Choose any CLU course except 301, any IIA course or any CPCU course.

Journalism

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in journalism at the University of Oregon. Students who complete this program and meet grade requirements may complete requirements for the baccalaureate degree within two additional years. See Chemeketa's journalism advisor for information on those requirements.

J224, 225, 226, Introduction to Journalism is offered at Chemeketa and students may wish to enroll in it as an elective. Lower-division course work in journalism taken at other institutions is not required in the UO major but may be tranferred as electives.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Eng101, 102, 103 Survey of English Literature or Eng104, 105, 106 Introduction to Literature	3	3	3
Science sequence	4	4	4
Foreign Language sequence (recommended)	4	4	4
Physical Education	1	1	
He250 Personal Health			3
J224, 225, 226 Introduction to Journalism (Elective)	3	3	3
Second Year	**4**	**5**	**6**
Hist107, 108, 109 History of World Civilization or Hist201, 202, 203 History of the United States	3	3	3
Eng253, 254, 255 Survey of American Literature or Eng201, 202, 203 Shakespeare	3	3	3
Ec201, 202, 203 Principles of Economics	3-4	3-4	3-4
Foreign language (recommended)	4	4	4
Physical Education	1	1	1
Electives	0-3	0-3	0-3

Technical Journalism

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in technical journalism at Oregon State University. Students may complete requirements for the baccalaureate degree with three additional years of work.

A technical minor is required as part of this major program. Consisting of 27-36 hours of work, this minor may be in aerospace studies, agriculture, applied economics, applied safety studies, business administration, civil engineering technology, forestry, health sciences, home economics, military science, naval science, oceanography, pharmacy, or science and may be completed after transfer. Consult the Oregon State College transfer guide for prerequisites for the selected minor.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121 English Composition	3		
J224, 225, 226 Introduction to Journalism	3	3	3
Science sequence with laboratory	4	4	4
Social science sequence other than history	3	3	3
Literature or history sequence	3	3	3
Physical Education	1	1	1
Electives		3-4	3-4

Machine Shop

The Machine Shop program offers training in knowledge and skills needed by workers in machine shops and related occupations. The training includes practice using machine tools plus courses in industrial materials, drafting, print reading, sketching, and layout practices. The program also includes instruction in written and verbal communication skills.

Machinists set up and operate all machine and shop tools, including drill presses, engine and turret lathes, milling machines, grinders, and

saws and work from blueprints or sketches to produce mechanical items in a variety of materials. This requires mastery of layout operations, making and using jigs, fixtures, and patterns, and the use of automated control equipment. Graduate machinists may qualify for positions in job shops, production, specialty, maintenance, tool setup, and layout work.

Cooperative Work Experience may be substituted for approved electives. CWE requires departmental approval.

Upon satisfactory completion of the required 103 credit hours, the student is awarded an Associate in Science degree.

Course No.	Course Title	Credit Hours
Term 1		
4200	Basic Mathematics	3
1101	Communication Skills I	3
Psy100	Introduction to Psychology	3
4807	Machine Tool Processes I	4
4253	Shop Safety	1
4810	Shop Drawing and Layout I	3
Term 2		
4202	Mathematics	3
4300	Practical Physics	4
4808	Machine Tool Processes II	4
4150	Welding	2
4811	Shop Drawing and Layout II	2
Term 3		
4204	Introduction to Trigonometry with Geometry	3
1104	Communication Skills II	3
4809	Machine Tool Processes III	5
4302	Practical Physics	4
4170	Industrial Materials and Processes	3
Term 4		
4171	Mechanical Systems	4
4820	Machine Shop Problems	3
4841	Machine Shop Practices	6
4173	Hydraulic and Pneumatic Systems	3
	Approved Elective or	
MS280	Cooperative Work Experience	3
Term 5		
4176	Hydraulic and Pneumatic Systems II	3
4174	Metal Fabrication and Finishing	4
4833	Advanced Lathe Practices	4
4837	Advanced Milling Machine Practices	3
	Approved Elective or	
MS280	Cooperative Work Experience	3
Term 6		
4824	Machine Shop Automation	2
4845	Job Machining Practices	8
4847	Tool and Fixture Design and Application	4
4500	Employer-Employee Relations	3

Mathematics

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in mathematics at the University of Oregon, Oregon State University, Portland State University, Eastern Oregon State College, or Southern Oregon State College or Oregon College of Education. Students who complete a basic sequence in calculus by the end of the sophomore year may normally complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Humanities sequence	3	3	3
Non-math science (OSU, PSU, SOSC) or Foreign language or non-math science or social science (UO, EOSC)	3-4	3-4	3-4
Mathematics (per placement examination)	4	4	4
Physical Education	1		1
He250 Personal Health		3	
Electives	0-3	0-3	3
Second Year	**4**	**5**	**6**
Mathematics	4	4	4
Second non-math science sequence	4	4	4
Social science (EOSC: Non-math science if social science taken first year)	3-4	3-4	3-4
Physical Education	1	1	1
Electives	3-4	3-4	3-4

Medical Office Assisting

The Medical Assisting Program includes options for persons who wish to become medical office assistants, ward clerks, health records technicians, and medical transcriptionists. The program offers clinical experience as well as theory and laboratory courses. Students in the

program must earn grades of C or better in all medical related courses. SS121, Typing I, is required for all students.

The **Medical Office Assistant** program prepares students for a wide range of duties in medical offices. Business responsibilities may include scheduling and receiving patients, keeping medical records, handling telephone calls and correspondence, and purchasing and maintaining supplies and equipment. They may be responsible for an office and handle insurance matters, accounts, fees, and collections. Their medical duties may include assisting with examinations and treatments, taking medical histories, performing certain diagnostic tests and laboratory procedures in a physicians's office, and sterilizing instruments and equipment.

Students are awarded Certificates of Completion upon successful completion of 53 credit hours. This program option is accredited by the Council on Medical Education of the American Medical Association in collaboration with the American Association of Medical Assistants which certifies graduates by examination.

Graduates of the **Ward Clerk** option may become members of a nursing unit team who relay telephone messages and doctors' orders; chart vital signs; perform clerical tasks for admission, discharge and transfer of patients; and prepare patient's charts before surgery and various diagnostic procedures. Ward clerks work with physicians, various hospital departments, patients' relatives and friends and other allied health professionals. Students are awarded Certificates of Completion upon successful completion of 36 credit hours.

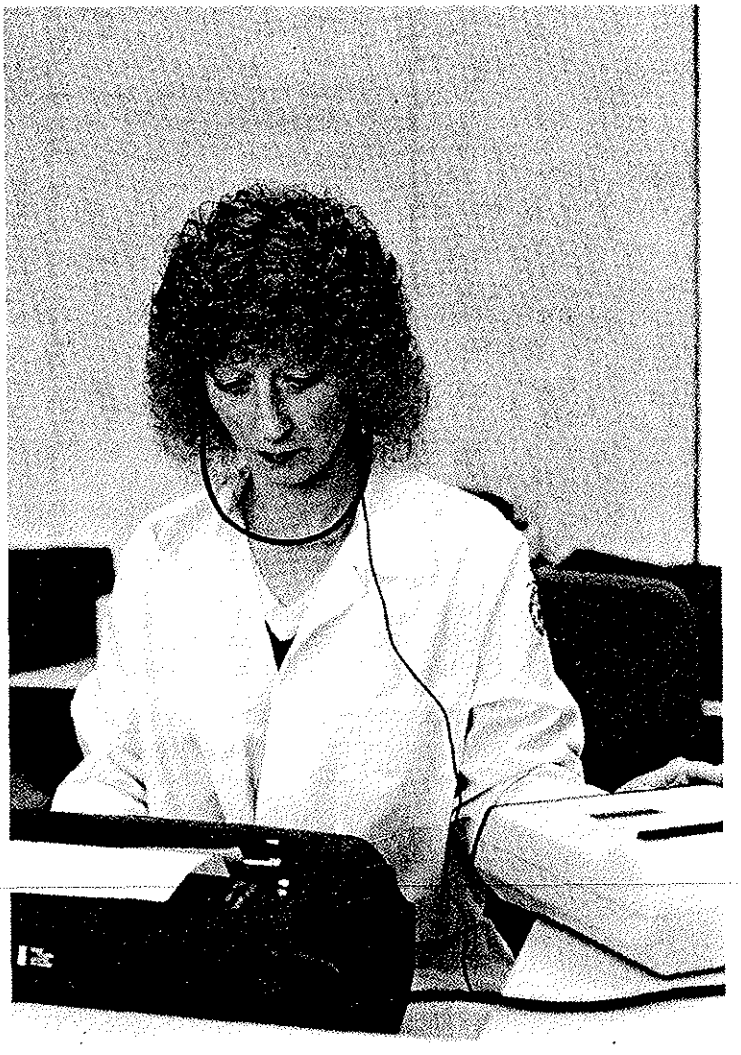
Graduates of the **Health Records Technology** option may become medical transcriptionists and health record technicians or may continue their education in Medical Record Technology and administration programs at other schools.

Health records technicians primarily perform the technical skills of handling medical records such as classifying diseases and operations, qualitatively and quantitatively analyzing current and discharged records, assisting in the collection of data for research and special studies, compiling vital and health statistical information, transcribing various medical reports, abstracting medical information for correspondence purposes, admitting patients to hospitals, filing and retrieving medical information, and many other duties related to medical records and health information keeping. Certificates of Completion are awarded to students who successfully complete 47 credit hours.

The **Medical Transcriptionist** curriculum offers courses in the use of medical terminology and attaining proficiency in transcribing, using transcription machines, preparing medical reports of all types with accuracy and speed and performing telephone and clerical duties in medical record offices. A Certificate of Completion is awarded upon successful completion of 47 credit hours.

Medical Office Assisting Option

Course No.	Course Title	Credit Hours
Term 1		
5602	Medical Assisting, Basic Procedures	3
5700	Health Occupations Overview	1
5611	Medical Law and Ethics	3
5600	Medical Terminology I	3
4200	Basic Math	3
5615	Body Structure and Function I	3
SS121	Typing	3
Term 2		
5616	Body Structure and Function II	3
5604	Medical Office Procedures	4
5513	Multimedia First Aid	1
5610	Medical Terminology II	3
5603	Medical Transcription	2
He261	Cardiopulmonary Resuscitation	1
5606	Medical Office Assisting, Advanced Procedures	4
Term 3		
5605	Medical Science	3
5607	Medical Office Mangement	3
5609	Medical Office Practice	6
5000	Medical Practice Seminar	1
Psy100	Introduction to Psychology	3



Ward Clerk Option

Term 1		
5700	Health Occupations Overview	1
5615	Body Structure and Function I	3
5600	Medical Terminology I	3
5620	Health Information Systems Procedures I	4
5611	Medical Law and Ethics	3
He261	Cardiopulmonary Resuscitation	1
SS121	Typing I	3
Term 2		
5616	Body Structure and Function II	3
5620	Medical Terminology I	3
5621	Health Information Systems Procedures II	5
5609	Medical Office Practicum	6
5000	Medical Practice Seminar	1

Health Records/Medical Transcriptionist Option

Term 1		
5700	Health Occupations Overview	1
5615	Body Structure and Function I	3
5600	Medical Terminology I	3
5620	Health Information Systems Procedures I	4
5611	Medical Law and Ethics	3
He261	Cardiopulmonary Resuscitation	1
SS121	Typing I	3
Term 2		
5616	Body Structure and Function II	3
5610	Medical Terminology I	3
5621	Health Information Systems Procedures II	5
5603	Medical Transcription	2
5604	Medical Office Procedures	4
Term 3		
5622	Health Records Processing	5
5605	Introduction to Medical Science	3
5000	Medical Practice Seminar	1
4200	Basic Mathematics	
	or	
1101	Communication Skills	
	or	
Wr121	English Composition	
	or	
Psy201	General Psychology	3

Nursing

Chemeketa offers a career ladder program in nursing for those students who want to become licensed practical nurses or registered nurses.

The nursing curriculum is designed to prepare men and women for positions as licensed personnel at the following levels:

Level I

Licensed Practical Nurse

The licensed practical nurse is a member of a nursing or health team and gives nursing care to patients of all ages in simple nursing situations. The licensed practical nurse assists the RN in complex nursing situations.

Completion of the one-year program entitles the student to take the Oregon licensure examination to become a licensed practical nurse. A Certificate of Completion is awarded upon successful completion of the required 53 credit hours.

Nursing Assistant

The student who successfully completes the required first-term courses and leaves the program is eligible to receive a certificate as a nursing assistant.

The nursing assistant works under the direction and supervision of a registered nurse or licensed practical nurse. He or she assists licensed nursing personnel in meeting normal patient needs for safety, comfort, hygiene, activity, rest, sleep, nutrition, elimination and fluid balances, oxygen, and emotional support.

Course No.	Course Title	Credit Hours
Term 1		
Nur106	Nursing	10
Bi121	Human Anatomy and Physiology	4
Psy201	General Psychology	3
He261	Cardiopulmonary Resuscitation	1
Term 2		
Nur108	Nursing	10
Wr121	English Composition	3
Bi122	Human Anatomy and Physiology	4
5700	Health Occupations Overview	1
Term 3		
Nur109	Nursing	10
Bi124	Medical Microbiology	4
Psy299	Growth and Development	3

Level II

Registered Nurse

The registered nurse, or RN, applies knowledge drawn from broad, indepth education in the social and physical sciences in assessing, planning, ordering, giving, delegating, teaching, and supervising care which promotes a patient's optimum health and independence.

The RN guides other team members with less education and/or experience, evaluates the need for patient instruction, plans and participates in health teaching, and applies mental health principles to nursing care and function. RNs must also assume responsibility for their professional development.

Upon successful completion of the required 112 credit hours, the student is awarded an Associate in Science degree. This is a two-year program.

Chemeketa advises and helps students plan their pre-nursing programs for transfer to a school of nursing which grants the baccalaureate degree and offers general education courses applicable to the B.S. program. Licensed nursing personnel who want to continue their education may take general education courses for transfer into a senior college.

The college also offers specialized and re-entry courses to help registered nurses, licensed practical nurses, and other health care personnel keep abreast of current knowledge and new developments in their field (see course descriptions for Nur111, 205, and 211).

Term 4		
Nur205	Nursing	6
Ch140	Physiological Chemistry	3
He261	Cardiopulmonary resuscitation or	
5513	First Aid	1
Term 5		
Nur206	Nursing	10
	Elective*	3
Nur204A	Nurse at Work	1
	Elective*	3
Term 6		
Nur208	Nursing	10
	Elective*	3
Nur204B	Nurse at Work	1
	Sociology Elective	3
Term 7		
Nur209	Nursing	11
Nur204C	Nurse at Work	1
	Elective*	3

*Electives combines with required courses must meet Oregon State Board of Nursing minimum requirements:

6 credit hours – Humanities or social science (anthropology, art, composition, economics, foreign language, geography, history, journalism, literature, music, philosophy, political science, psychology, religion, speech, sociology, women's studies).
6 credit hours – Free electives

Nursing
(college transfer)

The University of Oregon Health Sciences Center School of Nursing offer a bachelor of science degree in nursing. Students must complete the courses below at an accredited college or university or community college and follow them with three academic years at the University of Oregon Health Sciences Center school of nursing in Portland. Admission to the professional nursing program is competitive. Application materials and information concerning the National League for Nursing, Prenursing, and Guidance Examination, required of all students with no previous preparation in nursing, are available at the Registrar's Office, UOHSC, Portland, OR 97201.

Transfer Students

Students enrolled and in good standing at any accredited school of nursing, or who have been enrolled and in good standing within the past two years, may apply for admission with advanced standing. Students are considered for advanced standing if they have completed the equivalent of the School of Nursing's sophomore year, including the freshman requirements.

Registered Nurses Seeking Baccalaureate Degrees

The UOHSC School of Nursing provides an opportunity for registered nurses, including those completing Chemeketa's Registered Nurse program, to complete requirements for the baccalaureate degree in nursing. A part-time or full-time program of study is available. Preprofessional course requirements are 45 credit hours of course work which must include one course in nutrition, one course in mathematics, and one year of general chemistry. Information regarding earning credit through CLEP (College Level Examination Program) is available in registrars' offices of all colleges and universities. Registered nurses are strongly encouraged to complete the basic science requirements (anatomy and physiology, biochemistry, microbiology) before entering the baccalaureate program.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term 1	2	3
Wr121 English Composition		3	
Ch104, 105, 106 or Ch204, 205, 206 General Chemistry	5	5	5
FN225 Nutrition			3-4
Mth95 Intermediate Algebra	4		
Physical Education	1	1	1
Humanities sequence	3	3	3
Social Science sequence	3	3	3
Electives	0-3	3	3

Office Occupations

Office Occupations is an open-entry, open-exit program for people who want to develop or refresh their clerical skills in order to qualify for office work. Training is completed when a student attains certain competency goals.

The Office Occupations program is offered on the Salem campus, the McMinnville Chemeketa Center, and the Dallas Chemeketa Center. Students may enroll each Monday when openings exist. For additional information, call 399-5114 in Salem, 472-9482 in McMinnville, and 623-5567 in Dallas.

The program concentrates on developing basic skills required of receptionists, file clerks, typists,

and other related positions. Independent study and individualized instruction give students a comprehensive review of typing, filing, business English and mathematics, calculators, and machine transcription.

The average length of time to complete the full program is two terms (22 weeks) if the student attends 30 hours per week. Students who wish to refresh specific skills may enroll on a weekly basis.

After successfully completing the required 19 credit hours, students receive a Certificate of Completion and a proficiency statement for the subjects studied. Those who enroll on a weekly basis receive proficiency statements.

Required Courses:

Course No.	Course Title	Credit Hours
2606A	Typing I	1
2606B	Typing I	1
2606C	Typing I	1
25151	Individualized Filing	3
2720	Civil Service Exam Prep I	3
2721	Civil Service Exam Prep II	3
2722	Civil Service Exam Prep III	3
2658A	Introduction to Calculators	1
2658B	Introduction to Calculators	1
2662A	Introduction to Machine Transcription	1
2662B	Introduction to Machine Transcription	1

Optional Courses

2607A	Typing II	1
2607B	Typing II	1
2607C	Typing II	1
SS110A	Shorthand Refresher I	2
SS110B	Shorthand Refresher II	2
SS3280	Cooperative Work Experience	6 maximum

Philosophy

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in philosophy at the University of Oregon, Oregon State University, or Portland State University. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

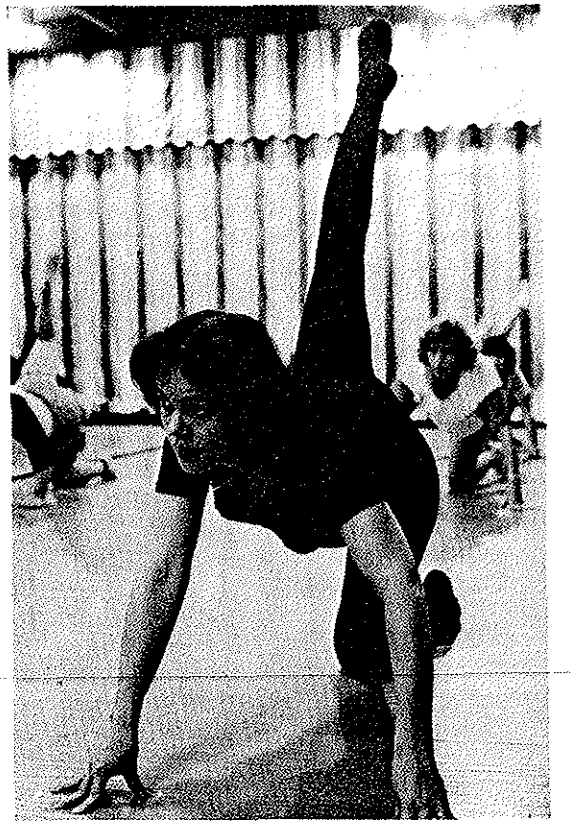
First Year	Term 1	2	3
Wr121, 122, 123 English Composition	3	3	3
Humanities sequence	3	3	3
Science or Mathematics sequence	3-4	3-4	3-4
Social Science sequence	3	3	3
Physical Education	1	1	1
Electives	3	3	3
Second Year	**4**	**5**	**6**
Hist107, 108, 109 History of World Civilization	3	3	3
Phl201, 202, 203 Problems of Philosophy	3	3	3
Science or Foreign Language sequence	3-4	3-4	3-4
Humanities sequence	3	3	3
Physical Education	1		1
He250 Personal Health		3	
Electives	3		3

Physical Education

(college transfer)

Students who wish to become physical education instructors, athletic coaches, recreational directors or dance majors should begin their professional course work during their first college year in order to complete requirements for a baccalaureate degree in four years. These courses below may be transferred into a professional physical education and/or teacher preparation program offered by Oregon state four-year institutions.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemekets's counseling center or an advisor at the institution to which they plan to transfer.



First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Bi101, 102, 103 General Biology	4	4	4
PE194 Professional Activities	2	2	2
PE131 Introduction to Physical Education		3	
Sp111 Fundamentals of Speech	3		
He252 First Aid			3
Humanities sequence	3	3	3
Electives	0-3	0-3	0-3
Second Year	**4**	**5**	**6**
PE294 Professional Activities	2	2	2
Psy201, 202, 203 General Psychology			
Social Science sequence	3	3	3
He250 Personal Health	3		
WE280 Cooperative Work Experience			4
PE199 Sports Officiating		3	
Electives (PE185 Weight Training, Badminton or Racquetball, He199E Nutrition, Weight Control and Physical Fitness recommended.)	0-6	0-6	0-6

A one-year preprofessional program is designed for two different groups of students:those who must transfer to a four-year institution before completing requirements for an Associate in Arts degree and those who are interested in alternative careers in physical education or recreation.

One-Year Preprofessional Program

	1	2	3
Wr121 English Composition	3		
Bi101, 102, 103 General Biology	4	4	4
Science or Social Science sequence	3-5	3-5	3-5
Humanities sequence	3	3	3
Physical Education PE194 or 294 Professional Activities	2	2	2
Electives	0-3	3-6	3-6

Political Science

(college transfer)

These courses have been approved by Oregon State University, the University of Oregon, Portland State University, and Southern Oregon State College for students who plan to transfer college credits into a major program in political science. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Humanities sequence	3	3	3
Science sequence	3-4	3-4	3-4
Physical Education	1		1
Personal Health		3	
Electives (include Psy201, 202; Sp111 for teachers)	6	3-6	6-9
Second Year	**4**	**5**	**6**
PS201, 202, 203 American Government and State and Local Governments	3	3	3
Physical Education	1	1	1
General education sequence in mathematics-science or humanities	3-6	3-6	3-6
Social science sequence other than political science	3	3	3
Electives	3-6	3-6	3-6

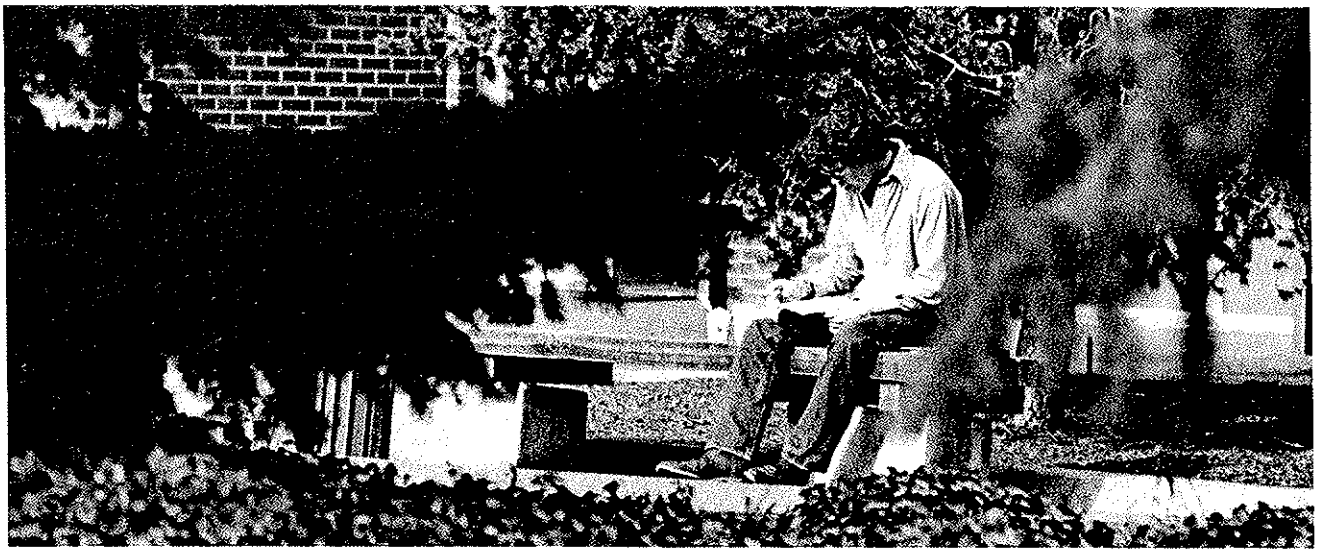
Pre-professional Study

(college transfer)

Admission into professional schools of medicine, dentistry, and veterinary medicine is highly competitive, and pre-professional studies must include stipulated courses in basic sciences and general education. Students beginning a pre-professional program at Chemeketa should consult with an advisor and should plan to transfer to an accredited, four-year institution pre-professional program in the health sciences upon completion of the first year at Chemeketa.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 or 227 English Composition	3	3	3
Sp111 Fundamentals of Speech (Veterinary Medicine)			3
Ch104, 105, 106 or Ch204, 205, 206 General Chemistry	5	5	5
Mathematics (per entrance examination)	4	4	4
Humanities or Social Science sequence	3	3	3
Physical Education	1		1
He250 Personal Health		3	
Electives			3



Psychology

(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in psychology at the University of Oregon, Oregon State University, Eastern Oregon State College, Portland State University, Oregon College of Education or Southern Oregon State College. Students may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Humanities sequence	3	3	3
Science sequence	3-4	3-4	3-4
Social science (Anth101, 102, 103 or Soc204, 205, 206 recommended	3	3	3
Physical Education	1		1
He250 Personal Health		3	
Electives	3	0-4	0-6
Second Year	**4**	**5**	**6**
Psy201, 202, 203 General Psychology	3	3	3
Science or social science sequence	3-4	3-4	3-4
Humanities sequence (foreign language recommended)	3-4	3-4	3-4
Physical Education	1	1	1
Electives (OSU - BA232 recommended; UO - Mth95 recommended)	6	6	6

Real Estate

The goal of the Real Estate program is to develop in students an awareness of the complexities of real estate. The required courses cover factors affecting the value, control, use, appreciation, responsibilities, and privileges associated with real property.

Students may specialize in three basic areas: appraisal, brokerage, or escrow and loan officer training.

Men and women with this technical training may fill a variety of jobs in county assessors' or county recorders' offices, city planning departments, the federal housing administration, veterans affairs, title insurance companies, escrow departments, state highway departments, mortgage companies, savings and loan associations, commercial banks, state tax commissions, federal land banks, farm credit administration, building/subdivision firms, real estate brokerages, and appraising offices.

Proficiency in communication skills and mathematics is required for graduation. Placement tests administered by Chemeketa's counseling center assist students in choosing course consistent with their abilities.

During the second year, students may be eligible for Cooperative Work Experience which allows them to gain valuable on-the-job training. CWE requires departmental approval.

An Associate in Science degree is awarded upon satisfactory completion of the required credit hours.

Appraisal Option

The Associate in Science degree requires 101 credits.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable or General Education Elective	3
4201	Business Mathematics	3
BA101	Business Environment	4
BA260	Real Estate Principles I	3
BA211	Financial Accounting I or	
6923	Accounting Procedures I	4
Term 2		
SS121	Typing I	3
Mth10	Beginning Algebra	4
BA264	Real Estate Finance	3
2437	Legal Descriptions, Platting and Map Reading	2
BA131	Introduction to Data Processing	3
BA263	Real Estate Law	3
Term 3		
2405	Applied Mathematics in Real Estate	3
BA262	Real Estate Practices	3
BA214	Business Communications	3
BA226	Business Law I	3
2408	Real Estate Appraisal I	3
Ec100	Outline of Economics or	
Ec201	Principles of Economics	3
Term 4		
BA232	Introduction to Business Statistics	3
2409	Real Estate Appraisal II	3
2423	Escrow Procedures I	3
2415	Real Estate Investment Analysis I-Principles	3
BA261	Land Use Economics	3
RE280	Cooperative Work Experience or Approved Elective	3
Term 5		
2414	Appraisal Report Writing	3
2418	Elements of Design and Construction	3
2416	Real Estate Investment Analysis II-Taxation	3
2411	Real Estate Appraisal III	3
RE280	Cooperative Work Experience or Approved Elective	3
Term 6		
2425	Zoning, Subdivision, and Community Planning	3
2412	Real Estate Appraisal IV	3
Psy101	Psychology of Human Relations	3
6121	Dwelling Construction Under the UBC	3
RE280	Cooperative Work Experience or Approved Elective	3

Brokerage Option

The Associate in Science degree requires 101 credits.

Term 1		
	English Variable or General Education Elective	3
4201	Business Mathematics	3
BA101	Business Environment	4
BA260	Real Estate Principles I	3
BA211	Financial Accounting I or	
6923	Accounting Procedures I	4
Term 2		
BA212	Financial Accounting II or	
6924	Accounting Procedures II	4
2405	Applied Mathematics in Real Estate	3
SS121	Typing I	3
BA264	Real Estate Finance	3
2437	Legal Descriptions, Platting, and Map Reading	2
BA263	Real Estate Law	3
Term 3		
BA214	Business Communications	3
BA262	Real Estate Practices	3
	Approved Elective	3
BA226	Business Law I	3
2408	Real Estate Appraisal I	3
Ec100	Outline of Economics or	
Ec201	Principles of Economics	3
Term 4		
2430	Real Estate Effective Selling	3
2409	Real Estate Appraisal II	3
2423	Escrow Procedures I	3
2415	Real Estate Investment Analysis I-Principles	3
RE280	Cooperative Work Experience or Approved Elective	3
BA261	Land Use Economics	3
Term 5		
2424	Escrow Procedures II	3
2418	Elements of Design and Construction	3
2416	Real Estate Investment Analysis II-Taxation	3
2411	Real Estate Appraisal III	3
RE280	Cooperative Work Experience or Approved Elective	3
Term 6		
2426	Escrow Procedures III	3
2425	Zoning, Subdivision and Community Planning	3
2417	Real Estate Investment Analysis III-Exchange	3
6121	Dwelling Construction Under the UBC	3
RE280	Cooperative Work Experience or Approved Elective	3

Escrow Option

The Associate in Science degree requires 105 credits.

Term 1		
	English Variable (based on placement test) or General Education Elective	3
	Math Variable	3
BA101	Business Environment	4
BA260	Real Estate Principles	3
BA211	Financial Accounting or	
6923	Accounting Procedures	4
Term 2		
	English Variable or General Education Elective	3
	Math Variable	3
BA261	Real Estate Principles II	3
BA264	Real Estate Finance	3
2437	Legal Descriptions	2
2658	Introduction to Calculators	2
BA263	Real Estate Law	3

Term 3		
BA214	Business Communications	3
BA262	Real Estate Practices	3
SS121	Typing 1	3
BA226	Business Law I	3
2408	Real Estate Appraisal I	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
Term 4		
Sp130	Business and Professional Speaking	
	or	
Sp111	Speech	3
2423	Escrow Procedures I	3
Psy101	Psychology of Human Relations	3
SS122	Typing II	3
2415	Real Estate Investment Analysis I–Principles	3
RE280	Cooperative Work Experience	
	or	
	General Education Elective*	3
Term 5		
2424	Escrow Procedures II	3
2416	Real Estate Investment Analysis II–Taxation	3
2641	Office Procedures	3
RE280	Cooperative Work Experience	
	or	
	General Education Electives*	6
Term 6		
2426	Escrow Procedures III	3
2417	Real Estate Investment AnalysisIII–Sales and Exchange	3
2428	Real Estate Seminar	3
2429	Public Relations in Business	3
RE280	Cooperative Work Experience	
	or	
	General Education Electives*	6

*Electives must be approved by the student's advisor.

Records Management

The Records Management program offers training to students who wish to enter or advance in the expanding field of control and management of records for offices and businesses.

The curriculum includes such specific technical courses as records storage, forms, analysis and control, data processing, micrographics, and records administration as well as personnel selection, office organization and general business and education courses. Some of the courses may be transferred to four-year educational institutions in Oregon. All of the classes are offered at night as well as during the day.

The program has specific mathematics and English skill level requirements. Initial placement in these courses is determined by results of tests administered by Chemeketa's counseling center.

The program includes preparation for the national Certified Records Manager examination. An Associate in Science degree is awarded upon successful completion of the required 93 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
1101	Communication Skills	3
4201	Business Mathematics	3
2658	Introduction to Calculators	2
BA251	Business Environment	4
	Psychology Elective	3
2801	Records Career Survey	1
Term 2		
2673	Business English	3
6918	Applied Business Math	3
SS121	Typing	3
BA131	Introduction to Data Processing	1
2642	Principles of Records Management	3
Term 3		
BA211	Financial Accounting I	4
SS122	Typing	3
	Elective	3
2641	Office Procedures	3
6944	Introduction to Systems and Procedures	3
Term 4		
BA214	Business Communications	3
	Elective	3
	Psychology Elective	3
BA206	Business Management Principles	3
2820	Forms Design, Analysis, and Control	3
2924	Records Storage and Retrieval	3
Term 5		
BA260	Business Law	3
1106	Report Writing	3
BA251	Office Management	3
2826	Micrographics	3
RM280	Cooperative Work Experience	3
Term 6		
2685	Personnel Principles	3
2828	Records Administration	3
RM280	Cooperative Work Experience	3
	Business Elective	3
	Sociology Elective	3

Secretarial Science

The Secretarial Science program offers training for students who want to become stenographers and secretaries. It is also for employed secretaries who want further training to increase or add to their skills in order to advance in their careers.

Office workers are vital to the inner workings of a company or institution. Many jobs are interesting and challenging. The work is varied. It may be highly specialized or it may be closely related to management-level personnel concerned with policy decisions.

The Secretarial Science program has five options for specialization: engineering, insurance, legal, medical, and professional secretaries. Upon successful completion of the required credit hours in each option, the student is awarded an Associate in Science degree.

Engineering Secretary Option

Graduates of the engineering secretary option may become employees of consulting firms, civil or structural engineering businesses or drafting and architectural companies. In these offices, a secretary may have a variety of duties such as typing contracts and specifications, billing, handling correspondence, drafting, keeping financial records, and maintaining technical reference materials and manuals.

To prepare students for these jobs, the program includes classes in written communications skills, technical mathematics, and civil and structural engineering as well as secretarial skills.

The Associate in Science degree is awarded upon successful completion of 96 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
SS111	Shorthand I	
	or	
SS114	Briefhand I	3
SS121	Typing	3
BA101	Business Environment	3
SS101	Office Careers Survey	1
	Math Variable or General Education Elective	3
	English Variable or General Education Elective	3
Term 2		
SS112	Shorthand II	
	or	
2701	Briefhand II	3
SS122	Typing II	3
2661	Reprographics	3
6261	Technical Math I	4
	English Variable or General Education Elective	3
Term 3		
SS113	Shorthand III	
	or	
2702	Briefhand III	3
2641	Office Procedures	3
6193	Engineering Terminology	4
6262	Technical Math II	4
BA214	Business Communications	3
Term 4		
SS123	Typing III	3
2663	Machine Transcription I	3
2710	Secretarial Practicum	3
6192	Introduction to Engineering Calculators	1
	or	
2658	Introduction to Calculators	2
	Engineering Elective	3
	Business Elective	3
Term 5		
BA211	Financial Accounting	
	or	
6923	Accounting Procedures	4
6118	Contracts and Specifications	3
2642	Records Management	3
2715	Introduction to Word Processing	3
	Social Science Elective	3
Term 6		
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
BA226	Business Law	3
BA131	Introduction to Data Processing	3
	Engineering Elective	3
	Business Elective (SS2280 Cooperative Work Experience recommended)	3

Insurance Secretary Option

Graduates of the insurance secretary option may be employed in an independent insurance agent's office, a large district insurance officer or in the personnel benefits department of a corporation or institution.

The insurance secretary often has a variety of duties including processing applications and forms, answering questions of policyholders and handling all kinds of written communications.

An Associate in Science degree is awarded upon successful completion of the required 99 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable	
	or	
	General Education Elective	3
	Mathematics Variable	3
BA101	Business Environment	4
SS121	Typing I	3
BA241	Risk and Insurance	3
Term 2		
	English Variable	
	or	
	General Education Elective	3
	Math Variable	3
SS122	Typing II	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
2119	Insurance-Property and Casualty	3
2344	Insurance Occupational Survey Seminar	1
Term 3		
BA214	Business Communications	3
SS123	Typing III	3
1610	Public Speaking	
	or	
Sp111	Fundamentals of Speech	3
BA226	Business Law I	3
2658	Introduction to Calculators	2
2343	Insurance-Life and Health	3
Term 4		
BA211	Financial Accounting I	
	or	
6923	Accounting Procedures	4
SS114	Briefhand I	
	or	
SS111	Shorthand I	3
2663	Machine Transcription I	3
2342	IIA-Insurance 21	4
	Business Elective	3

Term 5		
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II	4
2701	Briefhand II	
	or	
SS112	Shorthand II	3
2231	Risk Management Analysis	3
2641	Office Procedures	3
	General Education Elective*	
	or	
SS3280	Cooperative Work Experience	3
Term 6		
2702	Briefhand III	
	or	
SS113	Shorthand III	3
2226	Regulations and Law	2
	General Education Electives*	6
SS3280	Cooperative Work Experience	
	or	
	Business Elective	3
	Social Science Elective	3

*Electives must be approved by the student's advisor.

Legal Secretary Option

Legal secretary graduates may gualify for beginning secretarial positions in law offices or in legal departments of companies or agencies.

The program emphasizes training in shorthand dictation, machine transcription, typing legal documents and correspondence, managing legal files, answering telephones, and keeping office records. Students work with documents in real estate and property transfer, litigation, wills and estates, and corporations and partnerships.

Supervised on-the-job training gives students opportunities to use the skills, knowledge, and attitudes required in a legal environment.

An Associate in Science degree is awarded upon successful completion of the required 95 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
2673	Business English	
	or	
	General Education Elective	3
SS101	Office Careers Survey	1
4201	Business Mathematics	3
SS111	Shorthand I	3
	Social Science Elective	3
SS121	Typing I	3
Term 2		
2674	Business Writing	
	or	
	General Education Elective	3
SS112	Shorthand II	3
2713	Legal Terminology	3
SS122	Typing II	3
2641	Office Procedures	3
Term 3		
BA214	Business Communications*	3
SS113	Shorthand III	3
2663	Machine Transcription I	3
2661	Reprographics	3
2658	Introduction to Calculators	2
2714	Legal Office Procedures	3
Term 4		
SS211	Shorthand IV	3
2715	Introduction to Word Processing	3
2642	Records Management	3
2711	Legal Transcription I	3
BA101	Business Environment	4
Term 5		
SS212	Shorthand V**	
	or	
	Elective	3
2712	Legal Transcription II	3
BA251	Office Management	3
BA226	Business Law I	3
BA211	Financial Accounting I	
	or	
6923	Accounting Procedures I	4
Term 6		
SS213	Shorthand VI**	
	or	
	Elective	3
BA131	Introduction to Data Processing	3
SS3280	Cooperative Work Experience	
	or	
	Business Elective	6
SS123	Typing III	3

*Initial course is based on results of an English placement test administered by Chemeketa's counseling center.
**Students may substitute an approved elective if they have the required skill (ability to take dictation at a minimum of 80 wpm for three minutes and transcribe with 95 percent accuracy).

Suggested Electives: 2515 Filing, 2710 Secretarial Practicum, 2716 Word Processing: CRT Operation, 5600 Medical Terminology, 5611 Medical Law and Ethics.

Medical Secretary Option

The Medical Secretary curriculum helps to prepare persons to work in medically-related offices where they make appointments, manage patient records, meet patients, type correspondence, transcribe patient records, maintain financial records, and complete insurance forms.

The Associate in Science degree is awarded upon successful completion of the required 95 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
	English Variable	
	or	
	General Education Elective	3
	Math Variable	3
SS111	Shorthand I	
	or	
SS114	Briefhand I	3
SS121	Typing I	3
5600	Medical Terminology I	3
SS101	Office Careers Survey	1
Term 2		
	English Variable	
	or	
	General Education Elective	3
SS122	Typing II	3
SS112	Shorthand II	
	or	
2701	Briefhand II	3
BA131	Introduction to Data Processing	3
5610	Medical Terminology II	3
2568	Introduction to Calculators	2

Term 3		
BA214	Business Communications	3
SS113	Shorthand III	
	or	
2702	Briefhand III	3
SS123	Typing III	3
2663	Machine Transcription I	3
5611	Medical Law and Ethics	3
5513	Multimedia First Aid	1
Term 4		
5615	Body Structure and Function I	3
2569	Medical Machine Transcription I	3
2641	Office Procedures	3
SS211	Shorthand IV	3
2642	Records Management	3
Term 5		
5615	Body Structure and Function II	3
2566	Medical Secretary Practicum	3
6923		
or		
BA211	Financial Accounting I	4
2570	Medical Machine Transcription II	3
	Business or Medical Elective	3
Term 6		
5605	Medical Science	3
	Social Science Elective	3
Ec100	Outline of Economics	3
or		
Ec201	Principles of Economics	
	or	
SS3280	Cooperative Work Experience (recommended)	
	or	
	Elective	3
	Business or Medical Elective	3

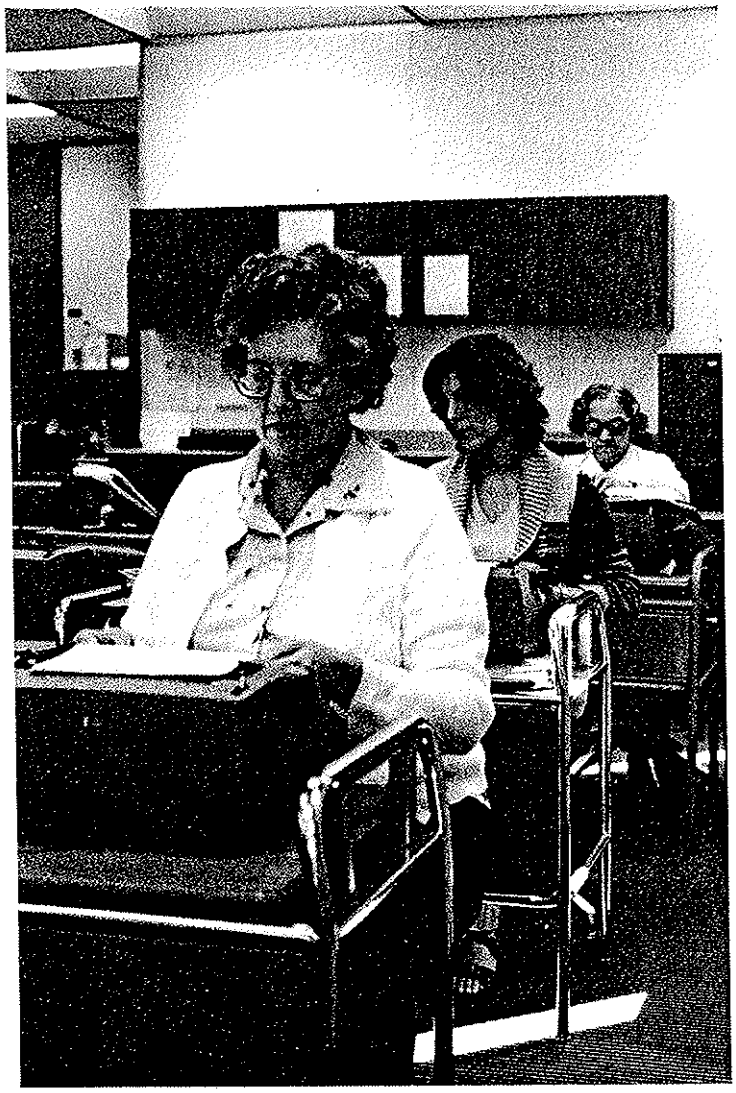
Professional Secretary Option

Students who wish to become secretaries may choose Chemeketa's professional secretary option. Secretarial work requires the ability to organize a variety of tasks, to accept responsibility, and to use initiative as a member of a team. Skill requirements may include ability to type; transcribe from machine or shorthand dictation; serve personal and telephone callers; operate business machines; maintain records; do mathematical calculations; store and retrieve records; and apply a working knowledge of office organization, office procedures, accounting, business law, economics, records management, data processing, and human relations.

Students who satisfactorily complete the curriculum requirements are eligible to sit for the Certified Professional Secretary examination in the spring of the second year during the final term of study.

Math requirements: 4201 Business Mathematics, English requirement: BA214, Business Communications. Placement in the prerequisites for this course is determined by a test administered by Chemeketa's counseling center.

SS2280 Cooperative Work Experience is recommended for one term. Up to six credit hours in CWE may be accepted toward graduation requirements. Students are eligible for assignment to Cooperative Work Experience



only if they have a grade point average of 2.5 or better and have completed approximately 60 term units of the program.

The Associate in Science degree is awarded upon satisfactory completion of minimum of 99 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
2673	Business English	
	or	
	General Education Elective	3
BA101	Business Environment	4
4201	Business Mathematics	3
SS111	Shorthand I	3
SS121	Typing I	3
SS101	Office Careers Survey	1
Term 2		
2674	Business Writing	
	or	
	General Education Elective	3
SS112	Shorthand II	3
BA131	Data Processing	3
SS122	Typing II	3
2715	Introduction to Word Processing	3
2658	Introduction to Calculators	2

Term 3		
BA214	Business Communications	3
SS113	Shorthand III	3
2663	Machine Transcription I	3
2641	Office Procedures	3
2661	Reprographics	3
2642	Records Management	3

Second Year-Option A

This option requires successful completion of 99 required credit hours for the Associate in Science degree.

Term 4		
SS211	Shorthand IV	3
2710	Secretarial Practicum	3
BA211	Financial Accounting	
	or	
6923	Accounting Procedures I	4
SS123	Typing III	3
BA217	Business Machines	3
Term 5		
SS212	Shorthand V	
	or	
	Approved Elective	3
BA251	Office Mangement	3
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II	4
BA226	Business Law	3
	Business Elective	3
Term 6		
SS213	Shorthand VI	
	or	
	Approved Elective*	3
Ec100	Outline of Economics	
	or	
Ec201	Principles of Economics	3
	Social Science Elective	3
	Business Electives**	6

*If student has achieved minimum competency, choose from 2569, 2667, 2711, 2716, 2717, SS123
**SS2280 Cooperative Work Experience

Second Year-Option B

This option allows the student to be employed in a full-time paid position while earning 12 term units. The position is secured by the work related experience office to enable the student to integrate secretarial skills and knowledge with practical and valuable on-the-job experience with business or governmental agencies.

An Associate in Science degree is awarded upon successful completion of the required 108 credit hours.

Term 4		
SS3280	Cooperative Work Experience	12
Term 5		
SS211	Shorthand IV	3
SS123	Typing III	3
BA211	Financial Accounting	
	or	
6923	Accounting Procedures I	4
BA217	Business Machines	3
2710	Secretarial Practicum	3
Term 6		
SS3280	Cooperative Work Experience	12
Term 7		
SS212	Shorthand V	3
BA251	Office Management	3
BA212	Financial Accounting II	
	or	
6924	Accounting Procedures II	4
BA226	Business Law	3
Ec100	Outline of Economics	
	or	
Ec201	Introduction to Economics	3

Silicon Technology

Chemeketa plans to begin a new short-term program in Silicon Technology in 1981. It will include training both in theory and specific skills for men and women seeking careers in the silicon manufacturing industry. The curriculum features self-paced learning laboratories and individualized instruction.

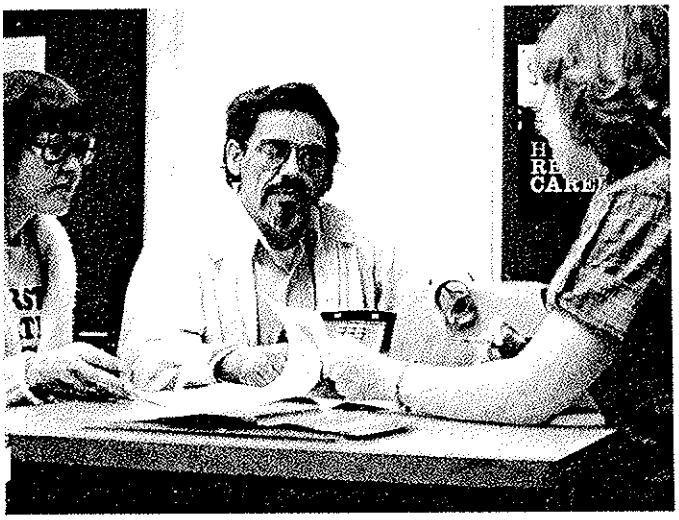
Through a cooperative effort of the college and Siltec Corporation, a laboratory facility on Chemeketa's Salem campus simulates three production departments:

The crystal growing department, using high technological equipment, grows and further processes cylindrical silicon ingots.

The slicing department slices processed silicone ingots into wafers, which then undergo a series of quality operations and checks.

In the polishing department, wafers are polished to a mirror-like finish on one side. They are then cleaned, quality checked, and shipped to customers.

For information call Chemeketa's center for alternative learning, 399-5088.



Small Business Management

The three-year program is for operators of small businesses and their spouses who own, lease or manage businesses or have access to a full set of financial records.

The program involves monthly class meetings and monthly visits by the instuctor to each business. Instruction includes how to keep basic records, annual computer analyses of these records, cost of operation summaries, and the applications of analysis information to improve the management and organization of each business.

Tuition covers the instruction and the year-end computer analysis. Contact the community and continuing education office for enrollment information, 399-5135.

First Year
9298 Small Business Management I-In-service

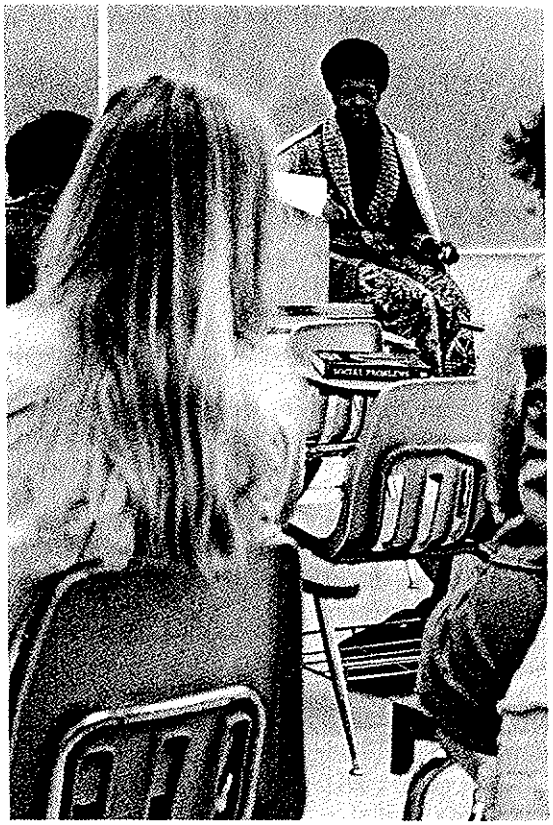
Discusses the need for the importance of small businesses to keep records, how to measure the progress of a small family business, the uses of business and home records, the importance of inventories and how to keep business accounts current. Also covers balance sheets and monthly summaries, cash flow and cash flow projections, employer's records, social security and income taxes, unemployment compensation, workers' compensation and fair labor standards act, employee relations, and Occupation Safety and ealth Administration and safety considerations. Includes depreciation schedules, income tax management and tax planning, end-of-year inventory, and closing record books for computer analysis.

Second Year
9298A Small Business Management II

How to calculate income, self-employment and social security taxes, measure business profit and size, the importance of inventories, how to analyze customer service departments and mechanization, labor, equipment and building costs, analysis of major department efficiencies, income tax planning and management, and closing business account books for analysis.

Third Year
9298B Small Business Management III

Covers attributes of successful small business entrepreneurs, determining the most profitable levels of operation, selection of departments, evaluation of customer service and other major departments, evaluation of overhead and general business costs, maximizing income, building sites, merchandise handling, planning and transitional stages, and analysis of records for closing the business year.



Sociology
(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in sociology at the University of Oregon, Oregon State University, Portland State University, Southern Oregon State College or a program in anthropology and sociology at Eastern Oregon State College. Students enrolling in the SOSC program may complete areas of specialization in sociology, anthropology or social work. EOSC students may specialize in sociology, anthropology or social welfare.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition	3	3	3
Humanities sequence	3	3	3
Science (EOSC: Mth103 recommended)	4	4	4
Social science (EOSC: Anth101, 102, 103; SOSC: Anth207, 208, 209)	3	3	3
Physical Education	1		1
He250 Personal Health		3	
Electives	3	0-6	0-6
Second Year	**4**	**5**	**6**
Soc204, 205, 206 General Sociology	3	3	3
Ec201, 202, 203 Principles of Economics	3	3	3
Humanities or science second sequence	3-4	3-4	3-4
Physical Education	1	1	1
Electives (PSU: Mth103 recommended) (PSU, OSU: Mth95 competency recommended) (SOSC: Sp111 recommended)	6	6	6

Speech
(college transfer)

These courses are recommended for students who plan to transfer college credits into a major program in speech at the University of Oregon, Oregon State University, Portland State University, or Southern Oregon State College. Students following the program outlined below may complete requirements for the baccalaureate degree within two additional years.

The following recommendations are based on information available as this catalog goes to press. Prior to enrollment, students should consult with Chemeketa's counseling center or an advisor at the institution to which they plan to transfer.

First Year	Term		
	1	2	3
Wr121, 122, 123 English Composition to meet general education requirement	3	3	3
Sp111, 112, 113 Fundamentals of Speech	3	3	3
Humanities sequence	3	3	3
First year foreign language	4	4	4
Physical Education	1	1	
He250 Personal Health			3
Electives	0-3	0-6	3
Second Year	**4**	**5**	**6**
Social science sequence	3	3	3
Second year foreign language (BA students)	4	4	4
Science	3-4	3-4	3-4
Physical Education	1	1	1
Electives	3-6	3-6	3-6

Visual Communications

The Visual Communications curriculum offers students opportunities to gain knowledge, skills, and experience to become press operators, process photographers, and graphic designers. Students may learn to operate a variety of graphic equipment including process cameras, printing presses, densitometers, enlargers, and phototypesetters.

Students may take lower division college transfer courses instead of general education, mathematics and science classes to complete program requirements. Any other deviations from the program must be approved by the department.

Cooperative Work Experience may be used instead of selected technical courses to complete program requirements. CWE requires departmental approval.

An Associate in Science degree is awarded upon satisfactory completion of the required 92 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
6163	Basic Technical Photography	5
4200	Basic Mathematics	3
1101	Communication Skills I	3
	Select one with consent of instructor:*	
6166	Graphic Design and Character Generation	5
	or	
6168	Process Photography, Stripping and Platemaking	6
	or	
6170	Presswork and Reproduction Systems	7
Term 2		
4202	Introduction to Algebra and Geometry	3
1104	Communication Skills II	3
6165	Science of Photography	4
	Select one (see term 1): 6166 or 6168 or 6170	
Term 3		
Psy100	Introduction to Psychology	3
	Communication Elective (English, speech, etc., to be arranged with advisor or counselor	3
	Select on (see term 1): 6166 or 6168 or 6170	
Term 4		
6164	Intermediate Technical Photography	6
	General Education Elective	3
	Select one with the consent of instructor**:	
6167	Advanced Graphic Design	
	or	
6169	Image Conversion and Image Carriers for Offset Lithography	6
	or	
	Special Problems in Graphic Communications: 6172 (3 cr. hr.), 6173 (5 cr. hr.), 6174 (6 cr. hr.) or 6175 (7 cr. hr.)	
Term 5		
6171	Advanced Presswork	6
	General Education Elective	4
	Select one (see term 4): 6167, 6169, 6172, 6173, 6174, 6175	
Term 6		
	Special Problems in Graphic Communications: 6172, 6173, 6174, 6175 to equal	16

*Courses 6166, 6168, 6170 will be taught concurrently each term. Students are counseled on enrollment on an individual basis.

**Courses 6167, 6169, 6171, 6172, 6173, 6174 and 6175 will be taught concurrently each term. Students are counseled on enrollment on an individual basis.

Welding

The Welding program combines training with classes in the background knowledge needed by workers in welding occupations. Students practice and develop their welding skills in the laboratory and may take the Oregon State Department of Commerce examination for certification in acr welding.

Graduates may find employment in job specialty, production, and maintenance shops, choosing from a variety of positions, including oxyacetylene burner, MIG welder, arc welder, oxyacetylene welder, semiautomatic welding equipment operator and TIG welder.

WE280 Cooperative Work Experience instead of selected technical courses may be used to complete program requirements. Appropriate summer employment may be used for CWE by arrangement before the end of spring term. CWE requires departmental approval.

A Certificate of Completion is awarded upon successful completion of the required 44 credit hours.

Course No.	Course Title	Credit Hours
Term 1		
4240	Basic Arc Welding	5
4161	Basic Oxyacetylene Welding	2
4244	Blueprint Reading and sketching	2
4200	Basic Mathematics	3
4253	Shop Safety	1
4242	Oxyacetylene Cutting	2
Term 2		
4241	Intermediate Arc Welding	6
4245	Layout Practices	1
4250	Basic MIG Welding	2
4251	Basic TIG Welding	3
4247	Welding Metallurgy I	2
Term 3		
4252	Advanced MIG Welding	3
4166	Advanced Arc Welding	3
4249	Weld Shop Problems	7
4248	Welding Metallurgy II	2

Welding and Fabrication

The Welding and Fabrication program is for persons who want to acquire the technical knowledge and skills required of workers in welding, fabrication, and related occupations.

Welding and fabrication technicians are skilled in the use of oxyacetylene welding and cutting equipment, manual arc, tungsten inert gas and metallic inert gas processes and have a working knowledge of shop blueprints and welding symbols, jig fabrication, and assembly processes.

Graduates may qualify for several types of positions in business and industry such as machinery fabrication, structural fabrication, welding fitting and layout, automatic and semiautomatic welding, automatic flame cutter operation, millwright welding, plant maintenance, and quality control and development.

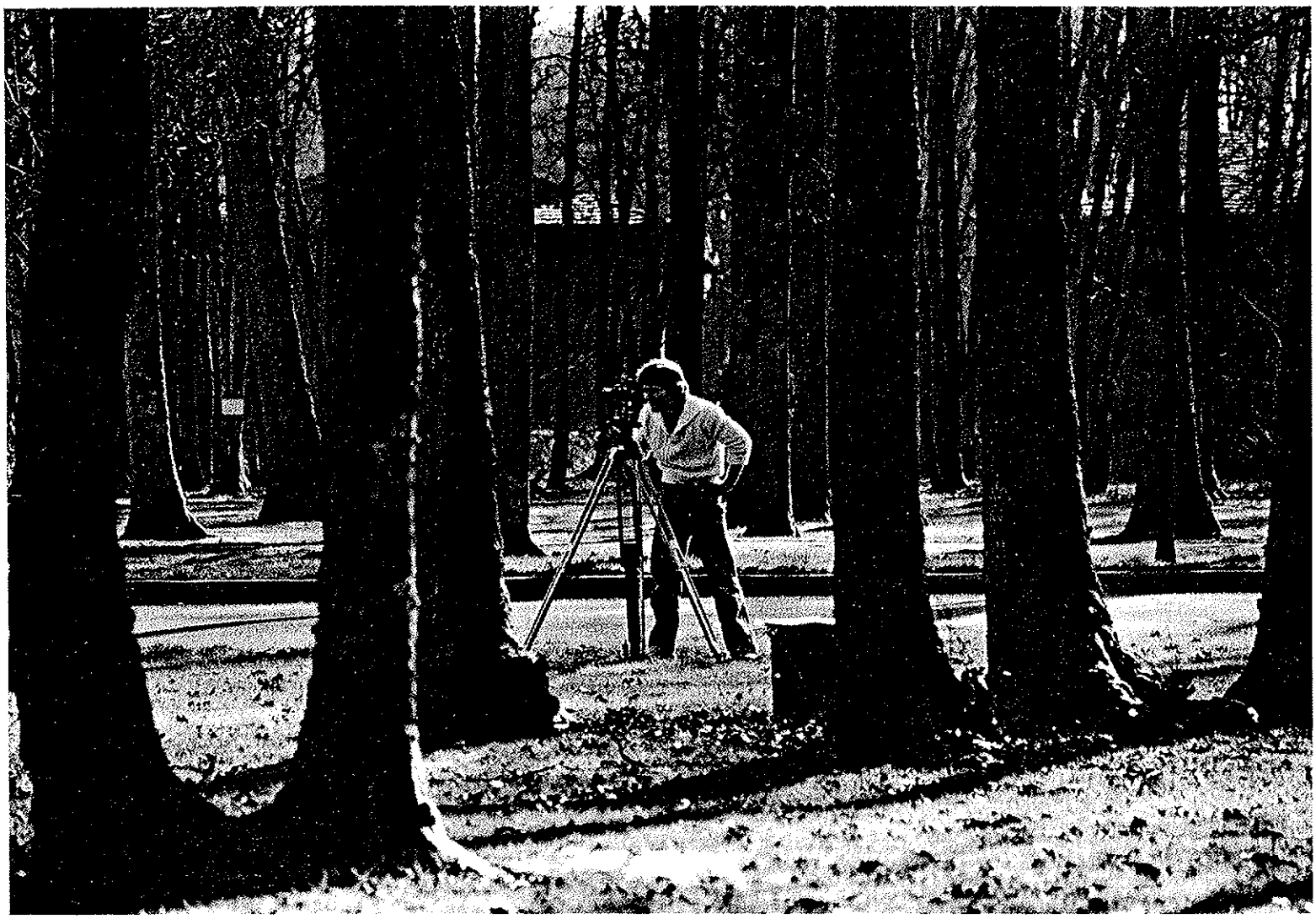
The program offers students a background in manufacturing materials, processes and systems, drafting, blueprint reading, and shop sketching. The curriculum includes written and oral communications and general education classes and emphasizes related scientific, mathematical, and general mechanical principles.

WE280 Cooperative Work Experience credits may be substituted for approved electives. CWE requires departmental approval.

At the end of the sixth term students may take the plant and/or pipe certification test administered by the Oregon State Department of Commerce. An extra fee for this test is determined by the number of students involved and the type of test.

Upon satisfactory completion of the required 104 credit hours the student is awarded an Associate in Science degree.

Course No.	Course Title	Credit Hours
Term 1		
4160	Electric Arc Welding	4
4244	Blueprint Reading and Sketching	2
4802	Machine Shop I	3
4200	Basic Mathematics	3
1101	Communication Skills	3
4101	Drafting	2
4253	Shop Safety	1
Term 2		
4161	Basic Oxyacetylene Welding	2
Psy100	Introduction to Psychology	3
1104	Communication Skills	3
4155	Fabrication Practices I	3
4300	Practical Physics	4
4202	Introduction to Algebra and Geometry	3
Term 3		
4250	Basic MIG Welding	2
4251	Basic TIG Welding	3
4204	Introduction to Trigonometry with Geometry	3
4302	Practical Physics	4
4500	Employer-Employee Relations	3
4156	Fabrication Practices II	3
6600	Elements of Metallurgy	3
Term 4		
4849	Heat Treatment of Steel	3
4238	Advanced TIG Welding	2
4162	Electric Arc Welding	5
4243	Fabrication Procedures	3
4168	Fabrication Shop Problems	3
Term 5		
4157	Fabrication Practices III	3
4169	Fabrication Problems	3
4252	Advanced MIG Welding	3
4804	Machine Shop II	3
	General Education Elective	3
Term 6		
4167	Welding for Certification	4
4158	Fabrication Practices IV	4
4165	Production MIG Welding	3
4254	Shop Projects	2
	General Education	3



Course Descriptions

The list on the following pages reflects the diversity and scope of the many courses Chemeketa currently offers; the college may add new classes after this catalog is published. The letters **F, W, Sp,** and **Su** at the end of a description indicate the term (fall, winter, spring, and summer) the course is usually offered.

For information on when and where classes meet, consult the schedule of classes published each term.

Chemeketa also offers many non-credit personal enrichment and occupational courses not included here. They are listed in the quarterly schedules of classes.

AH199 Issues in Allied Health, 3 class hrs/wk, 3 cr. Important topics in allied health and the current health care system. **Offered as needed.**

AH199C-F EMT Issues, variable class hrs/wk, variable cr. Focuses on important current topics in emergency medical technology such as laws, practices, equipment, techniques, and recent developments. **Prerequisite:** Consent of instructor. **Offered as needed.**

AH199N The Nation's Health, 3 class hrs/wk, 3 cr. A survey of issues surrounding the American health care system and the role of medical care in relation to the health of Americans, from historical, ethical, political, economic, social, and personal perspectives. W

Anth101 Human Evolution, 3 class hrs/wk, 3 cr. Study of the human species and its place in nature. Covers physical and cultural human evolutionary development, evolutionary theory and evidence for human evolution in the hereditary process, the fossil record, primate evolution, and human morphology, taxonomic classification of humans, and the nature of race. F, W, Su

Anth102 Archeology, 3 class hrs/wk, 3 cr. A study of unrecorded human history. Examines human's prehistoric development, archeological method and theory, and techniques for dating the past. Emphasizes the agricultural revolution and the rise of such civilizations as the Sumerians, Egyptians, Harappans, Chinese, Mayans, Aztecs, and Incas. W

Anth103 Introduction to Cultural Anthropology, 3 class hrs/wk, 3 cr. A survey of culture and how it structures "human nature." Examines cross-cultural methodology and anthropological theory, language, economic systems, technology, social orientation, political systems, art, religion, warfare, the nature of play, and the problem of controlling culture and managing society. Sp

Anth199 Introduction to Semantics, 3 class hrs/wk, 3 cr. The function of language and its symbols. Includes consideration of how adequately language can represent man's total environment and whether analysis of language use can increase our understanding of human behavior. **Offered as needed.**

Anth207 Cultural Anthropology, 3 class hrs/wk, 3 cr. An analysis of the significance of culture for humans, its diverse forms and degrees of elaboration among different groups of people. Emphasizes the divisions of anthropology and the rise of anthropological theory, the structure of language and how it transmits culture, the varieties of human subsistence patterns and technologies, and interdependence of heredity, society, and environment. F

Anth208 Cultural Anthropology, 3 class hrs/wk, 3 cr. A study of human social organizations and political forms, the nature of cross-cultural belief systems, art, and ritual. W

Anth209 Cultural Anthropology, 3 class hrs/wk, 3 cr. Cultural growth and expansion, the nature of culture change and adaptation of new culture patterns, effects of technical assistance to developing nations, and ethics of applied anthropology. Sp

Art115, 116, 117 Basic Design, 2 class hrs, 2 lab hrs/wk, 3 cr. A three-term introductory sequence on the basic principles of design. **Prerequisite:** Course taken in sequence or with consent of instuctor. **Art115: F; 116: W; 117: Sp**

Art204, 205, 206 History of Western Art, 3 class hrs/wk, 3 cr. Visual arts from prehistoric to modern times. Studies selected works of painting, sculpture, architecture, and other arts in relation to the cultures that produced them. **Art204: F; 205: W; 206: Sp**

Art211, 212, 213 Survey of Visual Arts, 3 class hrs/wk, 3 cr. Appreciation of architecture, landscape architecture, crafts and industrial design, photography, motion pictures, illustration, printmaking, easel and mural paintings of various cultures. Not an art history survey. **Art211: F; 212: W; 213: Sp**

Art231 Drawing, Term I, 6 lab hrs/wk, 3 cr. Basic principles of drawing, seeing, observing and developing traditional skills with a variety of drawing media. Subject matter ranges from still life to photographic imagery. Includes brief introduction to figure drawing. F, W

Art232 Drawing, Term II, 6 lab hrs/wk, 3 cr. Continuation of Art 231, concentrating on life drawing. **Prerequisite:** Art231. W, Sp

Art233 Drawing, Term III, 6 lab hrs/wk, 3 cr. Continuation of Art232 emphasizing development of personal style and expression, personal imagery, and mixed media approaches. **Prerequisite:** Art232. Sp

Art244 Stained Glass, 6 lab hrs/wk, 3 cr. Basic techniques for creating stained and leaded glass objects. Includes working with copper foil, staining, cutting, soldering, and finishing. F, W, Sp

Art255 Pottery I-Handbuilding, 6 lab hrs/wk, 3 cr. Three-dimensional design, shape, form, basic construction techniques for beginners. F, W, Sp

Art256 Pottery II-Wheel Throwing, 6 lab hrs/wk, 3 cr. Wheel throwing methods, glaze calculations, and kiln firing techniques. **Prerequisite:** Art 255 or consent of instructor. W

Art257 Pottery III-Advanced Pottery, 6 lab hrs/wk, 3 cr. Individual development of techniques, directions and ideas. Includes marketing, sales, and public showings. **Prerequisite:** Art 256. Sp

Art260 General Photography, 2 class hrs, 4 lab hrs/wk, 3 cr. Fundamental and technical aspects of photography. Covers types of cameras, f/systems, shutter speeds, film types and specifications, developing, basic enlarging, composition, familiarity with basic materials and processing, vocabulary and equipment. Directed photographic assignments and photo lab work. Students supply cameras, film, paper, exposure meters, tripods, and flash equipment. The college furnishes enlargers, chemicals, and other incidental darkroom equipment for students interested in photography as a part of general education. W, Sp, Su

Art261 Intermediate Photography, 2 class hrs and 4 lab hrs/wk, 3 cr. Covers varied materials and processing techniques, such as light measuring, gamma, densitometry, interpretation of and uses of technical data, improving design, and aesthetic approaches to photography. Incorporates use of darkroom techniques, densitometers, special films, and special developers into project-oriented assignments. **Prerequisite:** Satisfactory completion of 6163 or Art260 or a passing score on the 6163 final exam and acceptance of the student's portfolio or permission of the instructor. W, Sp, Su

Art271 Printmaking, 6 lab hrs/wk, 3 cr. An introduction to techniques of silkscreen printing. **Prerequisite:** Art231 or consent of instructor. F W Sp

Art281 Painting, 6 lab hrs/wk, 3 cr. An introduction to basic painting of traditional subject matter. Stresses disciplined study, observation and representation, composition, attention to detail, use of color, and personal expression. **Prerequisite:** Art231 or consent of instructor. W, Sp

Art284 Watercolor, 6 lab hrs/wk, 3 cr. An introduction to problems and techniques of watercolor painting. Fundamental skills and approaches to traditional subject matter, characteristics of watercolor, compositional problems, color problems, observation of detail, and personal expression. **Prerequisite:** Art231 or consent of instructor. Sp

Art291 Sculpture, 6 lab hrs/wk, 3 cr. Introduces the properties and characteristics of selected materials of sculpture. Elementary considerations of form through technical and compositional exercises. F

Art292 Ceramic Sculpture, 6 lab hrs/wk, 3 cr. An introduction to the potential and characteristics of clay as a creative sculptural medium. W

Art293 Intermediate Sculpture/Foundry Casting 6 lab hrs/wk, 3 cr. An introduction to lost wax casting processes using non-ferrous metals as casting materials. **Prerequisite:** One of the following: Art117, 255, 291, 292 or consent of instructor. Sp

AtS101 Rudiments of Meteorology, 3 class hr/wk, 3 cr. Winds, air masses, fronts, clouds, wave cyclones, and precipitation. A knowledge of science is not a prerequisite. F

BA101 Business Environment, 4 class hrs/wk, 4 cr. An introduction to the inter-relationships of business, government, and society; roles of members of the business community; ethics and social responsibility; employment opportunities in various business fields. F, W, Sp, Su

BA131 Introduction to Data Processing, 3 class hrs/wk, 3 cr. A brief history of data processing, current uses of computers and computer interactions (FORTRAN), data processing machines, and writing simple computer instructions. F, W, Sp, Su

BA199A Marketing Process, 3 class hrs/wk, 3 cr. How to communicate and sell ideas to people in a variety of selling situations. Emphasizes technique and mechanics. **Prerequisite:** BA223 or some experience in management of public relations. F

BA200 Perspectives in Business Methodology 3 class hrs/wk, 3 cr. Special issues and current trends in business and management presented by visiting instructors and/or regular faculty. F, W, Sp, Su

BA200F International Tourism I, 3 class hrs/wk, 3 cr. An introduction to prime geographic tourist destinations of Europe. Covers basic geography and major cities, elements of the natural environment, points of interest, and attractions especially appealing to tourists. W

BA200G Tourism Geography 3 class hrs/wk, 3 cr. A basic geography for travel agents or tourists. Highlights the physical geography, economics, major cities, hotels, tours, and sightseeing attractions of different countries. F

BA200H Travel Agent Basics, 3 class hrs/wk, 3 cr. Covers use of reference material, itinerary planning, domestic tariff and ticketing, reservation procedures, introduction to tours, and agency office procedures for travel industry personnel. W

BA200I Domestic Tourism, 3 class hrs/wk, 3 cr. An introduction to prime geographic tourist destinations of the United States. Covers basic geography, major cities, elements of the natural environment, points of interest, and attractions especially appealing to tourists. F

BA206 Business Management Principles, 3 class hrs/wk, 3 cr. Analyzes and synthesizes historical and current theories in leadership, group processes, organizational structures, personnel policies, motivation, and training that allow an individual to plan, organize, control, staff, and direct subordinates in an organization. F, W, Sp, Su

BA211 Financial Accounting I, 4 class hrs/wk, 4 cr. Recording transactions, adjustments, financial statements, worksheets, closing entries, accounting for merchandising concerns, cash and accounts receivable, notes and interest, and payrolls. For students enrolled in the accounting program and/or students transferring to four-year institutions. **Prerequisite:** Concurrently enrolled in 4201, 6918, Mth10 or higher math, or consent of instructor. F, W, Sp, Su

BA212 Financial Accounting II, 4 class hrs/wk, 4 cr. Current liabilities, payroll, corporate organization and operation, corporate stock transactions, corporate retained earnings. Covers long-term liabilities and investments, accounting principles, partnerships, price-level changes, analysis and interpretation of financial statements, funds flows, and statement of changes in financial positions. **Prerequisite:** BA211. F, W, Sp, Su

BA213 Managerial Accounting, 4 class hrs/wk, 4 cr. The accountant's role in the organization, cost terms and purposes, cost-volume-profit relationships, budgeting, systems design, standard costs, flexible budgets, and overhead control. Standard absorption costing, income effects of alternative product-costing methods and relevant costs, and the contribution approach to decisions. **Prerequisite:** BA212, 6925 or consent of instructor. F, W, Sp, Su

BA214 Business Communications, 3 class hrs/wk, 3 cr. The purpose and effectiveness of business communications. How to analyze and write simulated business letters, memoranda, and reports. **Prerequisite:** 2673, Wrl22 or the equivalent. F, W, Sp, Su

BA215 Cost Accounting, 3 class hrs/wk, 3 cr. Analyzes methods of detailed and specific identification of cost elements in business, emphasizing job orders, processes, and standard cost accounting systems and their related theory; principles, techniques, managerial use of cost accounting data; use of budget and performance reports, as related to cost accounting. **Prerequisite:** BA213. F, W

BA216 Income Tax Accounting, 3 class hrs/wk, 3 cr. Income tax withholding, individual income taxes, form 1040, declaration of estimated taxes, supporting schedules and forms, and special individual tax situations for individuals. **Prerequisite:** BA211 or 6923 or consent of instructor. F, Su

BA217 Business Machines, 1 class hr, 3 lab hrs/wk, 3 cr. Operation of electronic display and electronic printing calculators. Solving business problems with calculators. **Prerequisite:** 2658 or consent of instructor. F, Sp

BA219 Computer Augmented Accounting, 3 class hrs/wk, 3 cr. A basic course in the development of computer data processing as applied to accounting cycles. **Prerequisite:** BA212 or consent of instructor. W, Sp

BA222 Financial Management, 3 class hrs/wk, 3 cr. Managerial finance and how financial decisions affect society at large. Discusses the tax environment, ratio analysis, financial planning and control, current asset management, and term loans and leases. **Prerequisite:** BA212 or 6924. W, Sp

BA223 Principles of Marketing, 3 class hrs/wk, 3 cr. Marketing research and product development, sale of products or services, feedback of consumer acceptance, and marketing planning and strategy as dictated by the consumer. Previews marketing as a foundation for advanced marketing courses. **Prerequisite:** BA101 or consent of instructor. F, W, Sp

BA224 Introduction to Marketing Research, 3 class hrs/wk, 3 cr. Research design and the development of information gathering systems as applied to marketing. Use of secondary and primary data and the interpretation of information gathered. **Prerequisite:** One term of psychology or sociology. Sp

BA226 Business Law I, 3 class hrs/wk, 3 cr. An introduction to the nature and function of the law in society and a study of the rights and obligations of contract. **Prerequisite:** BA101 or consent of instructor. F, W, Sp, Su

BA227 Business Law II, 3 class hrs/wk, 3 cr. Continuation of BA226. Covers legal aspects of personal property, sales, commercial paper, and bankruptcy. **Prerequisite:** BA226. W, Sp

BA229 Consumer Finance, 3 class hrs/wk, 3 cr. The role of the consumer in society. Includes consumer decision-making, money and material happiness, credit and borrowing, food shopping, clothing management, home ownership, family transportation, health care and services, social security, life insurance, annuities, estate planning, wills, trusts, and consumer protection. F, W, Sp, Su

BA231 COBOL I, 3 class hrs, 3 lab hrs/wk, 4 cr. Application of computers to business data processing using COBOL. The development of a common business-oriented computer language and its use in modern business organizations. Comparison of COBOL with other automatic programming languages. **Prerequisite:** BA131. W

BA232 Introduction to Business Statistics, 3 class hrs/wk, 3 cr. Elementary statistical techniques to aid decision making in business. Includes populations and samples, estimating, hypothesis testing, analysis of variances, indexes, and time series. **Prerequisite:** Mth95. Sp

BA238 Salesmanship, 2 class hrs, 2 lab hrs/wk, 3 cr. Sales as an integral part of total marketing functions. How selling applies to the behavioral sciences, with special emphasis on sales, psychology, sales techniques, and the fundamental principles of sales communication. F

BA239 Principles of Advertising, 3 class hrs/wk, 3 cr. An examination of advertisements within each segment of media. Explores relative merits of several media. Practice in the planning and analysis of complete advertising campaigns and their coordination with other marketing strategies. **Prerequisite:** BA101 or consent of instructor. W

BA241 Risk and Insurance, 3 class hrs/wk, 3 cr. Concepts of risks, probability, and insurance, and the role of insurance in the management of risk. Examines underlying legal principles and common elements of most insurance contracts. Special emphasis on the role of insurance from consumer and business viewpoints. Personal applications of major types of property and liability insurance, life and health insurance, with emphasis on underlying economic need each is designed to meet. F, Sp

BA243 Introduction to Consumer Behavior, 3 class hrs/wk, 3 cr. How behavioral science concepts, theories, and research observations apply to various aspects of consumer behavior. Discusses the influences of perception, personality, attitudes, culture, family life, and social class on how and why people buy and consume products. F, W, Sp

BA250 Small Business Management, 3 class hrs/wk, 3 cr. General functions and procedures used in the operation of a small business. Introduces basic aspects of managing a small business and five management functions of planning, organizing, staffing, actuating, and controlling. **Prerequisite:** Second year standing or consent of instructor. Sp

BA251 Office Management, 3 class hrs/wk, 3 cr. A study of the broad scope of responsibilities of the administrative manager. Includes centralization of office services requiring knowledge of planning, organizing, and controlling business services, systems, and procedures. W

BA252 Office Support Systems, 3 class hrs/wk, 3 cr. Acquaints the non-secretarial science students with some fundamentals of operating an office efficiently and effectively. Includes office management, copy methods, office machines, and records management. W, Sp

BA260 Real Estate Principles, 3 class hrs/wk, 3 cr. The nature, importance and character of real property, the real estate business, the real estate market, the real estate brokerage, taxes and assessment, and contracts and ownership. F, W, Sp

BA261 Land Use Economics, 3 class hrs/wk, 3 cr. A continuation of BA260. Land use, taxation, valuation, planning, zoning and development with emphasis on their relationships to economic and social problems. Examines property management, brokerage, appraisal, and escrow functions as they relate to the overall real estate community and its participants. **Prerequisite:** BA260 or consent of instructor. W

BA262 Real Estate Practices, 3 class hrs/wk, 3 cr. A sheltered insight into the workings of real estate transactions including contracts, deeds,

mortgages, and other documents and forms commonly used in the transfer of ownership of real property. Some field work involves public records and title data. **Prerequisite:** BA263 and BA264. Sp

BA263 Real Estate Law, 3 class hrs/wk, 3 cr. Examines the complexities of Oregon real estate law to aid in identifying problems when dealing with clients and in recognizing the need for services of a competent attorney specializing in real property. The agent's role in the agency relationship between broker and client. **Prerequisite:** BA260 or consent of instructor. W

BA264 Real Estate Finance, 3 class hrs/wk, 3 cr. The real estate mortgage market and how it competes with other desired products purchased on credit. Forces that modify the operation of the mortgage market, and the availability of funds, lending policies, and methods of financing real property. **Prerequisite:** One course in real estate principles or practices. W

BA265 Real Estate Office Management, 3 class hrs/wk, 3 cr. Methods for establishing and operating a small real estate office. Emphasizes organizational formats, planning, office facilities, financial records, non-financial records, financial reports, office personnel, office manuals, and public relations. **Prerequisite:** BA262. **Offered as needed.**

BA266 Supervision of Real Estate Sales Personnel, 3 class hrs/wk, 3 cr. Methods for supervising real estate sales personnel. Emphasizes licensing requirements, planning, selection, training and supervision of sales personnel, motivation, leadership, authority, discipline, communication, advertising, and public relations. **Prerequisite:** BA262. **Offered as needed.**

BA269 Principles of Banking, 3 class hrs/wk, 3 cr. Fundamentals of bank functions to give beginning bankers a broad (and operational) perspective necessary for career advancement. F, W, Sp

BA270 Money and Banking, 3 class hrs/wk, 3 cr. Basic economic principles most closely related to money and banking for present and prospective bank managers. Stresses practical application of the economics of money and banking to the individual bank. Includes structure of the commercial banking system, banks and the money supply, bank investments and loans, the federal reserve system and its policies, and the international monetary system. W

BA277 Business Ethics, 3 class hrs/wk, 3 cr. A comparative study of ethical and economic systems designed to increase decision-making capabilities. Emphasizes issues and policy formation in varied business settings. **F, W, Su**

BA278 Law and Banking, 3 class hrs/wk, 3 cr. Basic rules of American law which underlie banking. Includes jurisprudence, the court system and civil procedure, contracts, quasi-contracts, property, torts and crimes, agencies, partnerships, and corporations, Also sales of personal property, commercial paper, bank deposits and collections, documents of title, and secured transactions. Emphasizes uniform commercial code. Sp

BA280 Bank Management, 3 class hrs/wk, 3 cr. New trends in the philosophy and practice of management. The study and application of these principles to give new and experienced bankers a working knowledge of bank management. F

BA281 Installment Credit, 3 class hrs/wk, 3 cr. The techniques of installment lending. Emphasizes establishing credit, obtaining and checking information, servicing loans, and collecting amounts due. Surveys banking installment credit operation, inventory financing, special loan programs, business development, advertising, and the public relations of installment lending. F

BA286 Credit Union Accounting, 3 class hrs/wk, 3 cr. Basic accounting principles and procedures used by credit unions. For all credit union employees whether or not they are directly involved in accounting operations. W

BA287 Credit Union Directorship, 3 class hrs/wk, 3 cr. The role, function, authority, and potential liability of the director's position in a credit union. Basic responsibilities of directors in relation to the historical development of the credit union movement, common practices, and federal and state laws. Sp

BA288 Credit Union Management, 3 class hrs/wk, 3 cr. Managerial and financial aspects of credit union operations under federal and state laws. Managerial accounting practice, financial analysis, and credit union structure. F

BA289 Credit Union Law, 3 class hrs/wk, 3 cr. Coverage of federal and state laws under which credit unions operate. Review of the Credit Union Act. W

BA290 Financial Counseling, 3 class hrs/wk, 3 cr. Explores the need for financial counseling, different types of counseling, and ideas for action. Sp

BA291 Savings and Loan Accounting, 3 class hrs/wk, 3 cr. Basic accounting principles and procedures used by savings associations. For all their employees whether or not they are directly involved in accounting operations. F

BA292 Savings Association Operations, 3 class hrs/wk, 3 cr. An introduction to the financial and management operations of savings and loan associations. Includes the concept of money and its flow to and from associations, its movement to and from assets, liabilities and capital as measured periodically by the balance sheet, the income statement, and other reports. Detailed study of handling savings flows, home mortgage loans, other investments, and branch operations. The effect of taxes on operations, the impact of the computer in operation and management, and the increasing financial complexities of savings associations. W

Bi101 General Biology, 3 class hrs and 3 lab hrs/wk, 4 cr. Diversity of organisms, ecological concepts, effects and consequences of human alteration on natural ecosystems for students not majoring in biology. May be taken in sequence with Bi102 and Bi103. F, W

Bi102 General Biology, 3 class hrs and 3 lab hrs/wk, 4 cr. Genetics, evolution, and behavior. See Bi101. W, Sp

Bi103 General Biology, 3 class hrs and 3 lab hrs/wk, 4 cr. Cell biology, plant and animal physiology, human biology. See Bi101. Sp, F

Bi121 Human Anatomy and Physiology, 3 class hrs and 3 lab hrs/wk, 4 cr. Indepth examination of the structure and function of the human body. First of a two-term sequence. Includes review of chemical principles and cell characteristics as a basis for structure and function, plus study of the integumentary, skeletal, muscular, and nervous systems. **Prerequisite:** Ch110 or equivalent. **F, W, Sp, Su**

Bi122 Human Anatomy and Physiology, 3 class hrs, 3 lab hrs/wk, 4 cr. Indepth examination of the structure and function of the human body. Second of a two-term sequence. Includes study of endocrine, circulatory, respiratory, digestive, excretory, and reproductive systems, plus an introduction to human genetics. **Prerequisite:** Bi121 or consent of instructor. **F, W, Sp, Su**

Bi123 Microbiology, 3 class hrs and 3 lab hrs/wk, 4 cr. A survey of various micro-organisms (bacteria, algae, fungi, protozoa, viruses) and their effects upon man and the environment. W

Bi124 Medical Microbiology, 3 class hrs and 3 lab hrs /wk, 4 cr. A continuation of the survey of bacteria and other micro-organisms emphasizing their impact upon human health. Includes discussion of infection, immunity, common pathogens, and mechanisms of control. **Prerequisite:** Bi123 or Ch110. **F, Sp, Su**

Bi200 Principles of Ecology-Field Biology, 2 class hrs and 4 lab hrs/wk, 3 cr. A study of the broad concepts of ecology. Includes class discussions and field trips. **Sp, Su**

Bot201, 202, 203 General Botany, 3 class hrs and 3 lab hrs/wk, 4 cr. Principles of plant biology. Covers introductory ecological principles, cell structure photosynthesis, respiration, genetics, and evolution of the plant kingdom including bacteria, algae, fungi, mosses, ferns, conifers and flowering plants. **Bot 201: F; 202: W; 203: Sp**

BS202, 203, 204 Introduction to Afro-American History, 3 class hrs/wk, 3 cr. An introductory history of the black race in the new world. Lectures and discussions plus speakers and films. Traces pertinent contacts between African and European worlds from ancient times to the present. How to re-examine traditional historical concepts and information from the black perspective. **Offered as needed.**

BS261 Black Economic Experience, 3 class hrs/wk, 3 cr. An introductory sequence of the historical context and development of contemporary urban and black economic parameters from the Civil War through early black business enterprises. A lecture-discussion course, augmented with speakers and film. **Offered as needed.**

BS262 Black Economic Experience, 3 class hrs/wk, 3 cr. The modern city-state of megalopolis as a special type of urban structure whose inner perimeters circumscribe the majority of America's black population. The classic structure with its real or implied economic opportunities is balanced against the realities of the current situation. **Offered as needed.**

Ch101 Consumer Chemistry, 3 class hrs and 2 lab hrs/wk, 4 cr. Introduction to chemical principles including atomic structure, states of matter, chemical reactions, thermodynamics and energy. Chemistry of life, including carbohydrates, lipids, proteins and nucleic acids. Includes chemical processes in the ecosphere. F, W, Su

Ch102 Consumer Chemistry, 3 class hrs and 2 lab hrs/wk, 4 cr. Chemistry and consumer materials including food and food additives, poisons, drugs, plastics, fuel sources and energy alternatives, nuclear chemistry, and nuclear energy options. W

Ch103 Consumer Chemistry, 3 class hrs and 2 lab hrs/wk, 4 cr. Major air and water pollutants and their effects on the environment. A close look at the pesticide dilemma and alternative methods of insect control. A look at the future. Sp

Ch104, 105, 106 General Chemistry, 4 class hrs and 3 lab hrs/wk, 5 cr. The structures of atoms, molecules, and ions and their interactions. Three lectures, one lecture-discussion, and one three-hour laboratory period. **Prerequisite:** Mth95 or equivalent. **Ch104: F, W; 105: W, Sp; 106: Sp, F**

Ch110 Chemistry for Allied Health, 3 class hrs and 2 lab hrs/wk, 4 cr. An introduction to chemistry, the cell and its chemistry for students entering the allied health field.

Ch140 Physiological Chemistry, 3 class hrs/wk, 3 cr. Chemistry of the human body especially for students in the allied health field. Includes metabolic processes, heredity, body poisons, and radiation. **Prerequisite:** Ch110. Sp, Su

Ch204 General Chemistry, 4 class hrs and 3 lab hrs/wk, 5 cr. A professional course for students majoring in science and related professional fields. Includes atomic structure, stoichiometry, bonding, (atomic and molecular orbital theory) oxidation-reduction, chemical reactions, and gas laws. **Prerequisite:** One year of high school chemistry and Mth95. F

Ch205 General Chemistry, 4 class and 3 lab hrs/wk, 5 cr. A continuation of Ch204 with emphasis on crystal theory, changes of state, properties of solutions, thermodynamics, kinetics, chemical equilibrium, and acid-base theory. **Prerequisite:** Ch204. W

Ch206 General Chemistry, 4 class hrs and 3 lab hrs/wk, 5 cr. An indepth study of acids and bases, ionic reactions, complexions, oxidation and reduction, electro-chemistry, quantitative analysis, and nuclear reactions. **Prerequisite:** Ch205 or Ch106. Sp

Ch226, 227 Organic Chemistry, 3 class hrs and 4 lab hrs/wk, 5 cr. Aliphatic, aromatic, and biologically important compounds and the structure and properties of hydrocarbons and their derivatives. This sequence, along with Ch228, meets the requirements of many science and preprofessional majors. **Prerequisites:** Ch226: Ch106 or Ch206; Ch227: Ch226. **Ch226: F; Ch227: W**

Ch228 Introduction to Biochemistry, 3 class hrs/wk, 3 cr. The structure, biological function, biosynthesis, and breakdown of molecules found in living cells. For students majoring in biology and biology-related disciplines and for students generally interested in biochemistry. **Prerequisite:** Ch227 or 6331. Sp

Ch234 Quantitative Analysis, 3 class hrs and 6 lab hrs/wk, 5 cr. Fundamental principles of quantitative analytical chemistry including gravimetric, volumetric, and limited instrumental methods. Meets requirements in quantitative analysis for pharmacy, pre-medical, pre-dental and medical technology students. **Prerequisite:** Ch206 or consent of instructor. **Offered as needed.**

CJ100 Survey of the Criminal Justice System, 3 class hrs/wk, 3 cr. A review of court systems and procedures from occurrence of criminal violation to final disposition. Covers six primary functional areas of administration of justice and reviews principles of federal, state, criminal, and civil laws as they apply to and affect law enforcement. F, W, Sp

CJ101 Criminology, 3 class hrs/wk, 3 cr. Facts on control of crime related to sociological and psychological theories of punishment and treatment. A study of imprisonment, probation, parole, etc., as society's reactions to crime. Examines operations of police departments, court probations, parole departments. F, W, Sp

CJ110 Introduction to Law Enforcement, 3 class hrs/wk, 3 cr. An orientation in law enforcement, history, and philosophy of enforcement of criminal laws, administration of justice, etiology of criminal behavior, correctional treatment, and professional career opportunites. F, W, Sp

CJ112 Traffic and Patrol, 3 class hrs/wk, 3 cr. Routine and emergency police patrol of public education, enforcement, and engineering. Preparation necessary to effectively handle major divisions of a police department. F, W, Sp

CJ121 Oregon Criminal Code, 3 class hrs/wk, 3 cr. Comprehensive coverage of Oregon criminal code sections as they relate to offenses against persons, habitation and occupancy, property, morality and decency, public order and sovereignty, and the administration of governmental functions. F, W, Sp

CJ131 Introduction to Penology, 3 class hrs/wk, 3 cr. The current role of imprisonment as a correctional tool and a survey of some of the more significant activities involved in the treatment of prisoners. F

CJ132 Introduction to Parole and Probation, 3 class hrs/wk, 3cr. Basic principles and techniques involved in correctional programs of probation and parole and a critical analysis of their individual roles in the administration of criminal justice. Sp

CJ140 Introduction to Criminalistics, 3 class hrs and 4 lab hrs/wk, 5 cr. Basic principles and techniques involved in criminalistics and definitions and distinctions between criminal investigation and criminalistics. Criminalistics laboratory must be taken concurrently. **Prerequisite:** CJ223 and CJ210 or consent of instructor. F, W, Sp

CJ141 Criminalistics II, 3 class hrs and 4 lab hrs/wk, 5 cr. Indepth inquiry into criminalistics, with special emphasis on legal medicine, toxicology, firearms identification, questioned document analysis, and the correlation and synthesis of different methods of approach to criminalistics problems. **Prerequisites:** CJ223, CJ210, and CJ140 or consent of instructor. **Offered as needed.**

CJ143 Personal Identification, 2 class hrs and 2 lab hrs/wk, 3 cr. The science of fingerprints in law enforcement work. Includes techniques and procedures in classification, latent prints and imprints, chemical treatment of questioned evidence for the development of fingerprints, and court room presentation. W

CJ150 Security Administration, 3 class hrs/wk, 3 cr. Alarm and protection devices, protective patrol and internal precautionary procedures in administration of security programs in business and industry. Includes protection against burglary, robbery and industrial espionage, prevention of lawsuits and certain business frauds. Emphasizes planning and implementation of well-rounded programs in these areas. F

CJ195 Independent Study in Criminal Justice, variable hrs and cr. Independent research projects and written and oral reports in the criminal justice field. **Prerequisite:** Consent of an instructor to act as a project sponsor. **Offered as needed.**

CJ199 Issues in Criminal Justice, 3 class hrs/wk, 3 cr. A forum on special issues in criminal justice by visiting instructors or regular faculty. **Prerequisite:** Consent of instructor. **Offered as needed.**

CJ200 Introduction to Community Relations, 3 class hrs/wk, 3 cr. The role of the police in a changing community. Explores racial and community tension and minority group crime, social forces in the community, and factors relating to police image. F, W, Sp

CJ201 Juvenile Delinquency, 3 class hrs/wk, 3 cr. How crime and delinquency facts relate to data including variations of crime and delinquency rates with age, sex, race, poverty, educational status, urbanization, and other variables. Discusses incidence among criminals and delinquents of various bilogical, psychological and social traits, characteristics, and processes. F, W, Sp

CJ202 Violence in the Family, 3 class hrs/wk, 3 cr. The causes and extent of violence in the family and preventive measures available in the community.

CJ204 Seminars in Criminal Justice, 3 class hrs/wk, 3 cr. For management personnel in the criminal justice system, solutions to particular administrative problem. **Prerequisite:** Consent of instructor. **Offered as needed.**

CJ210 Introduction to Criminal Investigation, 3 class hrs, 3 cr. History and theory of fundamentals of criminal investigation from crime scene to court room. Includes scientific techniques, psychology of offenders and recent pertinent court decisions. F, W, Sp

CJ213 Crime Scene Technician, variable hrs and cr. A seminar with three two-hour segments. Includes comprehensive theory and practice in crime scene photography, sketching, collection and identification of physical evidence, laboratory processing of physical evidence, preparation of evidence for courtroom presentation, and actual presentation of a case in a mock trial. Emphasizes participation in these activities. **Prerequisite:** CJ210 and CJ140 or consent of instructor. Segments must be taken in sequence unless prior consent of instructor is obtained. F, W, Sp

CJ215 Criminal Justice Administration, 3 class hrs/wk, 3 cr. A survey of administrative practices of criminal justice agencies. Administration in the public sector including organizational theory, public management, and policy making in criminal justice. Special emphasis on agencies in law enforcement and correction. F, W, Sp

CJ216 Criminal Justice Management, 3 class hr/wk, 3 cr. Principles of evaluating, testing, and selecting personnel plus supervision and advancement evaluations. Study and practice of general and specific testing and evaluating procedures. **Offered as needed.**

CJ218 Police Personnel Seminar, 3 class hrs/wk, 3 cr. Police profile, employment applications and resume testing techniques. Criminal justice personnel problems arising from commmunications reporting, and attitudinal conflict difficulties, from the employer's and employee's viewpoint. **Offered as needed.**

CJ220 Introduction to Substantive Law, 3 class hrs/wk, 3 cr. Origin and structure of common-law crimes and procedures as well as statutory crimes. Definitions and distinctions between criminal and civil law, criminal court procedures, criminal law case reading, federal and state law, and Oregon criminal code sections. **F, W, Sp**

CJ221 Criminal Law II, 3 class hrs/wk, 3 cr. A continuation of CJ220. Administration of governmental functions, concepts of imputability, causation, and intent. **Sp**

CJ223 Rules of Evidence, 3 class hrs/wk, 3 cr. Basic principles of the law of criminal evidence emphasizing the role of the investigator in collecting, preserving, and introducing evidence in court. Discussion of current decisions as they affect the rules of evidence. **F, W, Sp**

CJ227 Introduction to Constitutional Law, 3 class hrs/wk, 3 cr. An intensive study and analysis of the U.S. Constitution, and court decisions which determine the admissibility of evidence in criminal cases and which affect police procedures. Criminal procedure process with emphasis on the role of law enforcement. **F, W, Sp**

CJ228 Moot Court, 2 class hrs and 3 lab hrs/wk, 3 cr. Proper courtroom procedures emphasizing the role of the police witness. Covers proper attire for witnesses, demeanor in court, manner of response to questioning, and maintenance of a strictly unbiased and impartial attitude. Participation in moot court sessions offers experience in court procedures. **F**

CJ230 Introduction to Juvenile Corrections, 3 class hrs/wk, 3 cr. Historical and contemporary aspects of juvenile offenders including examination of juvenile court philosophy and current treatment programs. **Sp**

CJ231 Introduction to Corrections Process, 3 class hrs/wk, 3 cr. An analysis of the historical and contemporary background of adult offenders with emphasis on current prevention, control, and rehabilitative programs. **Sp**

CJ232 Introduction to Corrections Casework, 3 class hrs/wk, 3 cr. Approaches to behavior modification through interviewing and counseling. A survey of techniques available to entry-level practitioners in corrections in counseling and interviewing. Traces the development of positive relationships between the client and corrections personnel. **W**

CJ233 Introduction to Community Based Correction, 3 class hrs/wk, 3 cr. Pretrial intervention, work release programs, halfway houses, juvenile offenders, the roles of volunteers and para-professionals, probation, and parole. **W**

CJ244 Questioned Documents, 2 class hrs and 2 lab hrs/wk, 3 cr. Analysis of handwriting, typewriting, forged and altered documents as they pertain to criminal justice and presentation of document evidence in court. **Offered as needed.**

CJ251 Embezzlement and Shoplifting, 3 class hr/wk, 3 cr. Security problems which develop from external theft (shoplifting) and internal theft (embezzlement) in retail establishments. **F**

CJ252 Educational Security, 3 class hrs/wk, 3 cr. Problems of establishing and maintaining a balanced and inclusive program of educational security. Includes routine patrol, parking, traffic control, investigation, key control, administration advising in the case of riots, demonstrations, and all other types of disturbances. How to develop and maintain rapport with students, staff, and faculty of educational institutions. **W**

CJ254 Transportation Security, 3 class hrs/wk, 3 cr. Problems of security in the transportation industry, including airlines, trucking lines, and railways, Emphasizes hijacking and skyjacking. Analyzes the skyjacker profile and modus operandi. Stresses protective measures and investigative operations in this broad field. **Sp**

CJ256 Personnel Screening and Investigation, 3 class hrs/wk, 3 cr. Three aspects of screening and investigation of personnel in industry, business, education, and government. Analyzes alternate programs. **W**

CJ258 Communications Security, 3 class hrs/wk, 3 cr. Security measures pertaining to all police, industrial, and commercial telecommunications systems, including computers, telephones, teletypes, and radios. Reviews legal and moral aspects of invasion of privacy relating to these matters. **Sp**

CS213 FORTRAN IV, 4 class hrs/wk, 4 cr. An introduction to language structure, manipulation of arrays, input/output formats, coding techniques, functions, subroutines, disk files and memory dump debugging. Program assignments involve simple management and science problems. **Prerequisite:** BA131 or equivalent. **F, W, Sp**

CT210 Clothing Construction, 8 lab hrs/wk, 3 cr. The application of principles and techniques of construction and fitting to individual projects. **F**

CT211 Clothing and Man, 3 class hrs/wk, 3 cr. Sociological, psychological, economic, and aesthetic factors affecting the selection of clothing. **W**

CT250 Textiles, 3 class hrs/wk, 3 cr. Properties, identification, selection, use, and care of textile fibers and fabrics. **Sp**

DE20 Discovering Success, 3 class hrs/wk, 3 cr. How students may succeed in college through self-understanding, awareness of resources, and group support. Emphasizes clarifying values and making decisions related to life-work planning. **F, W, Sp, Su**

Ec100 Outline of Economics, 3 class hrs/wk, 3 cr. A survey of macro and micro economic theory to assist students in applying basic economic concepts to their business or personal lives. **F, W, Sp, Su**

Ec201 Principles of Economics, 3 class hrs/wk, 3 cr. A survey of basic economic tools and a study of macro economic theory. Covers the public sector, unemployment, inflation, taxation, national income accounting and income distribution, money, banking, fiscal and monetary policy, etc. **F, W, Su**

Ec202 Principles of Economics, 3 class hrs/wk, 3 cr. Examines micro economics concepts such as markets, firms' resource allocations, derived demand, income distribution, price systems, monopoly, and the allocation of resources. **Prerequisite:** Ec201 or consent of instructor. **W, Sp**

Ec203 Principles of Economics, 3 class hrs/wk, 3 cr. Emphasizes economic issues such as underdeveloped countries, economic growth, pollution, and comparative economic systems. **Prerequisite:** Ec201 or consent of instructor. **Sp**

Ed110 Psychology of Learning, 3 class hrs/wk, 3 cr. Modern theories of behavior, motivation, and human development as applied to the classroom, and techniques derived from these theories. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **F, W**

Ed111 Contemporary Education, 3 class hrs/wk, 3 cr. Public education in the United States today. Examines contemporary purposes and practices in relation to historical trends and philosophical issues. Discusses the organization, financing, and operation of local school districts. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **Sp**

Ed113 Discrimination: The Law and the Oregon Educator, 3 class hrs/wk, 3 cr. Ramifications, requirements, and impact of state and federal laws prohibiting discrimination in the educational system on the basis of sex, race, handicap, national origin, marital status or age. Designed to inform the interested public and to fulfill teacher certification requirements under ORS 342.123. **Offered as needed.**

Ed123 Tutoring Practices for Paraprofessionals I, 3 class hrs/wk, 3 cr. First of two courses on basic tutoring theory and techniques. Covers tutoring in reading and the language arts and how to carry out specific prescriptions from teachers, tutor pupils individually and in small groups, assess pupils' progress, and maintain appropriate records. **W**

Ed124 Tutoring Practices for Paraprofessionals II, 3 class hrs/wk, 3 cr. A continuation of Ed123. Covers tutoring in mathematics, science, social science, art, music, and physical education. **Sp**

Ed131 Teaching Techniques, 3 class hrs/wk, 3 cr. Instructional and evaluative techniques commonly used by educational aides. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **F**

Ed133 Instructional Media and Materials, 3 class hrs/wk, 3 cr. How to prepare and use instructional media and material commonly found in public schools. The place and importance of instructional media in the learning process and the function and use of the instructional media centers (I.M.C.) in schools. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **W**

Ed134 The Mexican-American and the Schools, 3 class hrs/wk, 3 cr. For persons

working, or planning to work, with Mexican-American students. Focuses on the learning problems some of these students may have because of conflicts between their ethnic-based values and those of other students. **Sp**

Ed199A Spanish Language Development for the Spanish Speaker, 3 class hrs/wk, 3 cr. First of three courses to help Spanish-speaking teacher aides improve their communication skills. Development of language skills. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **F**

Ed199B Spanish Reading for the Spanish Speaker, 3 class hrs/wk, 3 cr. Continuation of Ed199A. **Prerequisite:** Admission to Educational Aide program or consent of instructor. **W**

Ed199C Spanish Composition for the Spanish Speaker, 3 class hrs/wk, 3 cr. Continuation of Ed199B. **Prerequisite:** Admission to Educational Aide Program or consent of instructor. **Sp**

Ed199D Applied Behavior Modification, 3 class hrs/wk, 3 cr. Introduction and survey of behaviorism theory, and the application of behavioral techniques in working with school and institutionalized persons. **Sp**

Ed207 Seminar, Educational Aide Orientation, 3 class hrs/wk, 3 cr. An introduction to the role of educational aides. Covers occupational opportunities, career ladders, and other training models. Examines the attitudes and work habits which influence job effectiveness and satisfaction. **Prerequisite:** Admission to Educational Aide program or consent of the instructor. **F**

Ed209A Practicum: Introductory Observation and Experience, 3 class hrs/wk, 3 cr. Intitial experiences in school and agency settings for Educational Aide students. First in a three-term sequence, which includes Ed210 and Ed211. **F, W, Sp**

Ed209B Practicum, Introductory Observation and Experience (LDC), 3 class hrs/wk, 3 cr. A one-term introduction to the field of education for students exploring education as a career. **F, W, Sp**

Ed210 Education Practicum, Theory and Practice, 1 class hr and 15 lab hrs/wk, 6 cr. Field experience in a variety of classroom activities directly related to instructing and supervising children in school settings allowing students to apply knowledge, methods, and skills gained from education courses.Seminars cover classroom experience, problem solving, techniques, and materials. **Prerequisite:**Admission to Educational Aide program or consent of instructor. **W, Sp**

Ed211 Advanced Practicum, 1 class hr and 15 lab hrs/wk, 6 cr. Practical experience for educational aide students in their areas of specialization. **Offered as needed.**

Ed212 Practicum Specialized Education, 1 class hr and 15 lab hrs/wk, 6 cr. Classroom experience with children of specialized populations for second year students so they may use the knowledge, methods, and skills they have gained from education courses. Seminars on classroom experiences, problem solving, and special teaching techniques. **Offered as needed.**

Ed251 Introduction to Special Learner Problems, 3 class hrs/wk, 3 cr. Students survey and study areas, visit facilities, and meet persons in service to the handicapped in order to make appropriate career choices in special education. **W**

Ed257 Second Language Teaching Techniques Paraprofessionals I, 3 class hrs/wk, 3 cr. First of a three-term sequence covering philosophy, techniques, activities, materials, and various techniques used in bilingual/bicultural educational programs. **Prerequisite:** Admission to second year of Educational Aide program or consent of instructor. **F**

Ed258 Multi-Cultural Children's Activities Literature, 3 class hrs/wk, 3 cr. Continuation of Ed257. Selecting and using multi-cultural activities and literature. **Prerequisite:** Admission to second year of Educational Aide program or consent of instuctor. **W**

Ed259 Bilingual Methodology, 3 class hrs/wk, 3 cr. Continuation of Ed259. Examines the philosophy, rationale and legal implications of bilingual/bicultural programs and management and use of English and Spanish reading in a bilingual classroom. **Prerequisite:** Admission to second year of Educational Aide program or consent of instructor. **Sp**

Ed267 Introduction to the Education of the Mentally Retarded, Physically Handicapped, and Emotionally Disturbed Student, 3 class hrs/wk, 3 cr. First in a three-term sequence covering the theory and techniques of working with physically handicapped,mentally retarded, and emotionally disturbed students. Theory, identification process, instructional services, assessment procedures, and rules and regulations concerning handicapped students. **Prerequisite:** Admission to second year of Educational Aide program or consent of instructor. **F**

Ed268 Introduction to Classroom Management of the Mentally Retarded and Physically Handicapped, 3 class hrs/wk, 3 cr. Continuation of Ed267. Specific management skills related to mentally retarded and physically handicapped. Curriculum materials for use with the mentally retarded and physically handicapped. **Prerequisite:** Admission to second year of Educational Aide program or consent of instructor. **W**

Ed269 Introduction to Classroom Management of the Emotionally Disturbed, 3 class hrs/wk, 3 cr. Continuation of Ed268. Specific management skills relating to the emotionally disturbed. Focuses on learning characteristics of emotionally disturbed students and appropriate curriculum materials. **Prerequisite:** Admission to second year of Educational Aide program or consent of instructor. **Sp**

Eng30A English as a Second Language-Speaking, 3 class hrs and 2 lab hrs/wk, 3 cr. Speaking and listening skills to increase commmunication and comprehension of the English language for second language learners using skills covered in Eng30B. **Prerequisite:** Teacher referral and scores less then 65 percent on the STEL intermediate test.

Eng30B English as a Second Language-Writing, 3 class hrs and 2 lab hrs/wk, 3 cr. Writing basic and essential English language structures to prepare second language students for advanced work. **Prerequisite:** Teacher referral and scores less than 65 percent on the STEL intermediate test.

Eng101, 102, 103 Survey of English Literature, 3 class hrs/wk, 3 cr. Major literary documents and authors. Lecture-discussion and individual study on relation of authors and genres to their historical, cultural, intellectual and aesthetic contexts. Eng101 covers Beowulf to the Renaissance in England, Eng102 from Milton to the romantic movement, and Eng103 from the last half of the romantics to modern British fiction. **Eng101: F; 102: W; 103: Sp**

Eng104 Survey of Fiction, 3 class hrs/wk, 3 cr. Analysis of fiction literature through the reading of works in English and in translation. Eng104 introduces the short story and novel, basic literary concepts and terminology. **F, W, Sp**

Eng105 Survey of Dramatic Literature, 3 class hrs/wk, 3 cr. Dramatic literature by an international range of authors. Emphasizes students' perception of literary issues through discussion of basic dramatic conventions, characterization, theme, literary uses of language, and setting. **W, Sp**

Eng106 Survey of Poetry, 3 class hrs/wk, 3 cr. Analysis of poetry through the reading of works in English and in translation. Introduces literary concepts and terminology for poetry, and explores types, elements and structures of poetry. **Sp**

Eng107, 108, 109 World Literature, 3 class hrs/wk, 3 cr. A sequence on outstanding works of ancient, medieval, and modern literature that have had permanent and wide appeal outside their own countries. **Eng 107: F; 108: W; 109: Sp**

Eng110A English as a Non-native Language I, 3 class hrs and 2 lab hrs/wk, 4 cr. For foreign students learning how to listen and understand native speakers, speak English fluently, read and speak with correct intonations, write appropriate grammatical English patterns, and improve study skills. **Prerequisite:** Placement test. **F**

Eng110B English as a Non-native Language II, 3 class hrs and 2 lab hrs/wk, 4 cr. For students whose first language is not English. Emphasizes essential structure of English, reading and vocabulary development skills. **Prerequisite:** Placement test. **W**

Eng110C English as a Non-native Language III, 3 class hrs and 2 lab hrs/wk, 4 cr. For students of English as a second language at intermediate and advanced levels. Emphasizes thinking in English and communicating in writing and development of basic logical methods of organization required for Wr121. **Prerequisite:** Placement test. **Sp**

Eng201, 202, 203 Shakespeare, 3 class hrs/wk, 3 cr. Formal elements of Shakespeare's work/structure, characterization, setting, movement and imagery-as well as the more elusive elements of the plays-their larger meaning and value systems. Analyzes the nature of Shakespeare's work in relation to the larger mode of tragedy, comedy and the genre of drama. Discussion of the plays and critical essays of them. Eng201, tragedies, Eng202, comedies; and Eng203, important Shakespearean plays. **Eng201: F; 202: W; 203: Sp**

Eng253, 254, 255 Survey of American Literature, 3 class hrs/wk, 3 cr. Discussion of selected genres (poetry, fiction, drama and expository, religious and critical prose) and

works, from the beginning of American literature to present day, in relation to the way they imitate, interpret and direct personal and social lives. Reading and assessing interpretive literature for personal enjoyment. Emphasizes written and oral discussions of assigned readings. **Eng253: F; 254: W; 255: Sp**

Eng256, 257, 258 Minority Literature, 3 class hrs/wk, 3 cr. A three-term sequence on major writers of a specific group. Explores individual visions of each writer and how those visions relate to ethnic groups and group identities. **Eng256, Indian: F; Eng257, Black: W; and Eng258, Chicano: Sp**

Eng261 Science Fiction, 3 class hrs/wk, 3 cr. Character, setting, literary use of language, theme, and history in science fiction by international authors. Sp

Eng262 Western American Literature, 3 class hrs/wk, 3 cr. A study of themes and other elements peculiar to Western America and common to all literature, through reading short stories, novels, poetry, and nonfiction of the American West.

ES201 Mexican American Culture, 1 class hr/wk, 1 cr. A four-part workshop on family lifestyles and values and the geographical and regional culture of people of Mexican-American heritage. **F, W, Sp, Su**

FA250 Film and Video Arts, 3 class hrs/wk, 3 cr. Technologic advances of electronic media require the development of additional literacy skills. Exposes students to aesthetic considerations and production techniques necessary for effective use of new visual communications media, and provides an opportunity to express this awareness in a media production. F

FA251 Film Production, 3 class hrs/wk, 3 cr. Use of the camera, equipment, and lighting to capture proper image, action, and illusions of motion. **F, W, Sp**

FA255 Introduction to Film Styles, 1 class hr and 4 lab hrs/wk, 3 cr. History, technique, and art of film through in-class film viewing and discussion. Emphasizes acquiring background and basis for evaluating film as an art form and appreciation for a variety of stylistic approaches. F

FA256 Introduction to Film Directors, 1 class hr and 4 lab hrs/wk, 3 cr. An analysis of films from the standpoint of the director-the creator. Studies works of one or two directors in an effort to understand and critique the individual films as the works of film artists, especially within the context of a body of work expressing a particular and unique view of the world. W

FA257 Introduction to Film Themes, 1 class hr and 4 lab hrs/wk, 3 cr. An examination of a number of films representing a single genre (westerns, comedies, etc.) or expressing common themes in an attempt to focus on the various directors involved and the diverse styles, techniques, and personal expressions they bring to their subject. Sp

FE199 Job Interviewing, 1 class hr/wk, 1 cr. How to prepare and effectively manage job interviews. Emphasizes development of constructive attitudes, non-verbal communication, handling stress and anxiety, understanding the interviewer's perspective, and predicting and preparing for interview questions. Students are video-taped during mock interviews and critique these interviews. **F, W, Sp, Su**

FE201A Field Exploratory Project, 4 class hrs and 12 lab hrs/wk, 1 cr. An exploration of a career area by means of on-site visits to specific companies, agencies or institutions to give students a more complete picture of career areas and gain an understanding of how various jobs interrelate. **Offered as needed.**

FE205 Job Search Techniques, 1 class hr/wk, 1 cr. Seminar to help students find and apply for jobs. Preparing oneself for the job-search process, preparing and writing resumes, sources of information about jobs, preparing for interviews, job requirements, and what the employer is looking for in an employee. **F, W, Sp**

FL199 Perspectives on Effective Parenting, 3 class hrs/wk, 3 cr. Principles and techniques for establishing and maintaining effective human relationships, including fundamentals of relationships, listening skills, ways to communicate feelings, verbal and nonverbal communication, problem solving, handling conflicts, creating healthy emotional climates. **Offered as needed.**

FL222 Partner Relationships, 3 class hrs/wk, 3 cr. A practical, functional course for students interested in succeeding in marriage or close personal relationships. Exploration of the wide range of possibilities modern marriages offer, and options couples have in deciding on the kind of marital relationship that will fulfill both personal and mutual needs. **F, W, Sp**

FL223 Family Living, 3 class hrs/wk, 3 cr. Patterns of family living in modern society. Includes the varying roles and interaction of family members and factors affecting family life. **Offered as needed.**

FL230 Single Parent/Stepparent Experience, 3 class hrs/wk, 3 cr. A practical, functional approach to the growing phenomenon of families with single parents and/or stepparents. Sp

FN225 Nutrition, 4 class hr/wk, 4 cr. The relationship of food and its components to health with emphasis on the young adult. Considers current national and international concerns. **F, W, Sp**

G101 Geology of Western Oregon, 3 class hrs and 2 lab hrs/wk, 4 cr. An introduction to the evolution of the western Oregon landscape. **F, Su**

G102 Oregon Geology, 3 class hrs and 2 lab hrs/wk, 4 cr. Introduction to evaluation of Oregon's earth and mineral resources. Requires only elementary knowledge of basic earth science concepts. **W**

G103 Geology Eastern Oregon, 3 class hrs, and 2 lab hrs/wk, 4 cr. Develops an awareness of the exceptional nature of the geology of eastern Oregon, including establishment of a physical and temporal framework essential to the geologic interpretation of the region. **Sp**

G199 Geological Field Studies, 1 class hr, and 4 lab hrs/wk, 3 cr. Geological formation, rocks and minerals of various areas with emphasis on paleontology through field studies. **Offered as needed.**

G199A Geological Field Studies, 1 class hr and 2 lab hrs/wk, 2 cr. Introductory class weekend field trip summary seminar. Students write a geological descriptive report (Roadlog) of features studied on trip. **W**

G199B Geological Field Studies, 1 class hr and 1 lab hr/wk, 1 cr. Introductory class weekend field trip summary seminar. **Sp**

G201, 202, 203 Geology, 3 class hrs/wk, 3 cr. Earth materials, processes and structures, and the history of earth and life. **G201: F; 202: W; 203: Sp**

G204, 205, 206 Geology Laboratory, 2 lab hrs/wk, 1 cr. Laboratory and field work to accompany G201, 202 and 203. **G204: F; 205: W; 206: Sp**

G208 Volcanoes, 3 class hrs/wk, 3 cr. A comprehensive study of all aspects of volcanic phenomena. **Offered as needed.**

Geog105 Introductory Geography, 3 class hrs/wk, 3 cr. Physical elements of geography and the environment in which man lives. Focus is on the planet earth's water, landforms, atmosphere, vegetation and soils. Introduction to problems of graphic representation of the earth and its significance to humankind. **F, W, Su**

Geog106 The Cultural Environment, 3 class hrs/wk, 3 cr. An introduction to man's cultural landscapes, cultural areas and integrative systems. Focus is on the study of the urban mosaic, political patterns, language, population, religion, agriculture and industry. Study of ecologically oriented issues as related to the above topics. **W, Sp, Su**

Geog107 Historical Geography, 3 class hrs/wk, 3 cr. An introduction to the historical evolution of cultures in the context of man-land relations. Focus is on culture areas, culture diffusion, and cultural ecology in past times. Special emphasis on cultural landscapes in South Asia, the Middle East, Mediterranean Europe, Northwest Europe, and the United States. **F, Sp, Su**

Geog199 The Urban Environment, 3 class hrs/wk, 3 cr. Development, evolution, and problems of cities, with special emphasis on Portland and Salem and their metropolitan areas. Focuses on spatial and functional characteristics of cities, and upon the various problems of human adjustment in both their present and historic aspects. **F, Su**

Geog200 Environment and Man, 3 class hrs/wk, 3 cr. Man's alteration of natural systems and environmental problems created by natural resources and energy development programs. Human activity at different times and places in regard to soils, climate, vegetation, land forms, and water. **W, Su**

GL101, 102, 103 First Year German, 4 class hrs/wk, 4 cr. Developing listening, speaking, and writing skills. Emphasizes comprehension of grammar and word patterns. **F, W, Sp**

GL107 First Year Norwegian, Term I, 4 class hrs/wk, 4 cr. A grammatical foundation in formal and idomatic Norwegian, with emphasis on speaking, reading, and writing. F

GL108 First Year Norwegian, Term II, 4 class hrs/wk, 4 cr. A cultural approach to written and spoken Norwegian for beginners who wish to speak, read, write, and understand the language. W

GL109 First Year Norwegian, Term III, 4 class hrs/wk, 4 cr. A continuation of GL108. Sp

GS104, 105, 106 Physical Science, 3 class hrs and 2 lab hrs/wk, 4 cr. Fundamental principles of physics, chemistry, astronomy and geology,

and man's relation to them. Development and application of the scientific method. Students are advised to complete one term of high school algebra, or equivalent. May not be taken for credit if a student has completed six or more hours in a college-level course in chemistry or physics. **GS104: F; 105: W; 106:** Sp

GS119 Solar Energy, 3 class hrs/wk, 3 cr. An introduction to solar radiation, flat plate collectors, active and passive solar heating systems, solar thermal electric generating schemes, and photovoltaic devices. **Offered as needed.**

GS121 Introduction to Astronomy, 3 class hrs/wk. 3 cr. Fundamentals of astronomy for non-science majors who have little or no preparation in mathematics or physical science. **F**

GS199 You and Your Environment, 3 class hrs/wk. 3 cr. An inquiring course on effects of pollution on the environment. Attempts to identify and study sources, causes, and effects of pollution problems and possible ways to eliminate environmental pollution. **Offered as needed.**

GS200 Computer Applications in Science and Technology, 3 class hrs and 2 lab hrs/wk, 4 cr. A continuation of Mth133B for mathematics, science, and engineering students. Includes finding roots of equations, graphing, curve fitting, and simulation to solve practical problems of scientific interest. Emphasizes writing and debugging computer programs on a microcomputer system, such as the APPLE or TRS-80. **Prerequisite:** Mth133B or equivalent or consent of instructor. **Offered as needed.**

GS207 Astronomy, 3 class hrs/wk, 3 cr. A descriptive treatment of historical astronomy, the earth coordinate system, the moon and solar system. **F**

GS208 Astronomy, 3 class hrs/wk, 3 cr. Understanding the nature of stars, including the sun, by examining the classification system for stars used by astronomers. Study of the great variety of telescopes, both optical and radio, so that students will understand how astronomers have gathered so much information about objects far removed from earth in space. **Prerequisite:** GS207 or consent of instructor. **W**

GS209 Astronomy, 3 class hrs/wk, 3 cr. A descriptive treatment of stellar evolution, the Milky Way galaxy, galactic and exgalactic systems, and current theories on the nature of the universe. **Prerequisite:** GS208 or consent of instructor. **Sp**

He199A Seminar in Health Studies–Narcotics, Alcohol, 3 class hrs/wk, 3 cr. Multidisciplinary study of the detrimental factors of our social environment and their effect on the body. **F, W, Sp, Su**

He199B Personal Health and Human Sexuality, 3 class hrs/wk, 3 cr. Personal health attitudes and behavior in relation to sexuality. Covers environmental conditioning and its relationship to identity, self-esteem, love, and role definition, and physiology in relationship to environmental conditioning and human sexual response. **F, W, Sp, Su**

He199D Consumer's Guide to Health, 3 class hrs/wk. 3 cr. A look at the health resources available to consumers: doctors, nurses, hospitals, drugs, insurance, welfare, the law, alternatives, psychologists. How to choose and use them and stay healthy when possible. Questions posed and answers sought. **F, Sp**

He199E Nutrition, Weight Control and Physical Fitness, 3 class hrs/wk, 3 cr. Methods of maintaining or improving fitness through consideration of diets and dieting, obesity, types of exercise, physical testing, cardiovascular fitness, and nutritional concepts. **F, W, Sp**

He250 Personal Health, 3 class hrs/wk, 3 cr. Relationship of attitude and behavior to an individual's health needs. Centers on individual health appraisal and values clarification. **F, W, Sp, Su**

He251 Community Health, 3 class hrs/wk, 3 cr. A study of community health problems and related agencies, community health programs, health resources, and the relationship of personal health to community health. **W**

He252 First Aid, 2 class hrs and 2 lab hrs/wk, 3 cr. First aid and safety procedures for individuals, school athletics, and civil defense. Meets certification requirements for American Red Cross standard and advanced first aid cards. **F, W, Sp, Su**

He260 Crash Injury Management, 2 class hrs and 2 lab hrs/wk, 3 cr. A 40-hour training program specifically for law enforcement officers usually the first persons at the scene of traffic accidents. Covers life-threatening emergencies including airway care, pulmonary and cardiopulmonary resuscitation, control of bleeding, and prevention and control of shock. Emphasizes practical aspects of emergency care required at an accident scene. **F, W, Sp, Su**

He261 Cardiopulmonary Resuscitation, 1 class hr/wk, 1 cr. A combination of lecture, audiovisual presentation, and mannequin practice in the principles and procedures of providing basic life support to victims of airway obstruction, respiratory arrest, and/or cardiac arrest. Successful completion leads to certification in basic life support by the American Red Cross or the Oregon Heart Association. **F, W, Sp, Su**

He262 Cardiopulmonary Resuscitation Instruction, 1 lab hr/wk, 1 cr. Reviews basic life support, both theory and its application. Discusses instructional materials and methods of use in CPR courses. Successful completion provides instructor certification/recertification by the Oregon Heart Association. **Prerequisite:** Valid CPR card and consent of instructor. **W**

He264 Childhood Emergencies, 1 class hr/wk, 1 cr. First aid procedures for children and infants. Safety, accident prevention, medicolegal, and public health aspects of day care centers. **Prerequisite:** He252 or consent of Allied Health department director. **Sp**

He268 Pharmacodynamics in Health Care, 3 class hrs/wk, 3 cr. Facts and principles required for safe administration of medicines in patient care situations. Provides comprehensive base for clinical application. **F, W, Sp**

HM250 Home Management and Decision Making, 3 class hrs/wk, 3 cr. Concepts of home management in various situations including values, goals, standards decision making, management processes, and the use of human and material resources to meet individual and family needs. **Offered as needed.**

HS10 Health Care Skills, 2 lab hrs/wk, 1 cr. One-to-one and small group tutoring for students in health-related programs who want to develop skills for working with patients and clients. How to observe, interview, and communicate with patients and how to use first aid and emergency medical techniques. **Prerequisite:** Enrollment in dental assisting, emergency medical technology, medical office assisting, or nursing program. **Offered as needed.**

Hst107, 108, 109 History of World Civilization, 3 class hrs/wk, 3 cr. Human cultural, social, economic, and political development of the world's civilizations. Hst107–from ancient times to 155 A.D.; Hst108–from 1500 to 1914; Hst109–the twentieth century. **Hst107: F, W, Su; 108: W, Sp, Su; 109: F, Sp, Su**

Hst157 History of the Middle East and Africa, 3 class hrs/wk, 3 cr. A survey of the cultural, social, economic, and political development in the Middle East and Africa. **F**

Hst158 History of Latin America, 3 class hrs/wk, 3 cr. A survey or cultural, social, economic, and political development in Latin America. **W**

Hst159 History of Asia, 3 class hrs/wk, 3 cr. A survey of cultural, social, economic, and political development in Asia. **Sp**

Hst201, 202, 203 History of the United States, 3 class hrs/wk, 3 cr. A study of the cultural, economic, social and political development of the United States. Hst201-1492 to 1865; Hst202-1865 to 1920; Hst203-1920 to 1970; **Hst 201: F, W; 202: W, Sp; 203: Sp, Su, F**

Hst210 Futurism: Alternatives for the Future, 3 class hrs/wk, 3 cr. Examines trends of the past and present. Examines the future as a "zone of potentiality" from the clues derived. **F**

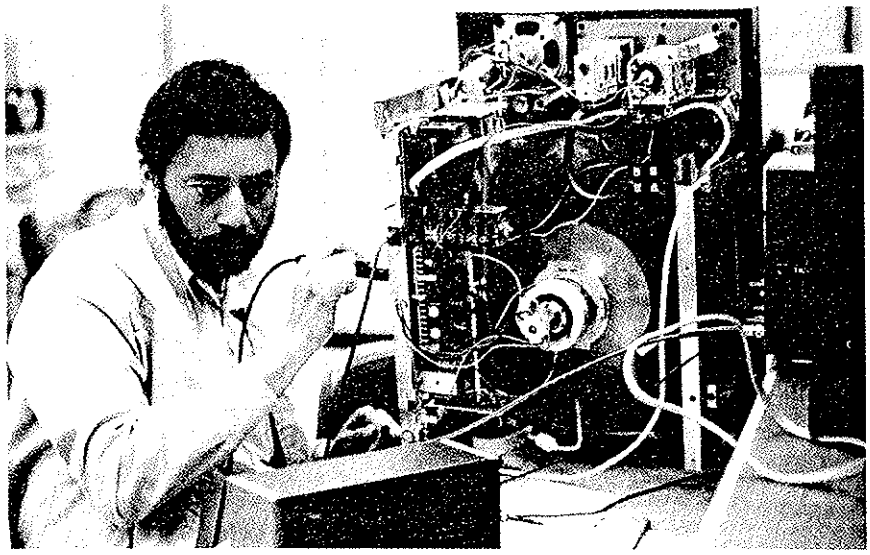
Hst234 Introduction to Chinese Cultural History, 3 class hrs/wk, 3 cr. Chinese cultural history and the Chinese mind and value system in relation to its social structure. **Offered as needed.**

Hst235 A Survey of Modern Chinese History, 3 class hrs/wk, 3 cr. Chinese history from the Ch'ing Dynasty to the present day with emphasis on European expansion and China's response to the West. **Offered as needed.**

Hst257 Introduction to Ethnic History, American Indian, 3 class hrs/wk, 3 cr. The native American as a minority group with a culture, heritage, humor, self-consciousness, and outlook. The history of the American Indian and his role in American history. **F**

Hst258 Introduction to Ethnic History, Black American, 3 class hrs/wk, 3 cr. The role of blacks in American history. Recounts and explains the experiences of America's largest minority group in its attempt to secure meaningful first-class citizenship. **W**

Hst259 Introduction to Ethnic History, Chicano, 3 class hrs/wk, 3 cr. Tracing and analyzing the various aspects of life and society of the Chicanos. Focuses on racial, cultural, educational, economic, and political development of the Chicanos in the United States. **Sp**



IS248A-E Independent Studies, variable hrs, and cr. Faculty supervised individualized study in areas not covered by courses currently offered. May involve resource persons in the community.

J215 Publication Lab, 4 lab hrs/wk, 2 cr. Practical application of reporting skills, photojournalism, and production principles through work on the student newspaper. **Prerequisite:** J224 or consent of instructor. **F, W, Sp**

J216 Newswriting, 3 class hrs/wk, 3 cr. Exposure to gathering and processing news includes lead format, straight news style, editorials, and some feature writing. Considerable time devoted to writing. **Prerequisite:** Knowledge of typing. **F, W, Sp, Su**

J224 Introduction to Journalism, 3 class hrs/wk, 3 cr. A survey of the press with emphasis on newspaper operation in the United States. Discussion includes historical base, reporting responsibilities, journalism ethics, and law. **F, W, Sp, Su**

J225 Advertising/Public Relations, 3 class hrs/wk, 3 cr. Communications and production aspects of advertising and public relations. Criticism and analysis combined with actual preparation of materials and campaigns. **W**

J226 Layout/Production, 3 class hrs/wk, 3 cr. Newspaper management in relation to production and editing procedures. Includes printing processes, page layout, style, and headline writing. **Sp**

MS250 Oceans: Our Continuing Frontier, 3 class hrs/wk, 3 cr. A multidisciplinary course. The relationship between the sea and art and literature, science, mythology, resources, politics, war, and people and the relationship of Oregonians to the sea. **W**

MS251, 252, 253 The Art of Discovery, Science, Philosophy and Society, 3 class hrs/wk, 3 cr. An interdisciplinary sequence focusing on discoveries which have had special impact on world views, values, and behavior. How scientific, philosophic, and social enterprises relate. Integrates disciplinary insights. Students are expected to see patterns which may help integrate their studies. **MS251: F; 252: W; 253: Sp**

Mth9A Basic Operation of Whole Numbers, 5 lab hrs/wk, 1 cr. Fundamental mathematics-addition, subtraction, multiplication, and division of whole numbers. **F, W, Sp, Su**

Mth9B Basic Operation of Fractional Numbers, 5 lab hrs/wk, 1 cr. Fundamental mathematics-addition, subtraction, multiplication, and division of fractions. **F, W, Sp, Su**

Mth9C Basic Operation of Decimals, 5 lab hrs/wk, 1 cr. Fundamental mathematics-decimals. **F, W, Sp, Su**

Mth10 Beginning Algebra, 5 class hrs/wk, 4 cr. For students who have not had high school algebra and who need a review of algebra before enrolling in Mth95. Reviews arithmetic operations and properties of real numbers, introduces linear equations, factoring, inequalities, algebraic fractions, exponents, and graphs. **F, W, Sp Su**

Mth20 Applied Geometry, 1 class hrs/wk, 1 cr. Individualized course which may be started and completed at any time during the term. Basic concepts of points, lines, planes, angles, triangles, congruence of triangles, different polygons, and similarity from an intuitive point of view. Includes applied problems involving these concepts. **Prerequisite:** Completion with C or higher of one year high school algebra or Mth10 or consent of instructor. **F, W, Sp**

Mth21 Applied Geometry, 1 class hrs/wk, 1 cr. Individualized course which may be started and completed any time during the term. Basic concepts of perimeter, circumference, arc length, areas of polygons and circles, surface area of solids, and volume of various solids. Includes applied problems involving these figures. **Prerequisite:** Completion with C or higher of one year high school algebra or Mth10 or consent of instructor. **F, W, Sp**

Mth22 Applied Geometry, 1 class hr/wk, 1 cr. Individualized course which may be started and completed at any time during the term. Use of protractor, straight edge, and compass to construct and copy various figures while learning terms and techniques of constructions. Introduces basic concepts of analytic geometry using applied problems. **Prerequisite:** Completion with C or higher of one year high school algebra or Mth10 or consent of instructor. **F, W, Sp**

Mth23 Applied Trigonometry, 3 class hrs/wk, 1 cr. Individualized competency-based course which may be started and completed at any time during the term. Trigonometry definitions and various applications of ratios: sin, cos, tan, sec, csc, and triangles. **Prerequisite:** Mth10, Mth20, and Mth21, with grade of C or higher or consent of instructor. **F, W, Sp, Su**

Mth24 Applied Trigonometry, 1 class hr/wk, 1 cr. Individualized competency-based course which may be started and completed at any time during the term. Covers solution of oblique triangles, radian measurement, vectors, and trigometric ratios of all angles. **Prerequisite:** Mth23 with grade of C or higher or consent of instructor. **F, W, Sp, Su**

Mth95 Intermediate Algebra, 5 class hrs/wk, 4 cr. Fundamental laws of algebra with real numbers, linear equations in one and two variables, linear inequalities, factoring, algebraic fractions, systems of linear equations, exponents, radicals, quadratic equations and inequalities, and word problems. **Prerequisite:** Completion with C or higher of one year of high school algebra and one year of geometry or Mth10 or consent of instructor. **F, W, Sp, Su**

Mth101 College Algebra, 4 class hrs/wk, 4 cr. Polynomials in algebraic expressions with equations and inequalities of various degree. An introduction to the concepts of relations and functions with real numbers and graphs in both two and three dimensions. Polynomial, rational, exponential and logarithmic functions, an introduction to complex numbers, matrices, determinates, sequences, and series. **Prerequisite:** Completion with C or higher of two years of high school algebra and one year of geometry of Mth95 or consent of instructor. **F, W, Sp, Su**

Mth102 Trigonometry, 4 class hrs/wk, 4 cr. A continuation of the study of functions. Circular, trigonometric and inverse functions, complex numbers, vectors and graphing with polar coordinates. **Prerequisite:** Mth101 with C or higher or consent of instructor. **F, W, Sp, Su**

Mth103 Probability and Statistics, 4 class hrs/wk, 4 cr. Basic concepts of statistics and probability, inferential methods and assessment of reliabilities of numerical information related to all occupational fields. Application of formula to problem solving is stressed over the mathematical theory. **Prerequisite:** Mth 101 with C or higher or consent of instructor. **F, Sp**

Mth106 Elementary Calculus, 4 class hrs/wk, 4 cr. An intuitive approach to differential and integral calculus. Emphasizes techniques of calculus in applied problem solving. Designed primarily for business, social science, life science or liberal arts students. **Prerequisite:** Mth101 with C or higher or consent of instructor. **W, Sp, Su**

Mth133B Introduction to Programming, BASIC, 3 class hrs and 1 lab hr/wk, 3 cr. Computer programming using the BASIC language. Analyzing problems, writing and entering programs, locating and correcting errors, and completing successful runs. Each student submits programs to cover each programming concept, but specific application may be chosen from his/her own interest area.

No previous knowledge of computers expected. **Prerequisite:** Mth10 or 4202 or consent of instructor. **F, W, Sp**

Mth191, 192, 193 Mathematics for Elementary Teachers, 3 class hrs/wk, 3 cr. A three-term sequence which partially fulfills mathematical requirements for students majoring in elementary education. Emphasizes concepts, terminology, and skills encountered in K through 9 elementary school mathematics curriculum. Primarily a study of subject matter, but several concepts are presented through concrete examples using manipulative materials, games, and activities. Mth193 includes field experience. Must be taken in sequence or obtain consent of instructor. **Prerequisite:** Proficiency with whole numbers. **Mth191: F; 192: W; 193: Sp**

Mth199 Math with Pocket Calculator, 2 class hrs/wk, 2 cr. Aids the students in the selection and purchase of a pocket calculator that best fits his/her individual needs. Includes how to use the calculator as an effective educational tool for basic mathematical operations, exponentials, logarithms, and trigonometry; applications of practical mathematics using the pocket calculator skills appropriate to everyday living, vocational occupations; and developing concepts for further study in mathematics. **Prerequisite:** Mth10 with C or higher or consent of instructor. **W, Sp**

Mth 200 Calculus with Analytic Geometry, 4 class hrs/wk, 4 cr. First term undergraduate calculus covering limits, continuity, the derivative, applications of the derivative, and integration. **Prerequisite:** Mth101 and Mth102 with C or higher or consent of instructor. **F, Sp**

Mth201 Calculus with Analytic Geometry, 4 class hrs/wk, 4 cr. Continuation of Mth200 covering applications of the definite integral, exponential and logarithmic function, trigonometric and hyperbolic functions, techniques of integration. **Prerequisite:** Mth200 with C or higher or consent of instructor. **F, W**

Mth202 Calculus with Analytic Geometry, 4 class hrs/wk, 4 cr. Continuation of Mth201 covering polar form of equations, conic sections, indeterminate forms, infinite series. **Prerequisite:** Mth201 with C or higher or consent of instructor. **W, Sp**

Mth203 Calculus with Analytic Geometry, 4 class hrs/wk, 4 cr. Undergraduate course in multivariable calculus including vectors, partial derivatives, multiple integrals, and their applications. **Prerequisite:** Mth202 with C or higher or consent of instructor. **Sp**

MuP100 Piano, 1 class hr/wk, 1 cr. Individual instruction in fundamentals of music theory incorporated into the basic skills of playing the piano. Open to students of all levels and interests. **F, W, Sp**

MuP174 Voice, 1 class hr/wk, 1 cr. Individual instruction in fundamentals of theory, melodic contouring and phrasing, vocal production, and body mechanics incorporated into the basic skills of singing and reading music. Open to students at all levels and interests. **F, W, Sp**

Mus111 Music Theory I, Term I, 3 class hrs/wk, 3 cr. Technique for perceiving and identifying smaller patterns in music. A basic understanding of music theory is helpful. **F**

Mus112 Music Theory I, Term II, 3 class hrs/wk, 3 cr. How to identify the basic elements of music as they occur in smaller patterns of music. Also emphasizes larger groupings as they become a part of the organization of the structure of music. **Prerequisite:** Mus111. **W**

Mus113 Music Theory I, Term III, 3 class hrs/wk, 3 cr. Exercises in ear-training, dictation, sight-singing, and keyboard harmony to help students focus on configurations, groupings, and characteristics of music that generate organization, resulting in continuity of form. **Prerequisite:** Mus112. **Sp**

Mus134 Chorus, 1 class hrs/wk, 1 cr. Classroom instruction for students in voice. Class activity is centered around choir practice and performance. No more than six hours credit may be earned in Mus134. **F, W, Sp**

Mus201 Introduction to Music and its Literature, 3 class hrs/wk, 3 cr. A comprehensive study of music literature and history dealing primarily with how tones are combined to create musical elements of melody, harmony and rhythm, and the relationships and organization of these elements as applied to compositional styles and form. Combines a study of elements as they appear in music "art forms" and ethnic musicology, with practical experiences in using these elements in writing melodic contours. **F**

Mus202 Introduction to Music and its Literature, 3 class hrs/wk, 3 cr. The historical evolution of music and the impact of culture, social philosophies, religion, and politics and on the development of music, visual arts, and literature. **W**

Mus203 Introduction to Music and its Literature, 3 class hrs/wk, 3 cr. A study of the philosophies and attitudes of the 20th century composers who revolted against traditional approaches to music composition and created new styles and forms. Traces American music from the serial technique composing of Schoenberg to the popular music of the 70's. **Sp**

Mus299 Mexican and Mexican-American Music-History, Style and Appreciation, 3 class hrs/wk, 3 cr. A survey of Mexican and Mexican-American music from its origins with the aborigines. Includes Mexican folk music, the influence of Spanish conquistadors through serious music composed in this century. Also covers popular music including folk, rock, and jazz-rock styles. **Offered as needed.**

Nur106 Nursing, 5 class hrs and 15 lab hrs/wk, 10 cr. Concepts, skills and values basic to contemporary nursing. Assessing and meeting physio-psycho-social health needs. Includes nursing skills, communications, nursing as an interpersonal helping process, growth and development, and beginning skills in problem solving. Correlates theory, skill development, and clinical experiences in nursing. **Prerequisite:** Enrollment in the nursing program. **F**

Nur108 Nursing, 5 class hrs and 15 lab hrs/wk, 10 cr. Concepts, skills, and values basic to nursing practices. Emphasizes problem solving in a variety of nursing situations including growth and developmental patterns in maternal-child-family health and the effects of hospitalization on infants and children through adolescence with physical and mental illness. **Prerequisite:** Nur106 or equivalent. **W, Sp**

Nur109 Nursing, 5 class hrs and 15 lab hrs/wk, 10 cr. Emphasizes the LPN's role in assessment, plan, intervention, and evaluation of nursing situations, involving common conditions of physical and mental illness. **Prequisite:** Nur106, 108 or equivalent. **W, Sp**

Nur111 LPN Reentry, 5 class hrs and 15 lab hrs/wk, 10 cr. For inactive LPN's returning to practice. Reviews concepts, skills, and values basic to contemporary nursing. Use of problem solving skills to meet needs of clients in a variety of nursing situations. Emphasizes independent study. **Prerequisite:** Eligibility for practical nurse licensure and proof of application for, or possession of, a limited license from the Oregon State Board of Nursing. **Offered as needed.**

Nur114 Nursing Care of the Elderly, 3 class hrs/wk, 3 cr. For Licensed Practical Nurses and Registered Nurses who care for elderly people. Emphasizes basic and emerging concepts related to aging and gerontological nursing. Stresses assessing health needs of the elderly, planning for patient care, implementing plans for care, and evaluating care. **Offered as needed.**

Nur204 A,B,C Nurse at Work, 1 class hr/wk, 1 cr. A study of trends and practice in the nursing profession including organizational and structural elements and socio-cultural factors influencing the role of the new graduate as a member of a nursing and health team. **Prerequisite:** Enrollment in second year of Nursing program. **F, W, Sp**

Nur205 Nursing, 3 class hrs and 9 lab hrs/wk, 6 cr. The ADN role in the nursing process. Focuses on pathophysiological aspects of mental health and the female reproductive system. Introduces fluids and electrolytes. **Prerequisites:** Nur106, 108, 109 or equivalent. **Su**

Nur206 Nursing, 5 class hrs and 15 lab hrs/wk, 10 cr. Nursing care of patients throughout their life spans. Covers hospitalization, surgery, infection and/or infectious diseases, neoplastic disease, and disturbances of the respiratory, cardiovascular, integumentary, gastrointestinal, urinary and male reproductive system. Emphasizes nursing at the ADN level, and the role of nurses as members of a nursing team. **Prerequisite:** Nur106, 108, 109, 205 or equivalent. **F**

Nur208 Nursing, 5 class hrs and 15 lab hrs/wk, 10 cr. Continuation of Nur206 focusing on the role of managing the nursing care for a group of patients. Team Leader concepts are introduced. Nursing care of patients throughout the life span, experiencing disturbances of the nervous, musculo-skeletal, endocrine and sensory systems. **Prerequisite:** Nur106, 108, 109, 205, 206. **W**

Nur209 Nursing, 5 class hrs and 18 lab hrs/wk, 11 cr. Continuation of Nur208 focusing on the role of managing a nursing care team in the acute care setting. Nursing care of patients who experience critical disturbances of any or all body systems throughout the life span. **Prerequisite:** Nur106, 108, 109, 205, 206, 208. **Sp**

Nur211 RN Reentry Program, 5 class hrs and 15 lab hrs/wk, 10 cr. For inactive RNs returning to practice. Reviews concepts, skills, and values of contemporary nursing as an RN. Uses problem solving approach in the management of nursing care in a variety of nursing

situations. **Prerequisite:** Eligibility for registered nurse licensure and proof of application for, or possesion of, a limited license from the Oregon State Board of Nursing. **Offered as needed.**

Nur250 Introduction to the Operating Room, 5 class hrs and 12 lab hrs/wk, 8 cr. Fundamentals of operating room nursing practices including circulating, scrubbing, sterilization, patient support, surgical techniques, and instrumentation. **Prerequisite:** Registered Nurse or Licensed Practical Nurse or eligibility for application in licensure or current enrollment in an accredited nursing educational program. **Offered as needed.**

Nur298A Holistic Health Care for Nurses, 3 class hrs/wk, 3 cr. Basic knowledge and skills in holistic health for maintenance and promotion of health. Includes therapeutic touch, biofeedback and relaxation. **Prerequisite:** LPN, RN, or enrollment in a generic nursing program. **Offered as needed.**

Nur298B The Aging Process, 3 class hrs/wk, 3 cr. Focuses on affective, cognitive, and physical changes which occur during the aging process and their influence on nursing care. **Prerequisite:** LPN, RN or current enrollment in a generic nursing program or other health disciplines and permission of instructor. **Offered as needed.**

Nur298C Care of the Terminally Ill, 3 class hrs and 3 lab hrs/wk, 4 cr. Expanded knowledge and skills in holistic health care of the teminally ill and their families. Focuses on nursing care of the terminally ill. **Prerequisite:** LPN, RN, current enrollment in generic nursing program or permission of instructor. **Offered as needed.**

Nur298D Geriatric Pharmacology, 3 class hrs/wk, 3 cr. Focuses on medications for the elderly with basic drug information to assist the elderly with self-medication and/or direct administration of medications. **Prerequisite:** Allied Health Practitioner, Licensed Practical Nurse, Registered Nurse or enrollment in an Allied Health program. **W**

Nur298E Introduction to Physical Assessment for Nurses, 3 class hrs and 1 lab hr/wk, 4 cr. Basic skills involved in health screening of adults, including health histories and screening examinations by inspection, palpation, percussion and auscultation. **Prerequisite:** Registered Nurse or enrollment in an RN generic program. **Offered as needed.**

OC133 Introduction to Oceanography, 3 class hrs/wk, 3 cr. Discusses four main areas of oceanography: chemical, physical, geological, and biological. Covers plate tectonics, ocean circulation, physical properties of seawater, chemical cycles, marine ecosystems, sedimentation, land and sea cycles, and climate effects. **Sp**

OL51 First Year Chinese, Term I, 4 class hrs/wk, 4 cr. Introduction to spoken and written Mandarin Chinese. **F**

OL52 First Year Chinese, Term II, 4 class hrs/wk, 4 cr. Introduces Chinese characters. Emphasizes speaking and reading with drills in grammatical patterns and illustrative sentences. Stresses vocabulary building. **Prerequisite:** OL51.

PA250 Introduction to Public Administration, 3 class hrs/wk, 3 cr. Survey of administrative practices of public agencies, with special emphasis on policy making in governmental organization. Includes public management, organizational theory, and behavior. **F, W, Sp**

PA255 Public Personnel Administration, 3 class hrs/wk, 3 cr. Introduction to principles, concepts, and decisions that determine public personnel policy. Special emphasis on compensation plans, position classification, staffing, staff reductions, tenure, affirmative action, and collective bargaining. **Offered as needed.**

PA256 Affirmative Action/Equal Opportunity, 3 class hrs/wk, 3 cr. Acquaints management trainees and related personnel with federal, state, and institutional equal opportunity requirements. Includes history of equal employment opportunity, rationale for EEO programs, descriptions of EEO laws and executive orders and their amendments, affirmative action and its legal basis, advantages of having EEO/AA programs, and agencies established to assist federal and state EEO/AA programs. Use of statistics and analyses of various kinds of work forces. **Offered as needed.**

PA260 Public Finance, 3 class hrs/wk, 3 cr. Aspects of financing state and local governments in Oregon. Includes fiscal management, finance policies and public issues expressed in budgetary terms. **F, W, Sp**

PA266A, B, C Public Personnel Supervision, 1 class hr/wk, 1 cr. An examination of the supervisor's role in a public service environment. **Offered as needed.**

PE131 Introduction to Physical Education, 3 class hrs/wk, 3 cr. Professional orientation, basic philosophy and objectives, professional opportunities and qualifications.

PE180 Women's Varsity Sports, 3 class hrs wk, 1 cr. See PE185GN.

PE180BN Basketball-Women's Varsity, 3 lab hrs/wk, 1 cr.

PE180CL Women's Cross Country-Varsity, 3 lab hrs/wk, 1 cr.

PE180TK Tennis-Women's Varsity, 3 lab hrs/wk, 1 cr.

PE180TQ Track and Field-Women's Varsity, 3 lab hrs/wk, 1 cr.

PE180VN Women's Volleyball-Varsity, 3 lab hrs/wk, 1 cr. Also PE185GN.

PE185 Co-ed Physical Education Classes, 3 lab hrs/wk, 1 cr.

PE185AA Dance Fitness-Beginning, 3 lab hrs/wk, 1 cr. Development of techniques through exercises to enhance flexibility, agility, strength, and coordination by means of different dance styles and movements.

PE185AB Dance Fitness-Intermediate, 3 lab hrs/wk, 1 cr. See PE185AA

PE185AC Dance Fitness-Advanced, 3 lab hrs/wk, 1 cr. See PE185AA

PE185AJ Archery-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals of archery including safety, history, care and use of equipment, basic rules and skills technique. Application of fundamentals to target shooting with emphasis on self-testing and improvement. Class competition in regulation and novelty shoots. Intermediate and advanced courses include more emphasis on shooting perfection, self-improvement, analysis of errors.

PE185AK Archery-Intermediate, 3 lab hrs/wk, 1 cr. See PE185AJ.

PE185AL Archery-Advanced, 3 lab hrs/wk, 1 cr. See PE185AJ.

PE185BA Badminton-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills of serving, clears, drop, smash, backhand, singles and doubles play terminology, and rules. Intermediate includes practice in the overhead clear. Advanced covers perfection of techniques, skills and strategies through sophisticated drills and routines. Competitive play patterns emphasized.

PE185BB Badminton-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BA.

PE185BC Badminton-Advanced, 3 lab hrs/wk, 1 cr. See PE185BA.

PE185BE Baseball-Beginning, 3 lab hrs/wk, 1 cr. Fundamental techniques of offensive and defensive play, rules, strategy, and team play.

PE185BF Baseball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BE.

PE185BG Baseball-Advanced, 3 lab hrs/wk, 1 cr. See PE185BE.

PE185BJ Basketball-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills, techniques of offensive and defensive play, rules, team play, and competition. Increased skills and strategy levels in intermediate and advanced.

PE185BK Basketball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BJ.

PE185BL Basketball-Advanced, 3 lab hrs/wk, 1 cr. See PE185BJ.

PE185BO Basketball Officiating, 2 class hrs and 1 lab hr/wk, 1 cr. Proper officiating techniques for beginning and novice referees. Includes rules, mechanics, conditioning, and job opportunities.

PE185BP Billiards-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills, strategy, application of rules, etiquette, and competitive play.

PE185BQ Billiards-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BP.

PE185BR Billiards-Advanced, 3 lab hrs/wk, 1 cr. See PE185BP.

PE185BS Body Building-Beginning, 3 lab hrs/wk, 1 cr. Exercises to increase muscularity, muscular definition, and muscular power. Primary objective is to develop the physique.

PE185BT Body Building-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BS.

PE185BU Body Building-Advanced, 3 lab hrs/wk, 1 cr. See PE185BS.

PE185BV Bowling-Beginning, 3 lab hrs/wk, 1 cr. Beginning-basic fundamentals, techniques, rules, scoring, and social etiquette of bowling. Intermediate-perfection of straight ball delivery, introduction to hook and curve ball delivery, and tournament plan.

PE185BW Bowling-Intermediate, 3 lab hrs/wk, 1 cr. See PE185BV.

PE185BX Bowling-Advanced, 3 lab hrs/wk, 1 cr. See PE185BV.

PE185CA Conditioning-Beginning, 3 lab hrs/wk, 1 cr. Individual program. Includes circuit training and use of apparatus. Concern given to cardiovascular development and special programs of exercise for all ages.

PE185CB Conditioning-Intermediate, 3 lab hrs/wk, 1 cr. See PE185CA.

PE185CC Conditioning-Advanced, 3 lab hrs/wk, 1 cr. See PE185CA.

PE185CD Correctives-Beginning, 3 lab hrs/wk, 1 cr. Exercise programs of fitness or physical therapy for students with physical injuries, disabilities or handicaps. Offered many times daily.

PE185CE Correctives-Intermediate, 3 lab hrs/wk, 1 cr. See PE185CD.

PE185CF Correctives-Advanced, 3 lab hrs/wk, 1 cr. See PE185CD.

PE185CM Cross Country Skiing-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills and techniques, types of equipment, first aid, orienteering, survival, leadership, and route finding.

PE185CN Cross Country Skiing-Intermediate, 3 lab hrs/wk, 1 cr. See PE185CM.

PE185CP Cross Country Skiing-Advanced, 3 lab hrs/wk, 1 cr. See PE185CM.

PE185CR Dance Choreography-Beginning, 3 lab hrs/wk, 1 cr. Movement and improvisation techniques to develop elements of time, space, shape, and energy.

PE185CS Dance Choreography-Intermediate, 3 lab hrs/wk, 1 cr. See PE185CR.

PE185CT Dance Choreography-Advanced, 3 lab hrs/wk, 1 cr. See PE185CR.

PE185CW Cycling-Beginning, 3 lab hrs/wk, 1 cr. Cycling techniques including proper bicycle fitting, correct pedaling, safety, maintenance, and touring. Special emphasis on physical fitness.

PE185CX Cycling-Intermediate, 3 lab hrs/wk, 1 cr. See PE185CW.

PE185CY Cycling-Advanced, 3 lab hrs/wk, 1 cr. See PE185CW.

PE185DE Dance, Folk-Beginning, 3 lab hrs/wk, 1 cr. Basic steps, skills, and training in dances reflecting cultural tradition. Schottische, polka, etc.

PE185DF Dance, Folk-Intermediate, 3 lab hrs/wk, 1 cr. See PE185DE.

PE185DG Dance, Folk-Advanced, 3 lab hrs/wk, 1 cr. See PE185DE.

PE185DH Mexican Folk Dance-Beginning, 3 lab hrs/wk, 1 cr. Basic steps, skills, and training in dances reflecting cultural traditions of Mexico.

PE185DI Mexican Folk Dance-Intermediate, 3 lab hrs/wk, 1 cr. See PE185DH.

PE185DJ Dance, Modern-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals of movement, techniques, and use of axial and motor movements.

PE185DK Dance, Modern-Intermediate, 3 lab hrs/wk, 1 cr. See PE185DJ.

PE185DL Dance, Modern-Advanced, 3 lab hrs/wk, 1 cr. See PE185DJ.

PE185DR Dance, Social-Beginning, 3 lab hrs/wk, 1 cr. Basic dance steps of the fox trot, tango, rhumba, mambo, and current popular dances.

PE185DS Dance, Social-Intermediate, 3 lab hrs/wk, 1 cr. See PE185DR.

PE185DT Dance, Social-Advanced, 3 lab hrs/wk, 1 cr. See PE185DR.

PE185DV Dance, Square-Beginning, 3 lab hrs/wk, 1 cr. Basic square dance formation, singing calls, simple figures, and invigorating activity.

PE185DW Dance, Square-Intermediate, 3 lab hrs/wk, 1 cr. See PE185DV.

PE185DX Dance, Square-Advanced, 3 lab hrs/wk, 1 cr. See PE185DV.

PE185FA Fencing-Beginning, 3 lab hrs/wk, 1 cr. Initial position, en garde, salute, lunge and recovery, basic parries, basic attack and defense movements, fencing bouts, and scoring.

PE185FB Fencing-Intermediate, 3 lab hrs/wk, 1 cr. See PE185FA.

PE185FC Fencing-Advanced, 3 lab hrs/wk, 1 cr. See PE185FA.

PE185FD Soccer-Beginning, 3 lab hrs/wk, 1 cr. Fundamental soccer skills, position play, team formations, offensive and defensive team play, and rules.

PE185FE Soccer-Intermediate, 3 lab hrs/wk, 1 cr. See PE185FD.

PE185FF Soccer-Advanced, 3 lab hrs/wk, 1 cr. See PE185FD.

PE185FJ Flycasting-Beginning, 3 lab hrs/wk, 1 cr. Fly casting techniques, target practice, fly tying, how to select a fly, how to read the water; an introduction to Oregon's outdoor environment.

PE185FK Fly Casting-Intermediate, 3 lab hrs/wk, 1 cr. See PE185FJ.

PE185FL Fly Casting-Advanced, 3 lab hrs/wk, 1 cr. See PE185FJ.

PE185FM Fitness Appreciation-Beginning, 3 lab hrs/wk, 1 cr. Circuit training, jogging, running, and exercise programs designed for lifetime fitness. Instruction in diet and nutrition as aids to physical and mental fitness.

PE185FN Fitness Appreciation-Intermediate, 3 lab hrs/wk, 1 cr. See PE185FM.

PE185FP Fitness Appreciation-Advanced, 3 lab hrs/wk, 1 cr. See PE185FM.

PE185FQ Football-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals, rules, strategies, and team play.

PE185FR Football-Intermediate, 3 lab hrs/wk, 1 cr. See PE185FQ.

PE185FS Football-Advanced, 3 lab hrs/wk, 1 cr. See PE185FQ.

PE185GJ Golf-Beginning, 3 lab hrs/wk, 1 cr. Basic fundamentals of golf such as grip, stance, and mechanics of the swing. Use of irons, long irons, woods, and putting. Rules of the game, social etiquette, and actual playing of the game.

PE185GK Golf-Intermediate, 3 lab hrs/wk, 1 cr. See PE185GJ.

PE185GL Golf-Advanced, 3 lab hrs/wk, 1 cr. See PE185GJ.

PE185GN Golf-Men's and Women's Varsity, 3 lab hrs/wk, 1 cr.

PE185GP Gymnastics-Beginning, 3 lab hrs/wk, 1 cr. Instruction and practice of gymnastic skills. Men's events include tumbling, floor exercise, vaulting, horizontal bars, parallel bars, still rings, and side horse. Women's events include floor exercise, balance beam, vaulting, and uneven bars. Stresses conditioning exercises and mastery in routines.

PE185GQ Gymnastics-Intermediate, 3 lab hrs/wk, 1 cr. See PE185GP.

PE185GR Gymnastics-Advanced, 3 lab hrs/wk, 1 cr. See PE185GP.

PE185HA Handball-Beginning, 3 lab hrs/wk, 1 cr. Basic fundamental techniques and rules, etiquette, and singles and doubles play. Perfection of techniques, strategy, singles and doubles competition.

PE185HB Handball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185HA.

PE185HC Handball-Advanced, 3 lab hrs/wk, 1 cr. See PE185HA.

PE185JA Dance, Jazz-Beginning, 3 lab hrs/wk, 1 cr. Development of basic warm-ups at the barre, stretching, isolations, and floor movement with emphasis on technique, alignment, and style indicative of contemporary jazz.

PE185JB Dance, Jazz-Intermediate, 3 lab hrs/wk, 1 cr. See PE185JA.

PE185JC Dance, Jazz-Advanced, 3 lab hrs/wk, 1 cr. See PE185JA.

PE185JJ Jogging-Beginning, 3 lab hrs/wk, 1 cr. Instruction and practice in jogging techniques. Stresses development of cardiovascular endurance. Includes various systems of training. Students work according to their own abilities and physical conditions.

PE185JK Jogging-Intermediate, 3 lab hrs/wk, 1 cr. See PE185JJ.

PE185JL Jogging-Advanced, 3 lab hrs/wk, 1 cr. See PE185JJ.

PE185JQ Judo-Beginning, 3 lab hrs/wk, 1 cr. Instruction in fundamental personal defense skills, precautionary safety measures, countering attacks, etc.

PE185JR Judo-Intermediate, 3 lab hrs/wk, 1 cr. See PE185JQ.

PE185JS Judo-Advanced, 3 lab hrs/wk, 1 cr. See PE185JQ.

PE185KA Karate-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals of karate including basic stances, inside and outside blocks, straight punch, rising block, kick block, front, side and back kicks, basic throws, come-alongs, and techniques of detaining and restraining subject.

PE185KB Karate-Intermediate, 3 lab hrs/wk, 1 cr. See PE185KA.

PE185KC Karate-Advanced, 3 lab hrs/wk, 1 cr. See PE185KA.

PE185LA Dance, Ballet-Beginning, 3 lab hrs/wk, 1 cr. Basic fundamentals of the five positions at the barre. Includes development of legs, arms, torso alignment, and stretching. Center floor work covers basic turns, leaps, and combination movements to develop placement and technique.

PE185LB Dance, Ballet-Intermediate, 3 lab hrs/wk, 1 cr. See PE185LA.

PE185LC Dance, Ballet-Advance, 3 lab hrs/wk, 1 cr. See PE185LA.

PE185LJ Lifesaving, 3 lab hrs/wk, 1 cr. A wide range of elementary and advanced lifesaving skills based on a high level of correct swimming techniques and physical conditioning. Based on Red Cross senior lifesaving.

PE185PA Personal Defense-Beginning, 3 lab hrs/wk, 1 cr. Fundamental personal defense skills, precautionary measures to insure one's safety, countering attacks using various types of weapons. Development of skill levels that promote self-assurance to reduce panic.

PE185PB Personal Defense-Intermediate, 3 lab hrs/wk, 1 cr. See PE185PA.

PE185PC Personal Defense-Advanced, 3 lab hrs/wk, 1 cr. See PE185PA.

PE185PD Pistol/Semiautomatic-Beginning, 3 lab hrs/wk, 1 cr. Basic indoor small bore shooting. Safety procedures, equipment and rules. Introduction to national and range shooting and start of a shooting record. Target and silhouette hitting. Right and left barricades.

PE185PE Pistol/Semiautomatic-Intermediate, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PF Pistol/Semiautomatic-Advanced, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PG Pistol/Smallbore-Beginning, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PH Pistol/Smallbore-Intermediate, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PK Pistol/Smallbore-Advanced, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PM Pistol Marksmanship-Beginning, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PN Pistol Marksmanship-Intermediate, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185PO Pistol Marksmanship-Advanced, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185RA Racquetball-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals, various shots, and strategies of singles and doubles playing.

PE185RB Racquetball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185RA.

PE185RC Racquetball-Advanced, 3 lab hrs/wk, 1 cr. See PE185RA.

PE185RD Rifle Marksmanship-Beginning, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185RE Rifle Marksmanship-Intermediate, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185RF Rifle Marksmanship-Advanced, 3 lab hrs/wk, 1 cr. See PE185PD.

PE185RG Roller Skating-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills and techniques including forward skating, backward skating, and two-foot turns.

PE185RH Roller Skating-Intermediate, 3 lab hrs/wk, 1 cr. See PE185RG.

PE185RJ Roller Skating-Advanced, 3 lab hrs/wk, 1 cr. See PE185RG.

PE185RW Running for Fitness-Beginning, 3 lab hrs/wk, 1 cr. Running and circuit training techniques designed to improve the overall physical condition of the body.

PE185RX Running for Fitness-Intermediate, 3 lab hrs/wk, 1 cr. See PE185RW.

PE185RY Running for Fitness-Advanced, 3 lab hrs/wk, 1 cr. See PE185RW.

PE185SA Scuba Diving-Beginning, 3 lab hrs/wk, 1 cr. Skills and techniques necessary for proper and safe performance of underwater swimming and diving. Covers proper use and care of diving equipment, potential dangers of underwater swimming and diving, and procedures to avoid these dangers.

PE185SB Scuba Diving-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SA.

PE185SC Scuba Diving-Advanced, 3 lab hrs/wk, 1 cr. See PE185SA.

PE185SD Swim for Fitness-Beginning, 3 lab hrs/wk, 1 cr. Open to students who have mastered the front and back crawl, sidestroke, breaststroke, and elementary backstroke. Develops endurance and strength to acquire fitness.

PE185SE Swim for Fitness-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SD.

PE185SF Swim for Fitness-Advanced, 3 lab hrs/wk, 1 cr. See PE185SD.

PE185SG Skiing Conditioning-Beginning, 3 lab hrs/wk, 1 cr. Preparation for winter skiing. Includes use of universal gym machine, running, soccer skills, volleyball, and coordination exercises.

PE185SH Skiing-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills and techniques including snowplow turns, traverse-stem turns, sideslip, uphill christie, beginning parallel, and parallel turn. Advanced includes free skiing, powder, phase II, etc.

PE185SJ Skiing-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SH.

PE185SK Skiing-Advanced, 3 lab hrs/wk, 1 cr. See PE185SH.

PE185SL Slimnastics-Beginning, 3 lab hrs/wk, 1 cr. Calisthenics and jogging to achieve toning and total fitness. These exercises, when combined with a reduction in intake may result in loss of inches and pounds. Includes nutritional information.

PE185SM Slimnastics-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SL.

PE185SN Slimnastics-Advanced, 3 lab hrs/wk, 1 cr. See PE185SL.

PE185SP Softball-Beginning, 3 lab hrs/wk, 1 cr. Fundamental skills and rules presented through participation in team play.

PE185SQ Softball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SP.

PE185SR Softball-Advanced, 3 lab hrs/wk, 1 cr. See PE185SP.

PE185SS Swimming-Beginning, 3 lab hrs/wk, 1 cr. Follows Red Cross beginner and advanced beginner programs including floating, back and prone glides, survival floating, human stroke, front crawl, elementary backstroke, jumping and diving into deep water.

PE185ST Swimming-Intermediate, 3 lab hrs/wk, 1 cr. Follows Red Cross intermediate swimming program. Includes front crawl, back crawl, side stroke, breast stroke, surface dive, underwater swim, and standing front dive. Encourages swimming for fitness. Students should master beginner skills before enrolling.

PE185SU Swimming-Advanced, 3 lab hrs/wk, 1 cr. Emphasizes swimming for fitness and improving basic skills. At the completion of this course, students should have the skills necessary to progress to senior lifesaving. Students should master intermediate skills before enrolling.

PE185SW Skiing Conditioning-Intermediate, 3 lab hrs/wk, 1 cr. See PE185SG.

PE185SX Skiing Conditioning-Advanced, 3 lab hrs/wk, 1 cr. See PE185SG.

PE185TA Table Tennis-Beginning, 3 lab hrs/wk, 1 cr. Beginning-fundamental skills including serve and practice strategy and application of rules and etiquette. Intermediate-perfection of skills and strategy in singles and doubles play. Advanced-continued practice in skills and strategy with emphasis on competitive play.

PE185TB Table Tennis-Intermediate, 3 lab hrs/wk, 1 cr. See PR185TA.

PE185TC Table Tennis-Advanced, 3 lab hrs/wk, 1 cr. See PE185TA.

PE185TF Tennis-Beginning, 3 lab hrs/wk, 1 cr. Beginning-fundamental skills including forehand, backhand, serve strategy, applications of rules, and etiquette. Intermediate-perfection of skills and strategy in singles and doubles play. Advanced-continued practice in skills and strategy with emphasis on competitive play.

PE185TG Tennis-Intermediate, 3 lab hrs/wk, 1 cr. See PE185TF.

PE185TH Tennis-Advanced, 3 lab hrs/wk, 1 cr. See PE185TF.

PE185TL Track and Field-Beginning, 3 lab hrs/wk, 1 cr. Fundamentals, rules, theories, and training in track and field events.

PE185TM Track and Field-Intermediate, 3 lab hrs/wk, 1 cr. See PE185TL.

PE185TN Track and Field-Advanced, 3 lab hrs/wk, 1 cr. See PE185TL.

PE185TS Trap Shooting-Beginning, 3 lab hrs/wk, 1 cr. Safety procedures, rules, clay shooting, and advancement on qualifications.

PE185TU Trap Shooting-Intermediate, 3 lab hrs/wk, 1 cr. See PE185TS.

PE185TV Trap Shooting-Advanced, 3 lab hrs/wk, 1 cr. See PE185TS.

PE185VJ Volleyball-Beginning, 3 lab hrs/wk, 1 cr. Instruction and practice in skills, rules, and strategy through individual and team play.

PE185VK Volleyball-Intermediate, 3 lab hrs/wk, 1 cr. See PE185VJ.

PE185VL Volleyball-Advanced, 3 lab hrs/wk, 1 cr. See PE185VJ.

PE185WA Water Safety Instruction, 3 lab hrs/wk, 1 cr. Covers all phases of water safety, basic swimming strokes, related aquatic skills, diving, lifesaving skills, water safety, and teaching guidelines.

PE185WD Weight Training-Beginning, 3 lab hrs/wk, 1 cr. Fundamental safety procedures,

preconditioning for weight training, and progressive resistance for lifetime physical fitness. For students of all ages.

PE185WE Weight Training-Intermediate, 3 lab hrs/wk, 1 cr. See PE185WD.

PE185WF Weight Training-Advanced, 3 lab hrs/wk, 1 cr. See PE185WD.

PE185WJ Figure Control-Beginning, 3 lab hrs/wk, 1 cr. Improve human form and function through use of universal gym machine and calisthenics. Emphasizes cardiovascular fitness through aerobic exercise.

PE185WK Figure Control-Intermediate, 3 lab hrs/wk, 1 cr. See PE185WJ.

PE185WL Figure Control-Advanced, 3 lab hrs/wk, 1 cr. See PE185WJ.

PE185YA Yoga-Beginning, 3 lab hrs/wk, 1 cr. Background, safety precautions, and values of Yoga. Stretching and limbering exercises, proper breathing techniques, and exercise positions.

PE185YB Yoga-Intermediate, 3 lab hrs/wk, 1 cr. See PE185YA.

PE185YC Yoga-Advanced, 3 lab hrs/wk, 1 cr. See PE185YA.

PE190 Men's Varsity Sports, 3 lab hrs/wk, 1 cr. See also PE185GN.

PE190BI Baseball-Varsity, 3 lab hrs/wk, 1 cr.

PE190BN Basketball-Men's Varsity, 3 lab hrs/wk, 1 cr.

PE190CL Cross Country-Men's Varsity, 3 lab hrs/wk, 1 cr.

PE190TK Tennis-Men's Varsity, 3 lab hrs/wk, 1 cr.

PE190TQ Track and Field-Men's Varsity, 3 lab hrs/wk, 1 cr.

Professional Physical Education

PE194 3 lab hrs/wk, 2 cr. Knowledge and skills of sports/activities. College transfer courses for students interested in teacher preparation programs at state four-year institutions.

PE194BY Basic Rhythms, 3 lab hrs/wk, 2 cr.

PE194FW Fundamentals of Movement, 3 lab hrs/wk, 2 cr.

PE194GR Games and Relays, 3 lab hrs/wk, 2 cr.

PE194TR Track and Field, 3 lab hrs/wk, 2 cr.

PE199 Sports Officiating, 3 class hrs/wk, 3 cr. Rules, mechanics, and procedures for competitive sports, enforcement of rules, use of signals; personal appearance and conduct, public relations, duties of officials; suggestions for coaches and administrators, code of ethics, and qualifications for national officials rating.

PE294 Professional Physical Education, 3 lab hrs/wk, 2 cr. Knowledge and skills of sports activities. College transfer courses for students interested in teacher preparation programs at state four-year institutions.

PE294TF-FD Tennis-Soccer 3 lab hrs/wk, 2 cr.

PE294BO-VM Basketball-Volleyball, 3 lab hrs/wk, 2 cr.

Ph201, 202, 203 General Physics, 3 class hrs and 3 lab hrs/wk, 4 cr. Mechanics, sound, heat, light, electricity, magnetism, and modern physics. Three lectures, one one-hour discussion session, one two-hour laboratory period with outside assignments. **Prerequisite:** Mth101 or enrollment in Ph201. **Ph201: F; 202: W; 203: Sp**

Ph211, 212 General Physics for Engineers and Scientists, 3 class hrs and 3 lab hrs/wk, 4 cr. Fundamentals of physics for students in engineering and natural sciences. Uses the rudiments of calculus. **Prerequisite:** Mth200 and 201. **W, Sp**

Phl201 Problems of Philosophy, 3 class hrs/wk, 3 cr. Major philosophical traditions. Discusses self-identify and human communication. **F**

Phl202 Problems of Philosophy, 3 class hrs/wk, 3 cr. A survey of religious, metaphysical, ethical, political, and aesthetic issues of historic and contemporary interest. Discusses critical interpretation and perspectives. **W**

Phl203 Elementary Ethics, 3 class hrs/wk, 3 cr. Objectives and rules for human behavior as important tools for decision making. Applies diverse goals and means to such current issues as war/peace, sexuality, drugs, political issues, and religious beliefs. **Sp**

PS199B Great Decisions, 1 class hr/wk, 1 cr. Discussions based upon the annual Great Decisions program of the Foreign Policy Association. **Sp**

PS201 American Government, 3 class hrs/wk, 3 cr. Basic concepts and principles of the American political system in historical and contemporary contexts. Discusses patterns of political behavior of non-governmental political institutions, e.g. political parties, interest groups. **F, W**

PS202 American Government, 3 class hrs/wk, 3 cr. A continuation of PS201, dealing with executive, legislative, and judicial branches of government. Includes a study of civil liberties and selected aspects of domestic and foreign policy as examples of interaction of governmental and non-governmental institutions in the political system. **Prerequisite:** PS201 recommended, but not required. **W, Sp**

PS203 State and Local Governments, 3 class hrs/wk, 3 cr. Examines the roles of regional, state, and local governments, particularly the nature of federalism. Either PS203 or PS205 will complete the American Government sequence following PS201 and PS202. **F, Sp, Su**

PS205 International Relations, 3 class hrs/wk, 3 cr. An introduction to international politics. Deals with the nature of superpower conflict, nationalism, non-aligned nations, foreign policy; the role of multinational corporations in international decision-making, development and underdevelopment; and mechanisms of conflict resolution as related to contemporary international issues. **Sp**

PS212 Political Election Campaigning, 3 class hrs/wk, 3 cr. Introduction to election campaign techniques, processes, and strategy. **Offered as needed.**

PSA199A Issues in Human Resources Technology, 3 class hrs/wk, 3 cr. Indepth study of current problems and topics in human services. **Offered as needed.**

Psy100 Introduction to Psychology, 3 class hrs/wk, 3 cr. Application of basic concepts and methods of psychology to one's vocational and life situations. Covers motivation, learning, perception, emotion, personality, and mental health. **F, W, Sp, Su**

Psy101 Psychology of Human Relations, 3 class hrs/wk, 3 cr. Understanding interpersonal relations on the job and in everyday activities. Includes self-actualization, marriage and family relationships, social interaction, job satisfaction, and relations with supervisors and subordinates. **F, W, Sp, Su**

Psy111 Processes in Living, 3 class hrs/wk, 3 cr. Self-understanding through an exploration of values, attitudes, interests, beliefs, and abilities and how these personal factors influence learning, educational and vocational decision making, and interpersonal relationships. **F, W, Sp, Su**

Psy114 Career Development, Personal Perspective, 3 class hrs/wk, 3 cr. A comprehensive developmental program that provides exploratory opportunities to integrate the personal, educational and occupational elements of career development. Encourages career planning and decision making based on realistic self-knowledge and self-assessment. **F, W, Sp, Su**

Psy114A Career Exploration Workshop, 1 class hr/wk, 1 cr. Four day or evening workshops focusing on identifying individual skills, interests, values, goals, and lifestyles combined with exploring career options to help persons decide on career directions.

Psy199 Introduction to Industrial Psychology, 3 class hrs/wk, 3 cr. Applied psychological concepts stressing interpersonal communication skills, work values, habits, and attitudes. **Offered as needed.**

Psy201 General Psychology, 3 class hrs/wk, 3 cr. The first of three introductory courses dealing with psychology as a science. Stresses the biological foundations of humans, motivation and emotion, sensation, and perception. **F, W, Su**

Psy202 General Psychology, 3 class hrs/wk, 3 cr. The second of three introductory psychology courses. Includes principles of learning, memory, cognitive man, and problem solving. **Prerequisite:** Psy201. **W, Sp, Su**

Psy203 General Psychology, 3 class hrs/wk, 3 cr. The third of three introductory courses in psychology. Includes personality theory, psychopathology and psychotherapy, development and socialization, and social psychology. **Prerequisite:** Psy201. **F, Sp, Su**

Psy206 Introduction to Social Psychology, 3 class hrs/wk, 3 cr. Problems, theories, and methods of social psychology, emphasizing diverse ways social influences alter an individual's thoughts, feelings, and actions. Examines prejudice, conformity, leadership, and aggression and how they affect such events as wars, elections, discrimination, violence, and interpersonal attraction. **Prerequisite:** Psy201 or consent of instructor. **W**

Psy299 Growth and Development, 3 class hrs/wk, 3 cr. Human growth and development from conception through death. Indepth study of birth through middle adulthood. **F, W, Sp**

R201 Primitive and Far Eastern Religions, 3 class hrs/wk, 3 cr. A study of religion, religious practices in pre-history, and the major oriental religions. Discussion and film media relate the

intellectual and the aesthetic, the ancient and modern. Students are encouraged to do individual research. **F**

R202 Near Eastern Religions, 3 class hrs/wk, 3 cr. The second course in sequence adds a survey of the thought, scriptures, and practices of Judaism, Christianity, and Islam. Discussions, papers, and film will stimulate a critical appreciative approach to these religions. **Prerequisite:** R201 and/or instructor's consent. **W**

R203 American Religions, 3 class hrs/wk, 3 cr. Major religious traditions, beliefs and institutions as necessary components in understanding Western culture. A survey of the richness and diversity of American religious thought and practice, emphasizing useful information for believers and/or questioners. Includes discussion and individualized research projects to aid students in interpreting religious practices. **Sp**

RL101, 102, 103 First-Year French, 4 class hrs/wk, 4 cr. Grammar, vocabulary and common expressions. **Prerequisite:** RL102: RL101 or one year of high school French or instructor's permission. RL103: RL102 or one year of high school French or instructor's permission. **RL101: F; 102: W; 103: Sp**

RL107, 108, 109 First-Year Spanish, 4 class hrs/wk, 4 cr. Speaking, reading, writing, and oral comprehension. **Prerequisites:** RL108: RL107 or one year of high school Spanish. RL109: RL108. **RL107: F; 108: W; 109: Sp**

RL201, 202, 203 Second Year French, 4 class hrs/wk, 4 cr. A continuation of study and application of grammar, vocabulary, and syntax. Emphasizes self-expression. Includes some study of French literature and culture. **Prerequisite:** RL201: one year of college French or two years of high school French. May be waived. **RL201: F; 202: W; 203: Sp**

RL207, 208, 209 Second Year Spanish, 4 class hrs/wk, 4 cr. A continuation of study and application of grammar, vocabulary, and syntax. Emphasizes self-expression. Includes some study of Spanish literature and culture. **Prerequisite:** RL207: one year of college level Spanish, or two years of high school level Spanish. May be waived. **RL207: F; 208: W; 209: Sp**

Soc204 General Sociology-Introduction, 3 class hrs/wk, 3 cr. Basic issues and findings regarding the biological, symbolic, and social nature of man. Discusses foundations for social interaction including patterns of social structure, culture, socialization, primary relationships, social differentiation, organization, deviance, and collective behavior. Includes principles of scientific method and major sociological theorists. **F, W, Sp, Su**

Soc205 General Sociology-Institutions, 3 class hrs/wk, 3 cr. An analysis of social institutions emphasizing family, religion, education, economy, politics, and factors contributing to institutional stability and change. **Prerequisite:** Soc204 or consent of instructor. **F, W, Sp, Su**

Soc206 General Sociology, 3 class hrs/wk, 3 cr. A sociological approach to major social problems in contemporary American society. Emphasizes concepts of aging, health care, law, leisure, minorities, pollution, poverty, technology, urbanization, work, and youth. **Prerequisite:** Soc204 or consent of instructor. **F, W, Sp, Su**

Soc208 Social Changes and Earth's Resources, 3 class hrs/wk, 3 cr. Introduction to the direction and form social change may take because of rapidly increasing consumption of limited natural resources serving a growing mass population. Studies various adaptive possibilities which seem open to society. Uses case materials from the Pacific Northwest. **Offered as needed.**

Soc221 Juvenile Delinquency, 3 class hrs/wk, 3 cr. The nature, extent, causes, control, reaction, treatment, and rehabilitation of juvenile delinquency in contemporary American society from a sociological perspective. **W**

Soc222 Marriage Relationships, 3 class hrs/wk, 3 cr. Sociological approach to marriage, including preparation for marriage, mate selection, adjustment to marriage, marital problems to expect and solve, and the changing styles of family relationships. **F**

Soc291 Introduction to Data Collection and Interpretation, 3 class hrs/wk, 3 cr. Survey of concepts, techniques, and approaches used in collecting information from a scientific perspective. Covers varieties of procedures and strategies used in decision making and reporting information. Includes analysis of data. **Sp**

Soc295 Seminar: Grant Writing, 3 class hrs/wk, 3 cr. Explores availability of private and public grants. How to expand basic skills in grant writing. **F, W, Sp, Su**

Sp111 Fundamentals of Speech, 3 class hrs/wk, 3 cr. A survey emphasizing interpersonal, group, and public communications. **F, W, Sp**

Sp112 Fundamentals of Persuasion, 3 class hrs/wk, 3 cr. Ways to become an effective speaker to meet job demands or to build self-confidence. Covers verbal and non-verbal levels of persuasion, concentrating on effective delivery, motivation, and language. **W, Sp**

Sp113 Fundamentals of Leadership in Group Communication, 3 class hrs/wk, 3 cr. How to participate effectively in a committee-oriented society. Includes discussion and activities for developing leadership abilities and improving communication techniques in small task groups. **Sp**

Sp114 Interpersonal Communication, 3 class hrs/wk, 3 cr. For students who have no need for a formal speaking course, but would like to be able to communicate more effectively with friends and business associates. Covers concepts of self-awareness, nonverbal communication, emotional listening, and assertiveness. **F, W, Sp**

Sp115 Awareness of Communication in Relationships, 3 class hrs/wk, 3 cr. Practical information to strengthen personal relationships through communication. Explores major communication styles often confronted in intimate relationships and offers techniques for improving them. Stresses problem-solving options and flexibility. **Prerequisite:** Sp125. **W, Sp**

Sp130 Business and Professional Speaking, 3 class hrs/wk, 3 cr. Stresses improved speech efficiency, self-confidence, and skill in organization and delivery of speeches for business and social activities. Practical application of actual situations. **Offered as needed.**

Sp199 Effective Listening, 3 class hrs/wk, 3 cr. Explores ways to break bad listening habits and improve listening abilities. **W, Sp**

Sp217 Persuasion, 3 class hrs/wk, 3 cr. Concepts, principles, and theories related to people. Studies speaker credibility, reference groups, and other major variables in the progress of persuasion. Individual projects provide opportunities to apply principles. **Sp**

SS101 Office Careers Survey, 1 class hr/wk, 1 cr. The organization and climate of business and professional offices, including investigation of various job possibilities available to persons with secretarial/clerical training. Includes guest speakers and field trips to provide current picture of office occupations. **F, W, Sp**

SS110A Shorthand Refresher, 2 class hrs/wk, 2 cr. A review of basic Gregg shorthand theory including brief forms. Practice reading and writing from shorthand plates. Some dictation from previewed material. For persons with a background of shorthand theory. Requires a specified level of achievement. **F, W, Sp, Su**

SS110B Shorthand Refresher II, 2 class hrs/wk, 2 cr. A refresher course in Gregg shorthand for persons with a knowledge of theory and some ability to take dictation. Students progress at their own rate. Grades based on progress. **F, W, Sp, Su**

SS111 Shorthand I, 2 class hrs and 3 lab hrs/wk, 3 cr. A beginning course in Gregg diamond jubilee shorthand. A study of simplified principles to enable students to take simple dictation and transcribe in longhand early in the course. Students with previous training may complete these requirements in short periods of time. Also includes proper recording habits, spelling, vocabulary, and punctuation. **Prerequisite:** Enrollment in SS121 or typing skill. **F, Sp**

SS112 Stenography II, 2 class hrs and 3 lab hrs/wk, 3 cr. A continuation and review of shorthand theory plus transcription, including special forms, abbreviated forms, punctuation, and expanded vocabulary. Emphasizes shorthand writing from dictation to build speed and skill, and transcribing from shorthand notes on a typewriter. **Prerequisite:** SS111 or equivalent. **W**

SS113 Stenography III, 2 class hrs and 3 lab hrs/wk, 3 cr. Advanced vocabulary, phrase-building, and word building principles based on basic Gregg shorthand principles learned in SS111 and 112. **Prerequisite:** SS112 or equivalent or consent of instructor. **Sp**

SS114 Briefhand I, 2 class hrs and 3 lab hrs/wk, 3 cr. A simplified note-taking system. Beneficial for students for vocational application, for taking lecture notes, and for personal use. **F, W, Sp**

SS121 Typing I, 1 class hr and 4 lab hrs/wk, 3 cr. Basic parts of the IBM Selectric typewriter, typewriter keyboard touch system, and basic centering techniques. Minimum typing speed: 30 words per minute. Studies basic letter, table, memo, and manuscript format. Students with previous typing experience may complete this course in a minimum period of time or take the challenge examination. **F, W, Sp, Su**

SS121A, B, C Typing I, 1 class hr and 4 lab hrs/wk, 3 cr. Students may register for 1, 2, or 3 credits. SS121A includes basic parts of IBM Selectric typewriter and typewriter keyboard touch system. Minimum typing speed: 15

words per minute. SS121B includes basic centering techniques, corrections and carbons, composition at the typewriter, and business letters. Minimum typing speed: 20 words per minute. SS121C includes tables and manuscripts. Minimum typing speed: 30 words per minute. Students with previous typing experience may complete this course in a short period of time or take the challenge examination. **F, W, Sp, Su**

SS122 Typing II, 1 class hr and 4 lab hrs/wk, 3 cr. A continuation of typing SS121 emphasizing increasing typing speed and accuracy to at least 40 words per minute for a grade of C. Typing letters in several styles, paper sizes, printed forms, and tables. **Prerequisite:** SS121 or equivalent plus entry speed of 30 words per minute. **F, W, Sp, Su**

SS122A Typing II, Intermediate A, 2 lab hrs/wk, 1 cr. Presentation of three styles of tables and two letter styles and their variations. A = 40 net words per minute for three minutes with four errors allowed. **Prerequisite:** SS121 or SS121C or consent of instructor. **F, W, Sp, Su**

SS122B Typing II, Intermediate B, 2 lab hrs/wk, 1 cr. Presentation of book manuscripts, itineraries, and reports. A = 40 net words per minute for three minutes with four errors allowed. **Prerequisite:** SS122A or consent of instructor. **F, W, Sp, Su**

SS122C Typing II, Intermediate C, 2 lab hrs/wk, 1 cr. Presentation of four new letter styles, three stationery styles, and typing on printed forms. A = 50 net words per minute for three minutes with three errors allowed. **Prerequisite:** SS122B. **F, W, Sp, Su**

SS123Typing III, 1 class hr and 4 lab hrs/wk, 3 cr. Corrective and acceleration drills to develop minimum typing speed of 50 words per minute. Emphasis on production of various papers used in business offices. **Prerequisite:** SS122 or equivalent or consent of instructor. **F, W, Sp**

SS199A Office Update, 1 class hr/wk, 1 cr. A series of one-hour training sessions on basic clerical topics and current trends in office tasks. Students may learn ways to improve job performances and to review office procedures. **Prerequisite:** Background of employment in office occupations or consent of instructor. **F, W**

SS211 Shorthand IV, 2 class hrs and 2 lab hrs/wk, 3 cr. Continuation of shorthand development. Emphasizes office-related transcription skills and improvement of shorthand vocabulary dictation speeds. **Prerequisite:** SS113 or equivalent, SS122 or consent of instructor. **F**

SS212 Shorthand V, 2 class hrs and 2 lab hrs/wk, 3 cr. A continuation of SS212. **Prerequisite:** SS211 or equivalent. **W**

SS213 Shorthand VI, 2 class hrs and 2 lab hrs/wk, 3 cr. A continuation of SS212. **Prerequisite:** SS212 or equivalent. **Sp**

SSc102 The Minority Experience in Contemporary America, 3 class hrs/wk, 3 cr. Explores experiences of minority groups in contemporary America. Representatives from various ethnic groups in the college present specific issues to acquaint students with issues facing members of minority groups, their response to these issues, and their perception of the dominant culture. **Sp**

TA121 Fundamentals of Acting, 6 lab hrs/wk, 3 cr. Introduction to principles of acting, development of body control, investigation of body skills, and use of improvisation in dramatic expression. **F**

TA122 Fundamentals of Acting, 6 lab hrs/wk, 3 cr. Use of the voice in dramatic roles, its production, and control. An introduction to dialects and accents. **W**

TA123 Fundamentals of Acting, 6 lab hrs/wk, 3 cr. Problems in the analysis and presentation of characters in dramatic literature. **Sp**

TA161 Fundamentals of Technical Theater, 2 class hrs and 2 lab hrs/wk, 3 cr. Construction, painting, and shifting techniques for stage scenery and properties. Study of backstage procedures and stage management. **W**

TA270 Stage Makeup, 1 class hr and 2 lab hrs/wk, 2 cr. Theory and practical applications of theatrical makeup. The use of makeup in various theatrical media, and the use of different types of makeup. **Offered as needed.**

TA285A, B, C Theater Production Workshop, variable hrs and cr. Principles of dramatic production demonstrated through practical production experiences or special laboratory projects. **F, W, Sp**

Wr20A, B, C Basic Spelling Skills, 1 class hr/wk, 1 cr. Instruction in spelling improvement, basic word attack skills, pronunciation, and spelling generalizations. **F, W, Sp Su**

Wr21A, B, C Intermediate Spelling Skills, 1 class hr/wk, 1 cr. Instruction in spelling improvement, basic word attack skills, pronunciation, and spelling generalizations. **F, W, Sp**

Wr30A, B, C; Wr31A, B, C Vocabulary Building, 1 class hr/wk, 1 cr. Mini-courses (3 weeks=1 credit each) to help students improve their vocabularies, both general and technical, and develop a sense of correct English usage. May be taken concurrently with any writing course or with any course involving the designated skills. **F, W, Sp**

Wr40 Writing Skills, 3 class hrs/wk, 3 cr. Basic grammar and sentence construction. Combines lecture, discussion, and writing workshop. Credit not granted if students have received credit for Wr40A, Wr40B or Wr40C. **F, W, Sp**

Wr40A Writing Skills, Basic, 1 class hr/wk, 1 cr. A mini-course to familiarize students with basic elements of English grammar as a foundation for competent writing. Includes definitions of parts of speech and use in English sentences. Credit will not be granted if students have received credit for Wr40. **Offered as needed.**

Wr40B Writing Skills, Sentences, 1 class hr/wk, 1 cr. How to construct clear, coherent sentences. Includes analysis of typical English sentences, and writing effective and correct sentences based upon that analysis. Credit will not granted if students have received credit for Wr40. **Offered as needed.**

Wr40C Writing Skills, Paragraphs, 1 class hrs/wk, 1 cr. How to construct clear, complete, and coherent paragraphs. Analysis of English paragraphs and writing of expository paragraphs, definition, analysis, comparison/contrast, etc. Competence demonstrated in a short final essay. Credit will not be granted if students have received credit for Wr40. **Offered as needed.**

Wr120 Preparatory English Composition Skills, 3 class hrs/wk, 3 cr. Preparation for college-level writing. Includes ways to improve self-confidence and fluency in writing, sentence structure, punctuation and usage and the organization of expository paragraphs. **F, W, Sp**

Wr121 English Composition–Exposition, 3 class hrs/wk, 3 cr. First term college level English composition. Emphasizes clear, detailed expository prose, clear thinking, and intelligent reading. **Prerequisites:** Demonstrate mastery of 1) Writing complete, correct sentences. 2) Using punctuation correctly. 3) Following generally accepted conventions of standard English usage.4) Spelling correctly and knowing meanings of words commonly used in one's own writing. **F, W, Sp**

Wr122 English Composition, Logic and Style, 3 class hrs/wk, 3 cr. Second term college level English composition course. Includes logical, effective argumentative prose, awareness of stylistic elements, and critical readings. **Prerequisite:** Wr121. **W, Sp**

Wr123 English Composition–Research Writing, 3 class hrs/wk, 3 cr. Third term college level English composition. Includes the acquisition and evaluation of evidence, integration of opinion, and process and forms for developing research papers. **Prerequisite:** Wr121. **Sp**

Wr227 Technical Writing, 3 class hrs/wk; 3 cr. Various skills and forms used in technical communication. **Prerequisite:** Wr121, 122 or consent of instructor.

Wr241, 242, 243, Imaginative Writing, 3 class hrs/wk, 3 cr. Workshop in writing fiction, drama, and poetry. Daily discussions of student writings. Includes some textual explorations with student and instructor presentations. **Wr241: F; 242: W; 243: Sp**

Wr248 Freeing Yourself to Write Through Body Movement, 3 class hrs/wk, 3 cr. Introduction to a series of body movement exercises designed to initiate, sustain, and refine personal and professional writing.

WS100 Women in Transition, 3 class hrs/wk, 3 cr. Women adjusting to returning to school. Topics include family vs. students' needs, confidence building, study skills, financial assistance, time management, and the search for a basic survival job and specific needs of the students. Open to men. **F**

WS101 Introduction to Women's Studies, 3 class hrs/wk, 3 cr. Women as a minority group, the role of women from a variety of social science perspectives, position of women in the family and the labor force, and the political psychology of women. A look at women cross-culturally, in history, and literature. **F**

WS102 Introduction to Women's Studies, 3 class hrs/wk, 3 cr. The historical development of women from the 1920s through the 1960s with major emphasis on women cross-culturally in developing third world countries and modern industrial societies. **Prerequisite:** WS101. **W**

WS103 Introduction to Women's Studies, 3 class hrs/wk, 3 cr. Women as social beings moving toward the year 2000 A.D. Emphasizes theoretical changes occurring in anthropological, psychological, and other social areas which have major implications on

future behavioral trends. Includes development of changes in labor, laws, and social institutions with an eye toward future patterns. Focuses on research and evaluation of theories and data. Sp

WS150 Psychology of Women, 3 class hrs/wk, 3 cr. Women's behavior with focus on sex-role development, biological bases of behavior, and both interpersonal and intrapsychic bases of female behavior. **Offered as needed.**

Zoo201, 202, 203 General Zoology, 3 class hrs and 3 lab hrs/wk, 4 cr. Introduction of animal life dealing with principles, theories, and applications of animal biology. Includes comparative study of the morphology, anatomy, life history, physiology, development, and ecology of both vertebrates and invertebrates. Zoo202 emphasizes invertebrates, Zoo203 emphasizes vertebrates. **Prerequisite:** High school chemistry and biology or one quarter college biology. **Zoo201: F; 202: W; 203: Sp**

Occupational Preparatory Courses

1101 Communication Skills I, 3 class hrs/wk, 3 cr. Stresses improvement of communicative skills through reading, listening, writing, and speaking, with emphasis on research and writing. Covers problems in reading, notetaking, gathering information, report writing, and conventional usages of mechanics and grammar. F, W, Sp

1104 Communication Skills II, 3 class hrs/wk, 3 cr. A continuation of Communication Skills I. Practical applications for developing effective habits of communication through speaking, participating in conferences, presentation of reports, gathering information, listening, observing, and evaluating sources. W, Sp

1106 Technical Report Writing, 3 class hrs/wk, 3 cr. Covers why reports are written, types of reports, makeup, effectiveness of writing styles, gathering facts, planning documentation, methods of writing, layout, typing, and visual aids. **Prerequisite:** 1101 or consent of instructor. W, Sp

1109 Basic Reading Tactics I, 3 class hrs/wk, 3 cr. Individualized instruction to help students improve their reading abilities and study habits. F, W, Sp, Su

1110 Basic Reading Tactics II, 3 class hrs/wk, 3 cr. Individualized instruction to help students improve their reading abilities and study habits based upon appraisals of their particular levels, needs, and desires. **Prerequisities:** *Reading level between 6.0 and 9.0 or* approval of instructor.

1112 Accelerated Reading I, 3 class hrs/wk, 3 cr. Efficient methods of reading, including information and skills to improve reading through practice, training and application. For average or above average community college readers. F, W, Sp

1113 Accelerated Reading II, 3 class hrs/wk, 3 cr. Advanced methods of reading, training in critical and analytical thinking, skill training and lab sessions to develop reading ability. Emphasizes reading rate, comprehension, and flexibility. F, W, Sp

1115 Language Development for the Deaf and Hearing Impaired, 3 class hrs/wk, 3 cr. For deaf students. Emphasizes expanding vocabulary, a better understanding of language used in classes, and improving reading and writing skills. Teachers are skilled in American sign language and communicate with the students at their individual language levels. F, W, Sp

1116 Manual Communication with the Deaf I, 3 class hrs/wk, 3 cr. Development and practice of manual communication skills used by deaf people. Specific skill training by experienced teachers and deaf adults. Emphasizes fingerspelling and expressive and receptive manual communication skills. F, W, Sp, Su

1121 Basic Writing Skills for Deaf and Hearing Impaired, 3 class hrs/wk, 3 cr. Remedial course for improving writing skills of deaf and hearing impaired students. Includes sentence structure and paragraph, report and creative writing. F

1122 Basic Reading Skills for Deaf and Hearing Impaired, 3 class hrs/wk, 3 cr. Remedial *reading for deaf and hearing impaired* students who want to improve reading skills. Involves reading, newspapers, magazines, and books aimed at improving reading comprehension, vocabulary, and speed. **Offered as needed.**

1123 Basic Communication Skills for Deaf and Hearing Impaired, 3 class hrs/wk, 3 cr. Expressive and receptive communication skills. Stresses organizing written and oral reports, developing better listening skills, and learning to communicate effectively in group situations. **Offered as needed.**

1125 Manual Communication with the Deaf II, 3 class hrs/wk, 3 cr. Continuation of 1116. Involves increasing manual communication vocabulary and introduction to physical aspects related to deafness. Reviews and reinforces expressive and receptive fingerspelling and basic sign vocabulary. Introduces an additional 400-word vocabulary. Emphasizes improvement of both receptive and expressive skills. F, W, Sp, Su

1126 Manual Communication with the Deaf III, 3 class hrs/wk, 3 cr. Continuation of 1116 and 1125. Increases manual communication vocabulary and introduces various aspects of education of the deaf. Reinforces basic skills of fingerspelling and manual communication with an emphasis on developing skills in the simultaneous method of communication. Introduces additional vocabulary and idiomatic sign. F, W, Sp, Su

1127 Manual Communication with the Deaf IV, 3 class hrs/wk, 3 cr. A continuation of vocabulary introduction. Emphasizes comprehensive study of translating English with *American sign language using both English* and deaf idioms. F, W, Sp, Su

1128 Beginning Interpreting for the Deaf, 3 class hrs/wk, 3 cr. An introduction to the field of interpreting for students using manual communication. Includes basic theories, principles, practices of interpreting for deaf people, and the role of an interpreter. W

1129 Studies in Deafness, 3 class hrs/wk, 3 cr. Survey of historical and present aspects of deafness. Discusses notable deaf persons. Explores the role of deafness in today's world to help students develop a sense of personal pride in their own deafness. Open to hearing students. Sp

1130 Vocational Studies-Bilingual, 2 class hrs and 1 lab hr/wk, 2 cr. Assists bilingual and limited English-speaking students in development of basic college study skills. An orientation to the practical realities of the work world by examining self-awareness and occupational choice, looking for jobs, factors affecting upward mobility. Integrates study skills with career/vocational aspects. Includes lectures, guest speakers, and role playing. Bilingual student classroom tutors available. F, W, Sp

1131A, B, C Study Skills, variable hrs and cr. Development of efficient management of learning techniques for community college students. F, W, Sp

1205 Literature for Technicians, 3 class hrs/wk, 3 cr. An introduction to essays, short stories, novels, poems, and plays through discussion and individual study. Includes nonfiction works coupled with modern novels. Emphasizes how events affecting characters in literature relate to the modern technological world. W

1206 Experience and Expression in Literature, 3 class hrs/wk, 3 cr. The many images of the American in literature. Includes works of American writers that explore socially alienated, disadvantaged, and socially elite aspects of America. Discusses how these images relate to personal experiences, observations, and insights of the reader. Deals with the real American vs. the ideal or mythical American. F

1700, 1701, 1702 Conversational Spanish I, II, III, 3 class hrs/wk, 3 cr. Emphasizes Spanish-American pronunciation, grammar, and practical curriculum-based vocabulary, with some reading and writing.

1703 Advanced Conversational Spanish, Term I. Advanced conversational skills, including comprehension, self-expression, and pronunciation. Emphasizes vocational and special interest vocabulary building. **Prerequisite:** 1702 or proficiency in basic conversational Spanish.

2105 Merchandising, 3 class hrs and 2 lab hrs/wk, 4 cr. Application of principles to merchandise display problems of space utilization, improvisations, seasonal display, lighting, and organization of merchandise on display. Expands on merchandising concepts and practices covered in introductory courses of retailing and marketing. **Prerequisite:** BA223. Sp

2119 Insurance-Property and Casualty, 3 class hrs/wk, 3 cr. An introduction to property, casualty, and liability insurance coverages and general limitations of insurance. Successful completion of this course provides basic knowledge for 2342, 2120, and 2121. **Prerequisite:** *BA241* or consent of instructor. W

2120 Insurance-IIA 22, 4 class hrs/wk, 4 cr. Discusses coverages, policy provisions, and concepts common to property insurance. Includes standard fire policies, extended coverage endorsements, dwelling and contents forms, building and contents forms, crime policies, business interruption forms, and bailees' customer policies, and property coverages provided by multiple-line contracts. **Prerequisite:** 2342 or consent of instructor. **Offered as needed.**

2121 Insurance-IIA23, 4 class hrs/wk, 4 cr. Coverages, policy provision, and concepts peculiar to casualty, surety and multiple-line contracts. Includes family automobile policies, workers' compensation and employers' liability policies, owners' and tenants' liability

policies, comprehensive general liability policies, comprehensive personal liability coverages, life and health insurance coverages, and liability insurance aspects of multiple-line contracts. **Prerequisite:** 2342 or consent of instructor. **Offered as needed.**

2124 Property Loss Adjusting ADJ31, 4 class hrs/wk, 4 cr. Introduction to property loss adjusting, indeminity, insurable interest, co-insurance, subrogation, proximate cause, requisites of insurable risks, deductibles, valued policies, probability. Emphasizes adjustment procedures, claim analyses, reporting areas, estimations of building losses, construction costs, and adjustments of personal property losses. **Prerequisite:** BA241, 2342 or consent of instructor. **Offered as needed.**

2222 Underwriting–Life and Health, 3 class hrs/wk, 3 cr. A continuation of 2228 with indepth study of basic practices and decisions made by insurance companies. Includes use of rate books, applications, and company materials. **Prerequisite:** 2228 or consent of instructor. **Offered as needed.**

2223 Rating and Underwriting–Property and Casualty, 3 class hrs/wk, 3 cr. A continuation of 2342, with indepth study of the basic practices and decisions made by insurance companies, including rating using company rate materials. **Prerequisite:** 2342 or consent of instructor. **Offered as needed.**

2225 Group Insurance and Social Insurance, 3 class hrs/wk, 3 cr. Analysis of group life and group health insurance, including products, marketing, underwriting, reinsurance, premiums, and reserves. Socio-economic problems related to old age, unemployment, and disability and various public plans that have been developed to meet these problems. **Prerequisite:** 2343, 2222 or consent of instructor. **Offered as needed.**

2226 Regulations/Law (Oregon Insurance Code), 2 class hrs/wk, 2 cr. Study of Oregon revised statutes pertaining to insurance in Oregon, with special emphasis on agents and adjuster practices, fair trade practices, and consumer protection. **Prerequisite:** One course in life and health and property and casualty. **Sp**

2228 Policies and Forms–Life and Health, 3 class hrs/wk, 3 cr. Study of various basic forms and amendments used in riders and life and health insurance, including all forms of life, health, and hospital coverages as well as variable life and variable annuity contracts. Includes underwriting and actuarial assumptions which relate to various contracts. **Prerequisite:** 2343. **Offered as needed.**

2230 Investments, 3 class hrs/wk, 3 cr. How to consolidate and coordinate previous experiences with basic information and data that investors need to survive alternatives in the marketplace. Includes an explanation of investments as viewed by insurance companies and insurance as a part of an investor's portfolio. **Prerequisite:** BA101 and BA211 or consent of instructor. **Offered as needed.**

2231 Risk Management Analysis, 3 class hrs/wk, 3 cr. Operations of various types of businesses to determine what hazards exist and how to treat them best. Includes a case study of a small business risk management as a term project. **Prerequisite:** 2121, 2222, 2223 or consent of instructor. **Sp**

2242 Life Insurance Law CLU 302, 4 class hrs/wk, 4 cr. Legal aspects of contract formation, policy provisions, assignments, ownership rights, beneficiary designations, and disposition of life insurance proceeds. Covers probability, gross and net premiums, reserves, non-forfeiture values, surplus, and dividends. **W**

2275 Electronic Management, 2 class hrs/wk, 2 cr. A practical course for service technicians covering customer relations, business costs, inventories, shop planning, advertising methods, and state licensing law. **W**

2342 Insurance–HA 21, 4 class hrs/wk, 4 cr. General principles of insurance, including concept of risk, its place in economics, methods of treating risk, and the essentials of an insurable risk. Introduction to insurance contracts and legal concepts which underlie them. **Prerequisite:** BA241 or consent of instructor. **Offered as needed.**

2343 Insurance Principles–Life and Health, 3 class hrs/wk, 3 cr. Basic theory, policy structure, pricing structure, and applications of life and health insurance for students entering the insurance industry or to educate students as consumers. Covers rate making, cost analysis, and uses of various life and health contracts. **Prerequisite:** BA241 or approval of instructor. **Sp**

2344 Insurance Occupational Survey Seminar, 1 class hr/wk, 1 cr. Explores specific insurance occupations. Practicing professionals as guest speakers. Includes field trips. **F**

2401 Real Estate–A Consumer Approach, 3 class hrs/wk, 3 cr. How to survive a real estate transaction. Deals with developing a basic understanding of real property, transactions involving real property, concepts of real and personal property, ownership rights and responsibilities, conveyances of realty financing, leasing, and taxation of real property. Emphasizes application of concepts to the acquisition and disposal of real property rights. **F, W, Sp**

2405 Applied Mathematics in Real Estate, 3 class hrs/wk, 3 cr. Fundamental mathematics necessary in real estate transactions, tax computations, real property assessments, percentage relationships and ratios of values, finance, leverage, appreciation, depreciation, and equity ownership. **W**

2408 Real Estate Appraisal I, 3 class hrs/wk, 3 cr. Theories, functions, and purposes of appraisal-principles of valuation, including cost, market and income approach techniques for determining condemnation, insurance, loan, purchase and sales values for residential properties. **Prerequisite:** BA264 or consent of instructor. **Sp**

2409 Real Estate Appraisal II, 3 class hrs/wk, 3 cr. A continuation of 2408 to develop skill in determining values of real estate as preparation for entering the real estate industry. Includes cost, income, market approaches and appraisal and narrative report on single-family property. **Prerequisite:** 2408. **F**

2411 Real Estate Appraisal III, 3 class hrs/wk, 3 cr. Indicators of value derived by capitalizing the net income a property produces. Covers property techniques, methods, and yield rates. **Prerequisite:** 2409. **W**

2412 Real Estate Appraisal IV, 3 class hrs/wk, 3 cr. Continuation of 2411. **Prerequisite:** 2411 or qualified professional appraisal experience. **Sp**

2414 Appraisal Report Writing, 3 class hrs/wk, 3 cr. How to write appraisal reports easily understood by clients and their representatives. **Prerequisites:** 2408 and 2409 or consent of instructor. **W**

2415 Real Estate Investment Analysis I - Principles, 3 class hrs/wk, 3 cr. Basic understanding of investments and how to measure their returns. Includes analyzing commercial property to determine income and return on investment and determining cash flow before and after taxes, mortgage retirement, internal rate of return, etc. **Prerequisite:** 2405. F

2416 Real Estate Investment Analysis II-Taxation, 3 class hrs/wk, 3 cr. An advanced and intensive study of tax principles governing real property. Emphasizes tax planning and integration of tax concepts with procedural aspects. **Prerequisite:** 2415 or consent of instructor. W

2417 Real Estate Investment Analysis III-Sales and Exchange, 3 class hrs/wk, 3 cr. Alternative methods of property disposal including contract sales and exchanging and the tax implications of each. **Prerequisite:** 2416. Sp

2418 Elements of Design and Construction, 2 class hrs and 3 lab hrs/wk, 3 cr. An introduction to design and construction terminology, architectural styles and building designs, material and labor requirements, building codes, and approximate cost estimating for real estate students. Covers materials application, labor methods, costs for representative types of construction and site requirements, and unit-in-place method of estimating. W

2422 Property Management, 2 class hrs/wk, 2 cr. An intensive study of real property management factors. Emphasizes investment analysis from the management standpoint-analysis of hotels, multiple units, shopping centers and businesses. **Prerequisite:** BA263. **Offered as needed.**

2423 Escrow Procedures I, 3 class hrs/wk, 3 cr. The use of ordinary work sheets of the escrow agent to learn his function. Emphasizes significance of the third party to real estate transactions. Includes types of documents required to be held on deposit between the seller and buyer until the terms of the contract are completed. **Prerequisite:** Fourth-term standing and BA260 and BA262. F

2424 Escrow Procedures II, 3 class hrs/wk, 3 cr. The obligations of the escrow department and title insurance company real estate transactions. Deals with defects of title and abstract of title as a chain of statements to indicate the value of title insurance. Emphasizes the ramifications of title insurance. **Prerequisite:** 2423. W

2425 Zoning, Subdividing and Community Planning, 3 class hrs/wk, 3 cr. A practical study of zoning regulations, codes, and restrictions and cost of development of property for persons who want to subdivide, upgrade or change land use under actual zone codes, procedures, and material required by the Sate of Oregon, County of Marion and City of Salem. **Prerequisite:** 2423. Sp

2426 Escrow Procedures III, 3 class hrs/wk, 3 cr. The theory and practice of real estate exchanges and sales of businesses, including the ordinary exchange, tax-free exchanges, multiple exchanges and, in the sale of businesses, bulk sales affidavits, security agreements, assignments of leases, leasehold interests, and other ramifications of this phase of the escrow business. Includes review of 2423 and 2424. **Prerequisite:** 2424. Sp

2428 Real Estate Seminar, 3 class hrs/wk, 3 cr. Defines, explores, and analyzes contemporary real estate problems from various viewpoints within the real estate industry. **Prerequisite:** Second-year standing in real estate, 2409, 2419. **Offered as needed.**

2429 Public Relations in Business, 3 class hrs/wk, 3 cr. Basic theories and principles of public relations. How to develop or implement public relations activities and become more aware of all-encompassing public relations activities in business. Sp

2430 Real Estate Effective Selling, 3 class hrs/wk, 3 cr. Positive approaches and methods of handling the functions and requirements of real estate sales, especially residential property. Lectures, class discussions, visual aids, films, tapes, case studies, and role playing help students develop and improve their sales abilities. F

2437 Legal Descriptions, Platting and Map Reading, 1 class hr and 2 lab hrs/wk, 2 cr. Locating properties, sites and points, and mastering the reading and writing of legal descriptions using metes and bounds, lot and block and governmental rectangular survey systems. Showing such descriptions graphically by drafting plats, plot plans, and maps. Study of land measurements, areas, and dimensions. Emphasizes functional skills rather than cartographic methods. **Prerequisite:** BA260 suggested. W

2515 Filing, 3 class hrs/wk, 3 cr. Basic principles used in the systematic planning of the classification, arrangement, storage, and retrieval of business papers. Emphasizes practice in alphabetic, numeric, subject, and geographic filing systems of correspondence and non-correspondence papers. F, W

2515I Individualized Filing, 2 class hrs and 3 lab hrs/wk, 3 cr. Open-entry, open-exit. Students advance at their own rates, based on their schedules and abilities. Includes filing methods, rules, and retrieval of records. F, W, Sp

2551 Intermediate Financial Accounting I, 4 class hrs/wk, 4 cr. Comprehensive study of environment and development of accounting principles, basic theories, accounting processes, statements of income and retained earnings, statements of financial positions, present values, monetary assets, valuations of inventories, and current liabilities. **Prerequisite:** BA213, concurrent enrollment in BA213 or consent of instructor. F

2552 Intermediate Financial Accounting II, 4 class hrs/wk, 4 cr. Comprehensive study of plant assets, depreciation, depletion, intangible assets, long-term liabilities, stockholders equity, earnings per share, and long-term investments. **Prerequisite:** 2551 or consent of instructor. W

2553 Intermediate Financial Accounting III, 4 class hrs/wk, 4 cr. Comprehensive study of revenue recognition, accounting changes, error analysis, income taxes, pension plans, leases, statement of changes in financial position, financial statement analysis, full disclosure, and price level adjusted financial statements. **Prerequisite:** 2552 or consent of instructor. Sp

2555 Auditing, 3 class hrs/wk, 3 cr. A survey of the responsibilities and duties of an independent, external auditor. How to apply the ten auditing standards, assist a CPA making financial audit, use audit work papers, and become aware of critical auditing decisions. Emphasizes the importance of internal control and collection of sufficient evidence. Includes an examination and preparation of audit reports issues by CPAs. **Prerequisite:** 2552 or consent of instructor. Sp

2559 Governmental Accounting, 3 class hrs/wk, 3 cr. Comprehensive study of accounting for governmental and non-profit entities. Considers budgets, accounting for general funds, special revenue funds, revenue accounting, expenditure accounting, capital projects funds, debt service funds, special assessment funds, enterprise funds, general fixed asset group of accounts, and summary of funds and groups. **Prerequisite:** BA212 or consent of instructor. Sp

2566 Medical Secretary Practicum, 2 class hrs and 2 lab hrs/wk, 3 cr. Techniques, methods, and procedures used in medical offices. Reception of patients, appointment making, filing and processing medical and health insurance records and forms. **Prerequisite:** 2641 or consent of instructor. W

2569 Medical Machine Transcription, 1 class hr and 4 lab hrs/wk, 3 cr. Typing from a transcribing machine to build speed, accuracy, and understanding of medical case histories, clinical reports, and medical correspondence. **Prerequisite:** 2663 and typing speed of 40 words per minute. F

2570 Medical Machine Transcription II, 3 class hrs/wk, 3 cr. A continuation of 2569 in the study and production of medical communication materials. **Prerequisite:** 2569 or consent of instructor. W

2580 The Receptionist, 3 class hrs/wk, 3 cr. The significance of receptionists and their vital place in a company. Instruction and training for would be office receptionists. Recommended as a first-year course only. F, Sp

2590 CPS Examination Review, 2 class hrs/wk, 2 cr. A series of review sessions on secretarial work emphasizing judgment, understanding, and administrative ability. Includes updating skills, knowledge, and techniques covered in six portions of the qualifying examination for certification as a Professional Secretary. **Prerequisite:** Minimum of 75 college credits of secretarial training, or three years secretarial office experience or consent of instructor. Sp

2606A Typing I, 2 lab hrs/wk, 1 cr. Alphabetic keys. 25 net words per minute for one minute = A. Identification and operation of major typewriter parts. F, W, Sp, Su

2606B Typing I, 2 lab hrs/wk 1 cr. Number and symbol keys. 30 net words per minute for 2 minutes = A. How to center vertically and horizontally and type tables and memoranda. **Prerequisite:** 2606A. F, W, Sp, Su

2606C Typing I, 2 lab hrs/wk, 1 cr. 40 net words per minute for three minutes = A. How to type letters, envelopes, and manuscripts and make corrections and carbon copies. **Prerequisite:** 2606B. F, W, Sp, Su

2607A Typing II, 2 lab hrs/wk, 1 cr. Three styles of tables and two letter styles and their variation. 45 net words per minute for three minutes = A. **Prerequisites:** 2606A, B, C. F, W, Sp, Su

2607B Typing II, 2 lab hrs/wk, 1 cr. Book manuscript, itinerary, and reports. 50 net words per minute for three minutes =A. **Prerequisite:** 2607A. F, W, Sp, Su

2607CV Typing II, 2 lab hrs/wk, 1 cr. Four new letter styles, three differemt stationery styles, and typing on printed forms. 55 net words per mimute for three minutes=A. **Prerequisite:** 2607B. F, W, Sp, Su

2641 Office Procedures, 2 class hrs and 2 lab hrs/wk, 3 cr. An introduction to administrative support activities including telephone usage, mailing and shipping, meetings and conferences, appointments, and meeting the public. Also working with arrangements, word processing, sources of business information, job careers in offices, and job interviewing. Includes simulated job activities. **Prerequisite:** SS121 or consent of instructor. F, W, Sp, Su

2642 Records Management, 3 class hrs/wk, 3 cr. Principles of efficient control of business records including criteria for determining storage, disposition or retention. Includes guidelines for selection of equipment and supplies. F, Sp

2648 Payroll Procedures, 3 class hrs/wk, 3 cr. An examination of federal and state laws which determine what records need to be kept on each employee's earnings, what reports need to be prepared for state and federal governments, and what guidelines need to be followed in assigning pay scales to employees. Practice in computing, paying, and charging wages and salaries. Sp

2652 Bookkeeping, 3 class hrs/wk, 3 cr. Basic accounting principles and procedures. Provides familiarity with financial records and accounting terminology. Includes processing techniques for handling information, special journals, controlling accounts, and work sheets used in preparing account statements. W

2658 Introduction to Calculators, 1 class hr and 2 lab hrs/wk, 2 cr. Use of electronic display and electronic printing calculators in the solution of simple business and mathematical problems. F, W, Sp, Su

2658A Introduction to Calculators, 1 class hr/wk, 1 cr. Use of electronic display and electronic printing calculators to solve mathematical problems. F, W, Sp, Su

2658B Introduction to Calculators, 1 class hr/wk, 1 cr. A continuation of 2658A to increase speed and accuracy on calculators, and to develop ability to use calculators to solve mathematical problems in business offices. F, W, Sp, Su

2661 Reprographics, 3 class hrs/wk, 3 cr. Copy duplication methods used in business offices and small organizations. Emphasizes preparing layout, running equipment, and comparing methods and machines. W, Sp

2662A Introduction to Machine Transcription, 2 lab hrs/wk, 1 cr. Operation of transcribing machines. Techniques of transcribing from recorded dictation. Stresses accuracy. **Prerequisite:** 2606A, B, and C. W, Sp, Su

2662B Introduction to Machine Transcription, 2 lab hrs/wk, 1 cr. Transcription of letters, memos, and reports from recorded dictation. Stresses accuracy. Students progress at individual rates. **Prerequisite:** 2662A. W, Sp, Su

2663 Machine Transcription I, 1 class hr and 4 lab hrs/wk, 3 cr. For students with no previous experience in transcribing letters and memos from dictated belts. Covers parts and functions of dictating machines, care of belts, increasing skills in listening, understanding, correct spelling, punctuation, grammar. Emphasizes transcribing mailable copy with speed and efficiency. F, W, Sp

2667 Machine Transcription II, 1 class hr and 4 lab hrs/wk, 3 cr. A continuation of 2663, to increase students' transcribing efficiency from machine dictated materials. Stresses improved English skills and typing speed and accuracy to a usable, on-the-job level. **Prerequisite:** 2663 or consent of instructor. W, Sp

2673 Business English Fundamentals, 3 class hrs/wk, 3 cr. Emphasizes expression of ideas in written form. Includes a review of grammar and punctuation. Stresses business vocabulary and spelling. **Prerequisite:** Wr40 or equivalent. F, W, Sp, Su

2674 Business Writing, 3 class hrs/wk, 3 cr. How to write clearly and concisely. Covers grammar, spelling, and business vocabulary, with emphasis on punctuation. F, W, Sp, Su

2679 RPG for Operators, 3 class hrs and 3 lab hrs/wk, 4 cr. A study of the basic features of the RPG II language. Students write several RPG programs that print various reports and build and update a sequential disk file. **Prerequisite:** BA131 or consent of instructor.

2685 Personnel Principles and Supervision, 3 class hrs/wk, 3 cr. Principles and functions of a personnel department relating to supervision. Includes policy formulation, employee selection and placement, interviewing and counseling, discipline, labor-management relations, wage and salary administration, human resource development, and employee health and safety. **Prerequisite:** Second year standing or consent of instructor. Sp

2701 Briefhand II, 2 class hrs and 3 lab hrs/wk, 3 cr. Continuation of SS114. Emphasizes speed development. Introduces some transcription techniques. **Prerequisite:** SS114 or consent of instructor. W, Sp

2702 Briefhand III, 2 class hrs and 3 lab hrs/wk, 3 cr. Continuation of 2701. Emphasizes transcription skills, review of theory, and speed building. **Prerequisite:** 2701 or consent of instructor. Sp

2704 Machine Shorthand I, 3 class hrs and 4 lab hrs/wk, 4 cr. Beginning shorthand on stenograph machine. Includes study of basic letter and word-forming principles and the taking of dictation. **Prerequisite:** SS121 and required score on reading and writing placement test. F

2705 Machine Shorthand II, 2 class hrs and 3 lab hrs/wk, 3 cr. Continuation of 2704. Stresses increased knowledge of word formation, theory, building dictation speed, and becoming familiar with transcription techniques. **Prerequisite:** 2704. W

2706 Machine Shorthand III, 2 class hrs and 3 lab hrs/wk, 3 cr. Continuation of 2705 emphasizing increasing speed. Includes study and practice in transcribing material taken from dictation. **Prerequisite:** 2705. Sp

2709 Typing, Skill Building, 1 class hr and 4 lab hrs/wk, 3 cr. Emphasizes improving typing skills (keyboard proficiency, typing speed, and accuracy). For students who have learned the keyboard and wish to raise their skill levels for advanced work or who want to improve their skills. **Prerequisite:** SS121 or consent of instructor. W, Sp

2710 Secretarial Practicum, 2 class hrs and 2 lab hrs/wk, 3 cr. Advanced course in secretarial procedures, using all previous training plus other areas of specialization. Stresses decision making and quality production. **Prerequisite:** 2641 and second-year standing or consent of instructor. F

2711 Legal Machine Transcription I, 3 class hrs/wk, 3 cr. Preparing and typing legal briefs, forms, transcripts, documents, and correspondence from machine dictation. **Prerequisites:** 2713 and 2663. W

2712 Legal Machine Transcription II, 3 class hrs/wk, 3 cr. Continuation of 2711 emphasizing increased skill in typing and handling of materials to produce legal documents. **Prerequisite:** 2711. Sp

2713 Legal Terminology and Documents, 3 class hrs/wk, 3 cr. Introduction to legal terminology for legal secretaries and a survey of documents commonly encountered by legal secretaries in private law offices. Sp

2714 Legal Office Procedures, 2 class hrs and 2 lab hrs/wk, 3 cr. Duties of legal secretaries, including maintaining professional relations with employers and clients, keeping financial records, filing legal documents, knowing when and how to use court and non-court documents and procedures, learning to set priorities, making decisions, and integrating office skills. **Prerequisite:** 2641, SS121, 2713. F

2715 Introduction to Word Processing, 2 class hrs and 2 lab hrs/wk, 3 cr. Introduces various types of correspondence support activities, primarily keyboarding of magnetic editing typewriters. Explains organization of typical word processing centers as correspondence support and administrative support functions. **Prerequisite:** SS121 and SS122 or consent of instructor. F, W, Sp

2716 Word Processing: CRT Operation and Text Editing, 1 class hr and 4 lab hrs/wk, 3 cr. Individualized-instruction Cathode Ray Tube automatic typewriter operation, combined with training in revising and formatting keyboards on both CRT and other text-editing typewriters. **Prerequisite:** 2715 or consent of instructor. F, W, Sp

2717 Word Processing: Advanced CRT Operation, 2 class hrs and 3 lab hrs/wk, 3 cr. Individualized instruction in CRT Cathode Ray Tube glossary and advanced features. **Prerequisite:** 2716 or consent of instructor. F, W, Sp

2720 Civil Exam Prep I, 3 class hrs/wk, 3 cr. Review of subject areas included in the state civil service examination: English grammar, punctuation and spelling, fundamentals of mathematics including basic functions, fractions, percentages and business formulas, and practical applications. F, W, Sp

2721 Civil Service Exam Prep II, 1 class hr and 4 lab hrs/wk, 3 cr. A continuation of 2720. A refresher course in English fundamentals to help employees communicate effectively with supervisors, co-workers, and customers. Open entry/exit with individualized instruction. **Prerequisite:** 2720. F, W, Sp

2722 Civil Service Exam Prep III, 1 class hr and 4 lab hrs/wk, 3 cr. A review of subject areas included in Oregon state civil service entry level clerical assistant, clerical specialist, and secretary examinations. Covers use of reference manuals, preparation of application forms, personal data sheets, thank-you notes for interviews. **Prerequisite:** SS121 A, B, C. F, W, Sp

2801 Records Career Survey, 1 class hr/wk, 1 cr. A survey of records management career possibilities; insight into the responsibilities of record management personnel. Features guest speakers, field trips, and student research. F

2820 Forms Management, 2 class hrs and 2 lab hrs/wk, 3 cr. How to establish and operate a forms management program; its relationship to records management. Includes how to analyze and design forms as efficient means of recording, transmitting, and processing information. Covers development of forms specifications, flow process charting procedures, responsibility and work process charting, and application of the survey approach to forms design. F

3200 Food and Nutrition, 2 class hrs/wk, 2 cr. Principles of basic food preparation, nutritional values of foods, and retention of nutrients in cooking for commercial restaurants, fast foods operations, institutions, and industrial catering. F

3201 Quantity Foods Production I, 3 class and 20 lab hrs/wk, 8 cr. Supervised preparation of quantity foods in a commercial kitchen. Includes preparation of various breakfast items, salads, entrees, stocks, soups, sauces, bakery, desserts, and short order cooking by standardized recipes following professional preparation techniques. Includes handling of tools, equipment, and materials. F

3202 Quantity Foods Production II, 3 class and 20 lab hrs/wk, 8 cr. Preparation of quantity foods in an operating kitchen under professional guidance. Assigned projects in international cuisine and service. **Prerequisite:** 3201. W

3203 Quantity Foods Production III, 3 class and 20 lab hrs/wk, 8 cr. Preparation of quantity foods in an operating kitchen under professional guidance. Includes classical buffet and garde-manger cookery. **Prerequisite:** 3202. Sp

3204 Dining Room Operation I, 1 class hr and 4 lab hrs/wk, 2 cr. Experience in various types of restaurant services—cafeteria, snack bar, fountain, banquet, and table service. F

3205 Dining Room Operations II, 1 class hr and 4 lab hrs/wk, 2 cr. Continuation of 3204. Includes American and English service techniques. W

3206 Dining Room Operations III, 1 class hr and 4 lab hrs/wk, 2 cr. Continuation of 3205. Includes discussion and demonstration of French and Russian service. Sp

3210 Sanitation and Safety, 2 class hrs/wk, 2 cr. Food service sanitation and environmental health, bacteriology and food contamination, personal hygiene and safety practices, legal regulations of federal and state agencies pertaining to restaurant sanitation and USHA requirements. F

3211 Menu Planning and Culinary Terms, 2 class hrs/wk, 2 cr. Principles of menu planning using the menu as a tool for marketing, merchandising, personnel scheduling, equipment planning, and pricing. Covers single use, permanent, and cycle menus, standard menu terminology, and foreign terms. Includes student projects in menu planning and recipe research for special occasions. W

3212 Purchasing and Store Control, 2 class hrs and 1 lab hr/wk, 3 cr. Techniques of buying for large-scale food operations, comparing food quality and establishing food specifications, using federal and state grade standards, receiving stock, storing, and issuing controls. W

3213 Elementary Food Cost Analysis, 2 class hrs and 1 lab hr/wk, 3 cr. Basic methods of computing food costs, including the costs of standard recipes, yield of raw food, standard portions, analysis of daily food costs, and the steward's report. **Prerequisite:** 3216 or equivalent. Sp

3214 Food Production, Organization and Planning, 2 class hrs/wk, 2 cr. Organization of commercial kitchens, quantity production work methods, the use and care of heavy duty kitchen equipment, planning and forecasting of food production, and the use of cooks' production worksheets. Sp

3216 Mathematics for Food Service, 3 class hrs/wk, 3 cr. Basic math used in food production, including adjusting menus for various servings, use of fractions, percents, weights, measures, and an introduction to the metric system. F

3250 Survey of Food Service Industry, 1 class hr/wk, 1 cr. Orientation to the food service industry. Lectures on history, organization, problems, and opportunities in the industry, highlighted with talks by leaders in various branches. Emphasizes college district food service facilities. F

3255 Advanced Menu Planning, 3 class hrs/wk, 3 cr. Advanced study of the principles of menu making and nutrition. Includes factors affecting menu planning such as type of operation, season, clientele, equipment, personnel, and principles of nutrition. Consideration of menu pricing and merchandising and control. **Prerequisites:** 3211, 3201, and 3202. F

3256 Dining Room Supervision, 1 class hr and 5 lab hrs/wk, 3 cr. Principles involved and duties and responsibilities of scheduling and supervising staff, booking and supervising banquets and catered events, handling money and the cash register, preparing daily reports, opening and closing the dining room, and welcoming and serving guests. F

3260 Organization and Management of Institutional Food Service, 2 class hrs and 2 lab hrs/wk, 3 cr. Application of management principles to institutional food services situations. Includes problems in financial and administrative control, legal and governmental regulations, safety and sanitation regulations, fire prevention, emergency procedures, repair and maintenance procedures and costs, and design and layout for food service facilities. W

3261 Restaurant Management, 2 class hrs and 2 lab hrs/wk, 3 cr. Methods and techniques used by restaurants to accomplish effective and efficient operations. Includes methods and procedures in personnel selection, training, motivation, labor relations, effective development of kitchen staff, location and layout design, trade ethics, state and local health regulations, special problems in hotel and restaurant sanitation, licensing regulations, and customer relations. W

3262 Purchasing for Institutions, 2 class hrs and 2 lab hrs/wk, 3 cr. Food purchasing, storage, and inventory procedures, including purchasing policies, duties of the purchasing staff, organization of purchasing departments, and comparative buying of meats, staples, canned foods, and vegetables. Stresses the importance of food control, costs and sales analysis, portion control, and interpretation of daily reports. Sp

3263 Inventory Control, 2 class and 2 lab hrs/wk, 3 cr. Management of inventory including determination of requirements, pricing, source selection, and inventory policy, storage, and control. Sp

3271 Hospitality Beverages, 3 class hrs/wk, 3 cr. Introduction and survey of wine, beer, and distilled spirits, emphasizing historical origin, evolution, production techniques, geographical and stylistic differences. Covers economic values in the hospitality industry and problems of control and abuse. On-site visitations to brewery, wholesale operation, and restaurant. F

3300 Internal Combustion Engines, 3 class hrs and 9 lab hrs/wk, 6 cr. Construction, working principles, and methods of servicing internal combustion engines. Proper use of shop tools and equipment. Engines are disassembled, studied, serviced, and properly reassembled, using accepted rebuilding and servicing procedures. F

3301 Fuel Systems and Carburetion I, 2 class hrs and 3 lab hrs/wk, 3 cr. Fundamental principles of carburetion and the basics of fuel systems. Detailed instruction on the basic carburetor circuits. Sp

3302 Automotive Materials, 2 class hrs/wk, 2 cr. Materials and material production commonly associated with the automobile. Includes uses and applications of materials. Sp

3303 Automotive Shop Safety, 1 class hr/wk, 1 cr. A survey of principles of safety for the auto industry. Includes the use of films and case studies to develop an awareness of hazards and positive attitudes toward the prevention of accidents. F

3304 Automotive Electrical Systems I, 3 class hrs and 4 lab hrs/wk, 4 cr. Basic electricity terminology, fundamentals, and principles of operation applied to the circuitry of the automobile. Sp

3305 Power Trains, 3 class hrs and 6 lab hrs/wk, 5 cr. Operation removal, repair, and replacement of essential power train components of the automobile. Includes proper methods of determining which parts should be replaced, when and how to order them. W

3306 Auto Chassis I, 2 class hrs and 3 lab hrs/wk, 3 cr. Fundamental principles of automotive fluid power systems relating to brakes. Covers basic components of fluid power systems, how they are combined to build up circuits, the repair of these circuits, and basic design and use of hydraulic and pneumatic power systems as related to automobiles. F

3307 Auto Chasis II, 2 class hrs and 3 lab hrs/wk, 3 cr. Principles of automotive fluid power systems. Covers basic components of

fluid power systems, how they are combined to build up circuits, repair of circuits, and basic design and use of hydraulic and pneumatic power systems as related to automobiles. W

3308 Automotive Machine Shop, 2 class hrs and 3 lab hrs/wk, 3 cr. Automotive machine shop operations including cylinder head and block resurfacing, valve grinding, piston knurling, valve guide knurling, cylinder boring, piston fitting, honing, methods of precision measurement, piston pin and rod replacement, and other aspects of precision machining. **Prerequisite:** 3300 or consent of trades department director. Sp

3309 Technical Diagram Interpretation, 1 class hr and 3 lab hrs/wk, 2 cr. Fundamentals in sketching objects related directly or indirectly to automotive field. Involves pictorial representation, sectional views, and dimensioning, methods of diagramming including symbols, how to read diagrams related to auto wiring, and how to draw and use diagrams. W

3316 Fuel Systems and Carburetion II, 3 class hrs and 4 lab hrs/wk, 4 cr. Lectures and demonstrations dealing with two-barrel, four-barrel, and multiple carburetion systems, the diagnosis of problems in systems, technical coverage of operating principles of major types of carburetors, theory and principles of carburetor accessory devices. Also manifolding heat risers, etc. Students use actual units in the laboratory. **Prerequisite:** 3301 or consent of trades department director. F

3317 Automotive Electrical Systems II, 3 class hrs and 4 lab hrs/wk, 4 cr. Lectures and demonstrations covering testing, diagnosis, and theory of operation of ignitions; charging; cranking; and lighting systems. Students work on actual components. Requires laboratory reports on each job. **Prerequisite:** 3304 or consent of trades department director. W

3319 Automotive Auxiliary Systems, 3 class hrs and 2 lab hrs/wk, 4 cr. Operation, testing, and repair of malfunctions in auxiliary systems including power tops, windows, seats, overdrives, vacuum controls (head lamps, doors, power brake units, door locks, etc.), power steering, and other automotive assist units. W

3320 Automotive Service Operations, 2 class hrs/wk, 2 cr. An outline of the duties and responsibilities of parts and service managers. Methods of organizing service personnel and shop facilities and an introduction to shop layout. Operation of parts rooms and the problems common to both parts and service departments. W

3325 Automatic Transmissions, 3 class hrs and 4 lab hrs/wk, 4 cr. Fundamentals of automatic transmission operation, including methods of gear change, powerflows, and basic hydraulic principles used in automatic transmissions. Emphasizes servicing and proper overhaul of automatic transmissions. **Prerequisite:** 3305, 3306 or consent of trades department director. F

3326 New Automotive Developments, 3 class hrs/wk, 3 cr. Updated information on changes in the field. Primary concern is emission control devices used on major brand autos. Also changes dealing with safety, economy, and operation of vehicles such as transistor regulators and integral alternator regulators. Sp

3327 Automotive Repair I, 1 class hr and 9 lab hrs/wk, 4 cr. Work experience on prescribed automobile repair jobs. Job reports. **Prerequisite:** Third term standing or approval of trades department director. Sp

3328 Automotive Repair II, 1 class hr and 9 lab hrs/wk, 4 cr. A continuation of 3327, with other jobs on the automobile. Provides experience and develops speed in the mechanical field. **Prerequisite:** Fourth term standing or approval of trades department director. Sp

3329 Automotive Repair III, 1 class hr and 9 lab hrs/wk, 4 cr. Specialization in particular areas of interest. Emphasizes automatic transmissions, engines, and general areas for students not wishing to specialize. Speed and skill are important. **Prerequisite:** Fifth term standing or consent of trades department director. W

3330 Tune-up and Diagnosis, 3 class hrs and 9 lab hrs/wk, 6 cr. Tune-up and diagnosis procedures of the gasoline internal combustion engine including use of diagnostic equipment on vehicles during laboratory practice. Repairing electrical and fuel systems related to tune-up and diagnosis of these systems along with proper repair procedures. Keyed to actual experience on components and vehicles during lab periods. **Prerequisite:** 3316 and 3317 or consent of trades department director. Sp

3335 Automotive Parts I, 2 class hrs and 8 lab hrs/wk, 6 cr. An indepth study of the automotive parts industry, from manufacturer and rebuilder to retail automotive parts outlet. Includes methods of parts catalog layout, supplements, revisions, catalog indexing, and price sheets. Identification of serviceable parts and filling of parts orders. **Prerequisite:** Fourth-term standing or equivalent, or consent of trades department director. F

3338 Automotive Parts II, 2 class hrs and 4 lab hrs/wk, 4 cr. Instructions on automotive parts catalog and catalog indexing systems, inventory systems, and parts classification. Use of telephone, merchandise displays, and contacts with parts customers. Observations of automotive parts systems and methods of wholesale and retailing automotive parts at area dealerships and parts outlets. **Prerequisite:** 3335. W

3339 Automotive Parts III, 2 class hrs and 8 lab hrs/wk, 6 cr. Parts salesmanship and the operation of an automotive parts store. Covers automotive service tools and equipment, shop supplies, chemicals, and related automotive items. Includes practical work experience. Sp

3600 General Forestry, 3 class hrs/wk, 3 cr. An orientation and overall picture of forestry in the United States. Includes how forests and man are inter-dependent, the role of forests in the building of our country, the distribution and character of our forests, what a forest and forestry are, silvicultural systems, reforestation, and the history of forest protection as related to fire, insects, animals, and disease. F, W

3601 Forestry Seminar, 1 class hr/wk, 1 cr. A continuing discussion of the essentials necessary for successful employment in a forestry situation. Includes resumes, interviews, working conditions, safety, evaluations, and review of technical subjects. W

3605 Tools and Equipment, 1 class hr and 2 lab hrs/wk, 2 cr. Proper use and care of hand tools and power tools commonly used in forestry work. Includes fundamentals of falling and bucking, sharpening edged tools, and safety in the woods. Tools studied include files, axes, pulaskis, hazel hoes, shovels, peevees, wedges, mauls, and crosscut and chain saws. Includes practical work for cooperating individuals or agencies. Discussion and practice of foremanship. Sp

3610 Tree Identification, 1 class hr and 2 lab hrs/wk, 2 cr. A review of basic botany necessary for tree identification including taxonomy, flower and plant parts with emphasis on fruit, bark, and twig characteristics. Deals with the common commercial coniferous species of the Pacific Northwest with emphasis on native Oregon species. Practices use of the dichotomous key, studies scientific names and the economic importance of each tree. W

3611 Tree Identification, 1 class hr and 2 lab hrs/wk, 2 cr. Identification of native hardwoods of Oregon. Includes common forest shrubs. Covers use of the dichotomous genus key and of terms. Field recognition labs using scientific names. F, Sp

3614 Wood Products Marketing, 2 class hrs and 2 lab hrs/wk, 3 cr. An introduction to all aspects of wood products marketing from producer to consumer including the relationships of quality control, traffic, wholesaling, retailing, financing, ordering, and merchandizing. **Prerequisite:** Ec100, 4286, 6281. Sp

3617 Scaling Practices, 2 class hrs and 6 lab hrs/wk, 4 cr. Theory and principles of log scaling. Includes field scaling of logs for net scale. Discusses types of defects and corresponding deductions for each in field observations. **Prerequisite:** 3610. W

3624 Forest Photogrammetry, 2 class hrs and 2 lab hrs/wk, 3 cr. Basic principles of photogrammetry and photo interpretation emphasizing uses of vertical aerial photographs in forest industries. **Prerequisite:** Third-term standing or consent of trades department director. W, Sp

3626 Forest Sciences, 3 class hrs/wk, 3 cr. A study of important forest diseases, forest insects, and animal influences on trees and forests. Covers descriptions, damage inflicted, damage control techniques, and operational control projects. Sp

3630 Silviculture, 3 class hrs/wk, 3 cr. A study of tree habits, forest ecology, and silvicultural practices in the management of forest lands and timber in the Pacific Northwest. W

3660 Forestry Reports, 3 class hrs/wk, 3 cr. Principles of writing memos, letters, and technical forestry reports, and preparing maps. Particularly for forest technicians working in forestry field operations. **Prerequisite:** 1101 or equivalent and 6300. W

4100 Electronic Drafting, 8 lab hrs/wk, 3 cr. Electrical drafting for drafting majors. Includes schematic and wiring diagrams, block and flow diagrams, PC board layout, charts, and graphs. **Prerequisite:** Second-year standing in drafting or consent of instructor. F

4101 Drafting I, 4 lab hrs/wk, 2 cr. Fundamentals of drafting. Includes basic drawing techniques. Emphasizes application of drafting instruments, standard orthographic projection, layout procedures, and ASA approved lettering techniques. Covers such drawing techni-

ques as geometric construction, selection of views, sectional auxiliary views, and standard dimensioning practices. **F, W, Sp, Su**

4102 Introduction to Specifications, 3 class hrs/wk, 3 cr. A survey of development, composition, legal aspects, and writing of construction contract documents. Includes writing exercises, inspection of contract documents, simulations, and field visitations. **Sp**

4103 Electrical Drafting, 4 lab hrs/wk, 2 cr. Fundamental electronic and electrical drafting for non-drafting majors. Includes standard symbols, schematic drawings, block diagrams, industrial wiring diagrams, PC board layout, and the graphics of typical electrical data. **Prerequisite:** 4124 or 4101 or consent of the instructor. **W**

4111 Structural Drafting, 8 lab hrs/wk, 3 cr. Use of structural design data for production of structural working drawings. Includes drafting and coordinating plans and details for a specific structure emphasizing layouts, procedures, and terms standard to the construction industry. **Prerequisite:** Second-year standing in drafting or consent of instructor. **F**

4115 Descriptive Geometry, 1 class hr and 5 lab hrs/wk, 3 cr. Graphic solutions to mathematical and space relationship problems for design/drafting majors. Includes auxiliary views, point line plane problems, and revolutions. Introduces the geometric solution of vectors. **Sp**

4118 Sketching, 3 lab hrs/wk, 1 cr. The development of basic freehand technical sketching skills and techniques as used in drafting and practical pictorial communication. **F, W, Sp, Su**

4120 Print Reading, 4 lab hrs/wk, 1 cr. How to read and interpret various construction prints, shop drawings, and as-built drawings. Students practice each type of drawing to gain familiarity. **Prerequisite:** 4101 or consent of technology department director. **F**

4121 Advanced Print Reading, 4 lab hrs/wk, 2 cr. Reading and interpreting architectural plans and specifications of complex building construction. **Prerequisite:** 4120 or consent of instructor. **Sp**

4122 Industrial Materials, 2 class hrs and 3 lab hrs/wk, 3 cr. An introduction to fabrication and engineering materials used in industry. Emphasizes non-ferrous and non-metallic materials including ceramics, plastics, light metals, and "space age" metals. Laboratory time provides investigation of physical and electrical properties and methods to determine these properties. **F, W, Sp**

4123 Project Development, 8 lab hrs/wk, 3 cr. The development of plot plans, working drawings, and plotting field data. Includes laying out (staking) structures on plots of ground. **Prerequisite:** 4101 and 4120. **F, W**

4124 Basic Drafting for Electronics, 4 lab hrs/wk, 2 cr. Basic drafting techniques and standards. Includes use of materials and equipment, freehand lettering, orthographic projections, dimensioning practices, and the graphic and symbolic language of drafting. Stresses line work, lettering, and the appearance of finished drawings. **F, W**

4126 Drafting Room Computation, 2 lab hrs/wk, 1 cr. The computation and presentation of technical data. Emphasizes the application of the engineering type calculators. Includes typical problems from mechanical, civil, tool design, and other related areas. **Prerequisite:** 6261 and 4221 or consent of instructor. **W, Sp, Su**

4131 Mapping and Platting, 1 class hr and 7 lab hrs/wk, 3 cr. An introduction to basic components of maps, subdivisions, and plats with particular emphasis on drafting skills and techniques. **Prerequisite:** Third term standing or consent of instructor. **Sp**

4135 Project Graphics, 4 lab hrs/wk, 2 cr. Plot plans, working drawings, and plotting field data used in forestry and civil engineering. **Prerequisite:** 4101 or consent of instructor. **Sp, Su**

4150 Welding, 1 class hr and 3 lab hrs/wk, 2 cr. A beginning course in arc welding. Covers welding equipment, materials, procedures, and basic technical and related information. **F, W**

4153 Welding, 1 class hr and 3 lab hrs/wk, 2 cr. Fundamentals and application of arc welding, oxyacetylene welding, brazing and cutting pertaining to the automotive industry. **F**

4155 Fabrication Practices I, 2 class hrs and 3 lab hrs/wk, 3 cr. Practices in the fabrication of metals and metal finishing including change of shape, change of physical characteristics, and joining of metals. **W**

4156 Fabrication Practices II, 2 class hrs and 3 lab hrs/wk, 3 cr. Study and application of fabricated metal technology. Recognition of pattern and job material and positioning of fabricated sections for rapid completion. Use of automated equipment to eliminate distortion problems. **Prerequisite:** 4155 or consent of trades department director. **Sp**

4157 Fabrication Practices III, 1 class hr and 4 lab hrs/wk, 3 cr. A continuation of Fabrication Practices, with emphasis on fabrication and structural and ornamental iron machinery frames and bases. **Prerequisite:** 4156 or consent of trades department director. **W**

4158 Fabrication Practices IV, 2 class hrs and 6 lab hrs/wk, 4 cr. Instruction and experience in production type welding with the use of jigs, fixtures, and positioners. **Prerequisite:** 4157 or consent of trades department director. **Sp**

4160 Electric Arc Welding, 2 class hrs and 6 lab hrs/wk, 4 cr. Fundamentals of electric arc welding. Includes machine setting and electrode manipulation. **F**

4161 Basic Oxyacetylene Welding, 2 class hrs and 6 lab hrs/wk, 4 cr. Fundamentals of oxyacetylene welding introducing brazing and cutting processes. **F, W,**

4162 Electric Arc Welding II, 2 class hrs and 9 lab hrs/wk, 5 cr. A continuation of 4160. Provides the necessary class and laboratory time to allow students to become proficient in all position welding, electrode selection, and machine setting. **F**

4165 Production MIG Welding, 1 class hr and 6 lab hrs/wk, 3 cr. Students set up and weld under production situations. Instruction in the proper selection of the MIG process to use in different production instances. **Prerequisite:** 4252 or consent of trades department director. **Sp**

4166 Advanced Arc Welding, 1 class hr and 6 lab hrs/wk, 3 cr. A laboratory course to train certified welders. Extensive practice on simulated tests required for certification in plate and pipe welding followed by the test and certification by the state if the student qualifies. Includes a study of welding procedures previously covered as they apply to heavy gauge welding. **Prerequisite:** Third term standing and successful completion of 4240 and 4241. Certification test fee is determined by the number of students involved and the type of test. The fee must be paid at least one week prior to the test date. **Sp**

4167 Welding for Certification, 1 class hr and 9 lab hrs/wk, 4 cr. A continued laboratory course to train certified welders. Extensive practice on simulated tests required for certification in plate and pipe welding followed by the test and certification by the state if the student qualifies. Includes a study of welding procedures, previously covered, as they apply to heavy gauge welding. **Prerequisite:** Successful completion of basic and intermediate welding courses. Certification test fee is determined by the number of students involved and the type of test. The fee must be paid at least one week prior to the test date. **Sp**

4168 Fabrication Shop Problems, 1 class hr and 4 lab hrs/wk, 3 cr. Applies drafting and math courses to problems in fabrication and structural members, bins, hoppers, pipe fittings, chutes, etc. Includes principles and practices of pattern development for typical shapes and fittings. **Prerequisite:** 4101, 4202, and 4244 or consent of trades department director. **F**

4169 Fabrication Problems, 8 lab hrs/wk, 3 cr. A continuation of 4168 with emphasis on quality control. **Prerequisite:** 4168 or consent of trades department director. **W**

4170 Industrial Materials and Processes, 2 class hrs and 4 lab hrs/wk, 3 cr. An introduction to the materials used by modern industry to manufacture industrial products. Covers ferrous and non-ferrous metals and alloys and a number of newly developed "exotic" metals. Emphasizes non-metallic materials used in industry. Includes processes and methods of utilizing these industrial materials. **Prerequisite:** 4802 or consent of trades department director. **Sp**

4171 Mechanical Systems, 3 class hrs and 4 lab hrs/wk, 4 cr. An introduction to the transfer of power methods used by industry and industrial products with relation to the basic laws of physics. Emphasizes general types of mechanical equipment used, purpose of the components, and maintenance requirements of equipment. **Prerequisite:** 4302, 4202 or consent of trades department director. **F**

4172 Power Systems, 3 class hrs and 4 lab hrs/wk, 4 cr. The operation, maintenance, and minor repair of two-cycle and four-cycle gasoline and diesel engines. Includes proper procedures in making minor service adjustments and repairs to these units. Laboratory and classroom experience in the theory of operation and the component parts of these engines. **Prerequisite:** 4302 or consent of trades department director. **F**

4173 Hydraulic and Pneumatic Systems, 2 class hrs and 3 lab hrs/wk, 3 cr. Fundamental principles of hydraulic and pneumatic systems. Includes study of the basic components of hydraulic and pneumatic systems, how they

are combined to build up various circuits, ultimate use of these circuits, factors to be considered in the selection and installation and maintenance of hydraulic and pneumatic systems. **Prerequisite:** 4202 or consent of trades department director. W

4174 Metal Fabrication and Finishing, 2 class hrs and 6 lab hrs/wk, 4 cr. The production sequence of a completed part or machine from fabrication and assembly to heat treating and final finishing. **Prerequisite:** 4101 and fifth-term standing in machine shop program. W

4175 Power Transmission Design, 2 class hrs and 3 lab hrs/wk, 3 cr. An introduction to mechanical devices used in industrial material handling systems. Includes study of drivers: hydraulic, pneumatic, electric; and power transmission equipment: chain, sprockets, V belts, bearings, speed reducers. Emphasizes analyses of system requirements, sizing of machine elements, and selection of components from industrial catalogs. **Prerequisite:** Second year standing in Mechanical Design curriculum in Drafting Technology program or consent of instructor.

4176 Hydraulic and Pneumatic Systems II, 2 class hrs and 3 lab hrs/wk, 3 cr. A continuation of 4173 with emphasis on applications of circuits with electrical controls. **Prerequisite:** 4173 or consent of trades department director. W

4177 Foundry and Metal Forming Applications, 2 class hrs and 3 lab hrs/wk, 3 cr. Foundry, forging, and related metal forming methods. Stresses applied design, modern production methods, and new processes and materials. Lab includes local and regional industrial field trips and group discussions of these visitations. Sp

4178 Industrial Control Systems Design Lab, 8 lab hrs/wk, 3 cr. Introduction to the use and design of industrial control circuits. Designs of hydraulic, pneumatic, and electronic circuits to control direction, speed, and sequence of operations. Covers logic diagrams, truth tables, ladder diagrams, and valve symbols. **Prerequisite:** 4175 or consent of instructor. Sp

4190 Industrial Accident Prevention, 3 class hrs/wk, 3 cr. An extensive study of accident causes and costs to employer and employee. A combination of reading, lecture, and Workers' Compensation Board films on accident prevention and safety awareness from the standpoint of employer and employee, examining the role of each in promoting safe work practices. Sp

4200 Basic Mathematics, 4 class hrs/wk, 3 cr. A basic course in practical mathematics including the fundamentals of addition, subtraction, multiplication, and division in problems involving the use of whole numbers, fractions, decimals, percentages, and geometric measurements. Emphasizes analysis and solution of problems encountered in vocational fields. **Prerequisite:** Proficiency with whole number operations. F, W, Sp, Su

4201 Business Mathematics, 3 class hrs/wk, 3 cr. A continuation and practical application of the business mathematics principles studied in 4200, including mathematics of payroll, depreciation, insurance, taxes, dividends, and inventory. **Prerequisite:** 4200 or consent of instructor. F, W, Sp, Su

4202 Introduction to Algebra and Geometry, 4 class hrs/wk, 3 cr. Basic algebra and geometry introducing practical algebraic and geometric techniques and applications. Includes signed numbers, elements of algebra, equations and formulas, ratio and proportion, geometric figures, basic geometric measures, and occupational applications of these topics. **Prerequisite:** 4200 or consent of instructor. F, W, Sp

4204 Introduction to Trigonometry with Geometry, 4 class hrs/wk, 3 cr. Introduces further geometric techniques and basic trigonometry. Covers the Pythagorean theorem, similar triangles, right triangle trigonometry, some oblique triangle trigonometry, and occupational applications of these topics. **Prerequisite:** 4202. W, Sp

4220 Tool Design Lab II, 8 lab hrs/wk, 3 cr. A continuation of 4231. Includes advanced problems of jig and fixture design and detailing, application of tooling materials and components, a study of numerical control of machine tools, and selected industrial visitations. **Prerequisite:** 4231 or consent of instructor. Sp

4221 Machine Drafting I, 1 class hr and 7 lab hrs/wk, 4 cr. Introduction to technical drawing. Includes familiarization with drafting equipment, freehand lettering, orthographic projections, dimensioning techniques, pictorial drawing, geometric construction, and an introduction to welding drawing. Problems will be based on individual machine parts. **Prerequisite:** admission to Drafting Technology program or consent of instructor. F, W, Sp, Su

4222 Machine Drafting II, 1 class hr and 7 lab hrs/wk, 4 cr. A continuation of 4221, stressing lettering, line quality, and drafting techniques. Drafting projects include auxiliary views, sectional views, and production drawings. Technical subjects include tolerancing, geometric tolerancing, and fasteners and their application in drafting. **Prerequisite:** 4221 or consent of instructor. W, Sp, Su

4223 Machine Drafting, 1 class hr and 6 lab hrs/wk, 3 cr. A continuation of 4222. Includes assembly and production drawings, isometric drawing, and related pictorial drawings. **Prerequisite:** 4222 or consent of instructor. Sp

4224 Piping and Flow Systems Drafting, 8 lab hrs/wk, 3 cr. The detailing of a variety of piping and industrial flow systems. Covers schematic diagrams and pictorial layouts, heating applications, normal pipe and flow system drawings, and the elements of flow systems design. **Prerequisite:** 4222 and 6262 or consent of instructor. Sp

4226 Architectural Drafting, 8 lab hrs/wk, 3 cr. Basic architectural drafting techniques and methods. Covers architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. **Prerequisite:** 4221, 4101 or consent of instructor. W, Sp

4227 Architectural Drafting, 8 lab hrs/wk, 3 cr. The development of basic architectural drafting techniques, symbols, and methods. Includes advance planning, detailing, design, and application of related resource materials. Laboratory time is devoted to working drawing detailing of projects completed in 4226. **Prerequisite:** 4226. Sp, Su

4228 Technical Illustration, 8 lab hrs/wk, 3 cr. Methods of pictorial drawing, exploded view drawings with pencil and ink shading, freehand and template drawings. Introduces various color media and rendering techniques. **Prerequisite:** Second-year standing in drafting or consent of instructor. W, Su

4229 Technical Illustration, 8 lab hrs/wk, 3 cr. A continuation of 4228. The illustration of more complex pictorial presentations, exploded views and charting methods. Use of a variety of media and techniques. **Prerequisite:** 4228. Sp, Su

4230 Pattern Development, 8 lab hrs/wk, 3 cr. Covers the development of patterns for sheetmetal and similar applications. Uses descriptive geometry in the development of typical patterns by parallel line, radial line, triangulation, and simplified triangulation methods. **Prerequisite:** 4222, 4115 or consent of instructor. F, Su

4231 Tool Design Lab I, 8 lab hrs/wk, 3 cr. Introduction to modern principles of tool design including gauging, locating, clamping, and fixture design. Includes modern high production techniques and tooling, limit dimensioning and tolerancing. **Prerequisite:** 4222 and 4170 or consent of the instructor. W, Su

4232 Machine Design Lab I, 8 lab hrs/wk, 3 cr. Practical design situations as they relate to the drafting room. Selected design project(s) demonstrate a comprehensive study of parts relationships, materials application, and product design. Includes duo dimensioning (English-metric), geometric tolerancing, and welding applications. **Prerequisite:** 4222 and 4115 or consent of instructor. W

4233 Machine Design Lab II, 8 lab hrs/wk, 3 cr. A continuation of 4232. Uses a team approach to more complex design problems. Stresses the application of standard manufactured parts and components to an over-all design situation and introduces mechanical power and control systems. **Prerequisite:** 4232 or consent of instructor. Sp

4234 Architectural Design, 8 lab hrs/wk, 3 cr. A problem solving course dealing with the production of architectural design solutions to meet assigned program requirements. **Prerequisite:** 4226 and 4227 or approval of instructor. F, Su

4235 Photogrammetry I, 8 lab hrs/wk, 3 cr. An introduction to mapping procedures using aerial photo interpretation skills. Includes map construction using standard methods, equipment, and symbols. **Prerequisite:** 4131 or consent of instructor. W

4236 Civil Engineering Drafting, 8 lab hrs/wk, 3 cr. Introduction to typical drafting room problems of consulting engineering firms. Studies typical drawings from plan-profile sheets, construction details, piping details and standards in relationship to an overall set of plans. Preparation of selected civil engineering drawings, as assigned. **Prerequisite:** Second-year standing or consent of instructor. F, W, Su

4237 Photogrammetry II, 8 lab hrs/wk, 3 cr. A continuation of aerial photo interpretation methods. Develops topographic map construction skills using anaglyphic mapping equipment. **Prerequisite:** 4235 or consent of instructor. Sp

4238 Advanced TIG Welding, 1 class hr and 3 lab hrs/wk, 2 cr. A continuation of 4251. Includes extensive welding on mild steel plate in all positions. **Prerequisite:** 4251 or consent of trades department director. F

4240 Basic Arc Welding, 2 class hrs and 9 lab hrs/wk, 5 cr. Arc welding equipment, materials and procedures used in industry. Basic techniques in flat, horizontal, vertical, and overhead welding by demonstration and supervised practice. Includes basic technical and related information concerning processes and metallurgy. **F**

4241 Intermediate Arc Welding, 2 class hrs and 12 lab hrs/wk, 6 cr. A continuation of 4240 covering ferrous and non-ferrous alloys and welding procedures. Demonstration and supervised practice of techniques on various metals, applied in fabrication and repair concurrently with related information concerning the use and structure of these metals. **Prerequisite:** 4240 or 4150 or consent of trades department director. **W**

4242 Oxygen-Acetylene Cutting, 5 lab hrs/wk, 2 cr. The use and care of oxyacetylene cutting equipment. **Prerequisite:** Current enrollment in the one-year welding curriculum or consent of trades department director. **F**

4243 Fabrication Procedures, 1 class hr and 4 lab hrs/wk, 3 cr. Instruction in methods and application in layout and template design for structural shapes and pipe. **Prerequisite:** 4244 or consent of trades department director. **F**

4244 Blueprint Reading and Sketching, 6 lab hrs/wk, 2 cr. Basic sketching techniques and reading of three-view drawings for welders. Includes dimensioning practices, scaling, line alphabet notes, and symbols. Emphasizes developing skills in reading detail and weldment drawings. **F**

4245 Layout Practices, 3 lab hrs/wk, 1 cr. A study of layout tools and their use in fabricating structural members, bins, hoppers, pipe fittings, chutes, etc. Includes principles and practices of pattern development for typical forms and fitting. **W**

4247 Welding Metallurgy I, 2 class hrs/wk, 2 cr. The fundamentals of metallurgy pertaining to welders. Covers identification of ferrous metals, distortion, stress relieving, flame straightening and hardening plus various metallurgical problems. **Prerequisite:** Successful completion of term one of the one-year welding curriculum or consent of trades department director. **W**

4248 Welding Metallurgy II, 2 class hrs/wk, 2 cr. A continuation of 4247 covering the common non-ferrous metals and chromium alloys. **Sp**

4249 Weld Shop Problems, 2 class hrs and 15 lab hrs/wk, 7 cr. A review and application of the welding, layout, and fabrication processes covered during the year. Includes study and practice of production welding methods, electrode consumption, and method selection. Selected fabrication and assembly projects to present typical layout, fabrication, and production problems. **Prerequisite:** Third-term standing in welding program. **Sp**

4250 Basic MIG Welding, 1 class hr and 4 lab hrs/wk, 2 cr. Basic skills in semiautomatic MIG welding processes. Study of the principles involved in the equipment, material and procedures combined with demonstrations and supervised practical experience using standard industrial equipment. Use of solid and flux-cored wire in typical industrial applications. **Prerequisite:** 4240 and 4161 or consent of trades department director. **W, Sp**

4251 Basic TIG Welding, 1 class hr and 6 lab hrs/wk, 2 cr. A practical course in the fundamental of TIG welding processes, machine setting and application and development of inert gas welding skills. Includes welding of mild steel, aluminum, aluminum alloys, stainless steel metals and magnesium. **Prerequisite:** 4160 and 4161 or consent of trades department director. **W, Sp**

4252 Advanced MIG Welding, 1 class hr and 6 lab hrs/wk, 2 cr. A continuation of 4250. Includes mild steel, basic arc welding of ferrous and non-ferrous alloys, and welding procedures. Demonstration and supervised practice of techniques on various metals, applied in fabrication and repair concurrently with related information concerning the use and structure of these metals. **Prerequisite:** 4240 or 4150 or consent of trades department director. **W, Sp**

4253 Shop Safety, 1 class hr/wk, 1 cr. A survey of principles of safety for industry. Includes the use of films and case studies to develop an awareness of hazards and positive attitudes toward prevention of accidents. **F, W**

4254 Shop Projects, 1 class hr and 2 lab hrs/wk, 2 cr. Practical experience in maintenance and repair of weld shop machines, accessories, and fixtures. Uses selected fabrication and repair projects to develop resourcefulness and confidence in the application of skills and knowledge developed in concurrent courses. **Prerequisite:** Concurrent registration as a full-time student in the welding program or consent of trades department director. **Sp**

4260 Introduction to Electronics, 2 lab hrs/wk, 1 cr. An introduction to the tools and materials used in the field of electronics. Covers basic maintenance procedures and the proper use of materials. Stresses identification components and their symbols. Gives an overview of the electronics field and its opportunities. Some homework in electronic laboratories required. **F, W**

4262 Exploratory Electronics, 1 class hr/wk, 1 cr. Introduces basic concepts, vocabulary, equipment, and manipulative skills required for electronics. Gives a "feel" for the skills, knowledge, and type of work done by an electronics technician. Can aid pre-technical students in their transition into the electronics engineering technician program. **F, W, Sp**

4263 Electronic Principles, 2 class hrs and 6 lab hrs/wk, 4 cr. Studies the use of basic circuits and components of electronics as a base for understanding more complicated circuits. Covers such components and circuits as vacuum tubes, amplifiers, oscillators, power supplies, and other similar materials. Applies theory in laboratory experiments. **Prerequisite:** 6202 or approval of instructor. **F, W, Sp**

4274 Logical Trouble Shooting, 3 class hrs and 3 lab hrs/wk, 4 cr. A logical approach to trouble shooting with emphasis on the approach, finding, and solving of problems. Stresses use of equipment for servicing. **Prerequisite:** 6219 or consent of instructor. **W**

4280 Forest Products, 3 class hrs and 3 lab hrs/wk, 4 cr. A study of the major non-chemical wood products industries and a brief introduction to the pulp and paper industry. Emphasizes economic importance, properties, uses, and manufacturing processes. **W**

4282 Logging Practices, 2 class hrs and 6 lab hrs/wk, 4 cr. A study of the harvesting and transportation of logs. **F**

4283 Milling Practices, 2 class hrs and 6 lab hrs/wk, 4 cr. A study of sawmill machinery and operations, material flow concepts, and material handling equipment used in major forest products industries. **Sp**

4286 Wood Industry Economics, 3 class hrs/wk, 3 cr. A basic review of economic principles applied to forestry and wood products industries including the allocation of forest lands, timber, human, and industrial resources for optimal usage. Also includes an economic guide for timber production and an economic approach to products other than timber, such as recreation, water and wildlife, valuation topics, interest, taxes and capital, and input-output analysis. Covers the wood industry in the Pacific and Rocky Mountain regions of the United States and production economics in lumber and other forest products industries. **Prerequisite:** Ec100. **W**

4287 Methods of Supervision, 3 class hrs/wk, 3 cr. The basic techniques of supervision. Covers all aspects of supervision such as leadership, organization, communications, morale, job analysis, job training, accident prevention, planning time studies, cost analysis, etc. **Sp**

4300 Practical Physics, 3 class hrs and 2 lab hrs/wk, 4 cr. Practical physics for skilled workers, covering heat, light and sound. Laboratory time provides demonstrations and experiments to help clarify the principles and procedures covered in class. **W, Sp**

4302 Practical Physics, 3 class hrs and 2 lab hrs/wk, 4 cr. Practical physics for skilled workers covering matter, measurements, mechanics, machines and electricity. Laboratory time provides demonstrations and experiments to help clarify the principles and procedures. **Prerequisite:** 4300, 4202 or equivalent, or consent of instructor. **Sp**

4321 Introduction to Drafting, 3 lab hrs/wk, 1 cr. Fundamentals of drafting. Emphasizes use of drafting instruments, standard orthographic projection, layout procedures and ASA-approved lettering techniques. Covers such drawing techniques as geometric construction, selection of views, sectional and auxiliary views, revolutions, heads, and standard dimensioning practices. **Offered as needed.**

4324 Architectural Drafting I, 3 lab hrs/wk, 1 cr. A problem-solving course dealing with the production of architectural design solutions for assigned program requirements. **W**

4325 Architectural Drafting II, 3 lab hrs/wk, 1 cr. Basic architectural drafting techniques and methods. Covers architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. **Sp**

4326 Architectural Drafting III, 3 lab hrs/wk, 1 cr. Development of basic architectural drafting techniques, symbols and methods. Familiarizes students with advance planning, detailing, design and the application of related resource materials. **Offered as needed.**

4500 Employer-Employee Relations, 3 class hrs/wk, 3 cr. The rights and responsibilities of labor and management and the roles played by

them in relation to the individual, the community, and the national economy. Includes history, organization, laws, wages and hours, contracts, and community responsibilities. **Sp**

4605 Design Problems, 2 class hrs and 6 lab hrs/wk, 4 cr. Opportunities in advanced drafting room practice. Students apply knowledge of mathematics, science, and drawing to practical problems while designing complete machines or component parts machines. Includes analyzing problems, gathering data, sketching ideas, covers mathematical calculations, making working drawings, and checking work. **Offered as needed.**

4802 Machine Shop I, 2 class hrs and 3 lab hrs/wk, 3 cr. A basic machine shop operations course, introducing principles and operations of basic machine tools, work and procedures. Includes hand tools, measuring tools, layout tools, drill press (sensitive), grinder, saws, lathes, and milling machine. **F, W**

4804 Machine Shop II, 2 class hrs and 3 lab hrs/wk, 3 cr. A continuation of 4802 including machine tool processes, machine set up and machining operations, radial drill press, lathe, milling machine, and surface grinder. **Prerequisite:** Machine Shop I 4802 or consent of trades department director. **W**

4805 Machine Shop Operations Lab, 3 lab hrs/wk, 1 cr. A supplement to existing lab hours for first-year machine shop students, providing practical application of knowledge and skills learned in previous and current machine shop subjects. Includes technical instruction on specific machinery. **F, W, Sp**

4807 Machine Tool Processes I, 2 class hrs and 6 lab hrs/wk, 4 cr. A basic machine shop operations course, introducing principles involved and operations of basic machine tools, work, and procedures. Includes hand tools, measuring tools, layout tools, drill press (sensitive), grinder, saws, lathes, and milling machines. **F**

4808 Machine Tool Processes II, 2 class hrs and 6 lab hrs/wk, 4 cr. A continuation of 4807, including machine set up and machine operations, radial drill press, lathe, milling machine, and surface grinder. **Prerequisite:** 4807 or consent of trades department director. **W**

4809 Machine Tool Processes III, 2 class hrs and 9 lab hrs/wk, 5 cr. A continuation of the basic machine tool operation sequence. Introduces production methods, inspection, and quality control. Includes metal spraying and job shop type repair projects to increase understanding of common industrial practices to introduce application of carbide cutting tools. Emphasizes habits and attitudes as they relate to productivity, general housekeeping, tool care, safety, and regard for fellow workers. **Prerequisite:** Third-term standing in machine shop program or consent of trades department director. **Sp**

4810 Shop Drawings and Layout I, 2 class hrs and 6 lab hrs/wk, 3 cr. The first of two courses in development, interpretation, and use of mechanical drawings and shop sketches. Covers fundamentals of mechanical drawing and sketching, blueprint reading and layout principles, and tools and practices. Includes such drawing techniques as geometric construction, selection of views, section and auxiliary views, dimensioning with blueprint reading, and layout problems in the shop. **F**

4811 Shop Drawings and Layout II, 1 class hr and 3 lab hrs/wk, 2 cr. A continuation of 4810. Further development of mechanical drawing and geometric construction with applications in blueprint reading and layout problems. Discusses limitations of general shop equipment. **W**

4820 Machine Shop Problems, 3 class hrs/wk, 3 cr. An applied mathematics course, solving typical machine shop problems with the aid of mathematics. Includes tables and practical applications, figuring tapers, tolerances and allowances, gearing problems, and bearing fits. **F**

4824 Machine Shop Automation, 2 class hrs/wk, 2 cr. A study of theory and practice of automation. Includes mechanical numerical card and tape controls, history, theories, trends, and applications of automated machines. Field trips supplement classroom activities. **Prerequisite:** 4202, 4804 or consent of trades department director. **Sp**

4833 Advanced Lathe Practices, 2 class hrs and 6 lab hrs/wk, 4 cr. A continuation of the machine tool series. Includes internal boring, threading and taper turning, angular turning, and machine reaming. Laboratory time provides student operation of equipment. **Prerequisite:** 4841. **W**

4837 Advanced Milling Machine Practices, 2 class hrs and 4 lab hrs/wk, 3 cr. A continuation of the machine tool series. Studies include straddle milling, rotary table work, dividing head construction and indexing, gear cutting and terminology, and boring work on milling machines. Laboratory time provides student operation of equipment. **Prerequisite:** 4841. **W**

4841 Machine Shop Practices, 3 class hrs and 9 lab hrs/wk, 6 cr. Working conditions of a typical machine shop. Assigned projects require related technical information and shop skills previously acquired. Includes advanced theory application and extended machine operations. **F**

4845 Job Machining Practices, 4 class hrs and 12 lab hrs/wk, 8 cr. Typical job shop applications and sequences emphasizing quality of finished product and speed. Includes time study and general estimating, repair jobs, and small production runs. **Prerequisites:** 4833, 4837, 4174. **Sp**

4847 Tool and Fixture Design and Application, 2 class and 7 lab hrs/wk, 4 cr. An overview of design and making of tool fixtures and jigs. Application of drill jigs, special work holding devices, indexing work holders and other applications. Includes designing and drawing jigs and fixtures. **Prerequisite:** 4833, 4837, 4174. **Sp**

4849 Heat Treatment of Steel, 2 class and 3 lab hrs/wk, 3 cr. A study of methods and procedures for improving the characteristics of steel by hardening and tempering. Processes of heat treating, including furnace and flame hardening, case hardening, tempering, annealing and normalizing, and hardness and tensile testing. Laboratory time provides hardening, tempering and testing demonstrations and experiments. **F**

5000 Medical Practice Seminar, 1 class hr/wk, 1 cr. Study of relationship of clinical practicum in medical office settings with theoretical course content; application to career and personal goals. **Prerequisite:** Concurrent enrollment in 5609. **Sp**

5100 Introduction to Fire Protection, 3 class hrs/wk, 3 cr. Philosophy and history of fire protection. History of loss of life and property by fire, role responsibility of the fire department in the community, organization and function of fire protection agencies and allied organizations, sources of professional literature, survey of professional career opportunities and requirements, development of resume. **F**

5101 Fundamentals of Fire Prevention, 3 class hrs/wk, 3 cr. Philosophy and history of fire protection, review of life and property loss statistics, fire protection agencies, current and future fire protection problems, fire prevention programs, general public education, development and enforcement of fire prevention laws and regulations, responsibility of state fire marshals, local fire departments, property owners, fire safety, reporting fire prevention activities, drills, policies, public relations, DEQ regulations. Emphasizes "company inspections." **F**

5103 Elementary Science/Firefighters, 3 class hrs and 2 lab hrs/wk, 4 cr. Practical physics covering matter, measurements, machines, and energy. Laboratory time provides for demonstrations and experiments to help clarify the principles and procedures covered in class. **W**

5104 Fire Service Hydraulics, 3 class hrs and 2 lab hrs/wk, 4 cr. Hydraulic laws and formulas as applied to the fire service. Includes a review of basic math and application of formulas and mental calculations to hydraulic problems. Covers fireground water supply problems and underwriter's requirements for pumps and accessories. **Prerequisite:** 4200 or equivalent. **W**

5105 Fire Pump Construction and Operation, 2 class hrs and 2 lab hrs/wk, 3 cr. Theory of pump operation, types and features of various pumps, practical operation of fire pumps and accessories. Includes drafting, hydrant and tanker operations, and rule of thumb fireground hydraulics calculations. **Prerequisite:** 5104. **Sp**

5106 Fire Protection Systems and Extinguishers, 3 class hrs/wk, 3 cr. Portable extinguisher equipment, sprinkler systems, protection systems for special hazards, fire alarm and detection systems, ventilating systems. **Prerequisite:** 5109 and 6996 or approval of instructor. **W**

5107 Fire Investigation, 3 class hrs and 2 lab hrs/wk, 3 cr. Study of burning characteristics of combustibles, interpreting clues, burn patterns leading to points of origin, identifying incendiary indications, sources of ignition and materials ignited, and preservation of fire scene and evidence. **Sp**

5108 Hazardous Materials I, 3 class hrs/wk, 3 cr. The chemistry of fire. Includes handling emergencies involving flammable liquids, gases, and solids, cryogenics, combustible metals, plastics, and oxidizing agents. **F**

5109 Hazardous Materials II, 3 class hrs/wk, 3 cr. Handling of emergencies involving explosive and unstable materials, rocket propellants, water reactive materials, poisons, corrosives, combustion products, and radioactive materials. **W**

5110 Fire Training Programs and Techniques, 3 class hrs/wk, 3 cr. Purposes of fire service drills and training programs. Development

and operation of departmental training programs. Facilities and equipment necessary for modern training, selecting and training instructional staff, lesson planning, training aids, and other techniques of program training. Su

5111 Fire Insurance Principles and Grading Schedules, 3 class hrs/wk, 3 cr. Insurance grading schedules and principles of application. Methods of analyzing fire hazards and the effects of fire hazards on fire insurance rates. Fundamentals of fire insurance rating methods, loss records, and municipal grading. **Offered on request.**

5112 Fire Department Organization and Management, 3 class hrs/wk, 3 cr. Fire company and department organization and management, duties and responsibilities, response to alarms, public relations, fire prevention, records, and communications. Basics of why and how various functions of administration are carried out, authority and responsibilities of command officers, chiefs, and elected officials. **Prerequisite:** 5100, 5101 and Psy100, or consent of instructor. Sp

5113 Fire Fighting Tactics and Strategy, 3 class hrs/wk, 3 cr. Pre-fire survey and planning, response and size-up, fire-ground tactics, analysis, and post-mortem. Sp

5114 Fire Protection for Buildings, 3 class hrs/wk, 3 cr. Installation, functions and requirements of sprinkler systems. W

5116 Fire Codes and Ordinances, 3 class hrs/wk, 3 cr. A study of the uniform fire code, uniform building code, flammable liquid, and other codes relating to fire prevention and life safety. **Prerequisite:** 5100, 5101 or approval of instructor. W

5117 Water Distribution Systems, 3 class hrs/wk, 3 cr. Main systems-size, gridding, valves, hydrants, pumping stations and reservoir, fire flow requirements for commercial and residential districts, storage tanks, cisterns, and mobile supplies. **Offered on request.**

5118 Evidence Photography for Fire and Arson Investigators, 3 class hrs/wk, 3 cr. How investigators may improve the quality and efficiency level of evidence photography, and use the broadest spectrum of photographic knowledge to further the science of forensic photography. **Prerequisite:** Consent of instructor. W

5120 Fire Service Rescue Practices, 1 class hr and 2 lab hrs/wk, 2 cr. The use of rescue tools and related equipment, common rescue carries, search and rescue procedures, handling nets and lines, care of victims and transportation, excavation, and electrical rescue procedures. **Prerequisite:** 5122 and 5123. Sp

5122-27 Fire Related Experience, 9 lab hrs/wk, 3 cr. Orientation to fire incident related experience courses, engine company organization, engine configuration, small tools and minor equipment carried, basic hose practices, basic hose lays, use of protective breathing apparatus, response, district maps-phantom box areas, communication procedures, fire apparatus driving practices. F, W, Sp

5128 Aircraft Crash/Fire Rescue, 1 class hr and 3 lab hrs/wk, 1 cr. Pre-planning activities for on-airport and off-port emergencies. Approach, positioning, rescue procedures, and the application of control techniques. **Prerequisite:** 5122, 5123, 5124, 5125, 5126 or consent of instructor. Sp

5129 Emergency Medical Technology I, 3 class hrs and 4 lab hrs/wk, 6 cr. Basic skills in patient assessment, patient care, preparation of equipment, communications, extrication, patient transfer, and patient transport. Successful completion prepares eligible students to sit for Oregon State Health Division examination for EMT-I certification. **Prerequisite:** Age 18. Admission and eligibility for certification based on Oregon State Health Division priorities and regulations. Consent of allied health department director. F, W, Sp

5130 Emergency Medical Technician III-Part A, 4 class hrs and 2 lab hrs/wk, 5 cr. Roles and responsibilities of EMT II and EMT III, patient assessment, shock management, fluid therapy, respiratory system, airway management. First of a series on preparation for EMT III state examination and sitting for EMT II state examination. **Prerequisite:** 5129 and consent of allied health director. W

5131 Building Construction for Fire Suppression, 3 class hrs/wk, 3 cr. Fire problems inherent in the structural elements of buildings. How knowledge gathered through interpretation of blueprints and inspection of various building types provides a basis for applying effective extinguishment practices, with adequate safeguards for personnel. W

5132 Emergency Medical Technician III - Part B, 4 class hrs and 3 lab hrs/wk, 5 cr. A continuation of 5130. Includes pharmacology, drug administration, anatomy and physiology, patient assessment and pathophysiology of the respiratory cardiovascular systems, management of respiratory problems, arrhythmia recognition, and emergency treatment. **Prerequisite:** 5130 or equivalent and consent of Allied Health director. Sp

5133 Emergency Medical Technician III, Part C, 3 class hrs and 11 lab hrs/wk, 6 cr. A continuation of 5132. Includes clinical experience in the following areas: emergency room, intensive care unit, operating room, mobile intensive care unit, coronary care unit. F

5134 Emergency Medical Technician III, Part D, 2 class hrs and 11 lab hrs/wk, 5 cr. A continuation of 5133. W

5135 Emergency Medical Technology I, Part A, 1 class hr and 2 lab hrs/wk, 2 cr. Basic skills in patient assessment, patient care, preparation of equipment, communications, extrication, patient transfer and patient transport. Successful completion prepares eligible students to sit for Oregon State Health Division examination for EMT-I certification. **Prerequisite:** Age 18, Admission and eligibility for certification based on Oregon State Health Division priorities and regulations, consent of allied health department director. F

5136 Emergency Medical Technology I, Part B, 2 class hrs and 2 lab hrs/wk, 3 cr. A continuation of 5135. **Prerequisite:** Satisfactory completion of 5135 or consent of allied health department director. W

5137 Emergency Medical Technology I, Part C, 2 lab hrs/wk, 1 cr. Continuation of 5135 and 5136. Ten hours of patient contact in selected emergency settings. **Prerequisite:** Satisfactory completion of 5136 or consent of allied health department director. Sp

5141 Emergency Medical Technician IV (Paramedic), 5 class hrs and 8 lab hrs/wk, 8 cr. Continuation of the emergency medical technology modules: management of CNS disorders, soft tissue injuries, muscular and skeletal problems, fractures, medical emergencies, emotional disturbances, emergency childbirth, gynecological problems, and care of neonatal and pediatric patients. **Prerequisites:** 5129 or 5135, 5136, 5137, 5130, 5132, 5134. Sp

5142 Rescue Fundamentals, 3 class hrs/wk, 3 cr. Elementary procedures of rescue practices, systems, components, support and control of rescue operations including ladder procedures, rope use and knots, nets, lines, and basic rescue tools. Practicum includes the utilization of rescue items and total integration of basic rescue principles. F

5143 Emergency Response Driving, 1 class hr and 1 lab hr/wk, 1 cr. Defensive driving, tactics, evasive maneuvers, traffic hazards, weather, road conditions, regulations, laws and procedures for safe operation of an emergency response vehicle, vehicle selection and maintenance, and route planning. **Prerequisites:** 5129 or 5135, 5136, 5137 EMT-I. W

5144 Dispatching and Radio Communications, 1 class hr and 2 lab hrs/wk, 2 cr. Federal Communications Commission rules and regulations, radio frequency utilization, radio procedures, codes, voice and telemetry, transmission site selection and net composition, communication standard operating procedures, utilization coordination and system design. **Prerequisites:** 5129 or 5135, 5136, and 5137 recommended. W

5145 Introduction to Emergency Medical Services Systems, 4 class hrs/wk, 4 cr. An overview of the emergency medical services systems, federal, state and local emergency services organizations, including history, trends, future expectations, legislation, funding mechanisms, controls and regulations of the industry. Involvement of personnel in the operations, health systems and emergency medical services interaction. F

5146 Ambulance Service in the Community, 3 class hrs and 1 lab hr/wk, 3 cr. The relations of the ambulance service with other organizations: Cooperation and role identification in disaster planning, home and industrial needs, occupational safety programs, consumer protection and education, and planning a complete emergency health care system for public safety. **Prerequisite:** 4200, (5145 and 5129 helpful). F

5147 Crisis Intervention, 3 class hrs/wk, 3 cr. Intervention in behavioral crises of sudden death, suicide, rape, murder, vehicle accidents, disease, trauma, and child abuse. Resources supporting behavioral patterns and handling emotional stress of the individual. Coping with emotional conflict within oneself. Sp

5149 Disaster Planning and Management, 3 class hrs/wk, 3 cr. Introduction to disasters, including types, planning, triage, management, human behavior, simulation, and mobilization of resources. **Offered as needed.**

5150 Survey of Human Disease, 3 class hrs/wk, 3 cr. An overview of human pathology, including etiology, injury and illness. **Offered As needed.**

5151 Natural Cover Fire Protection, 3 class hrs and 2 lab hrs/wk, 4 cr. The organization, methods, tactics and strategy of safely controlling and extinguishing grass, brush and forest fires, uses of hand tools, portable pumps, motorized apparatus, aircraft and helicopters, chemicals and other related equipment used in the suppression of natural cover fires. Also covers forest and wildland fire prevention techniques.

5161 Fire Prevention Inspection, 3 class hrs/wk, 3 cr. Inspection, preparation, preapproach information, inspector equipment, appearance, gaining admission, explanations, inspection tour, techniques, mapping, observation, note-taking, records, follow-up, persistence, consistency, advantages, purposes, records maintenance, in-service company inspections. Also types of inspections by rating bureaus and insurance companies, industrial complexes and home inspections, value of public relations, hazard identification and elimination, fire extinguisher, and other installed fire protection equipment inspection. **W**

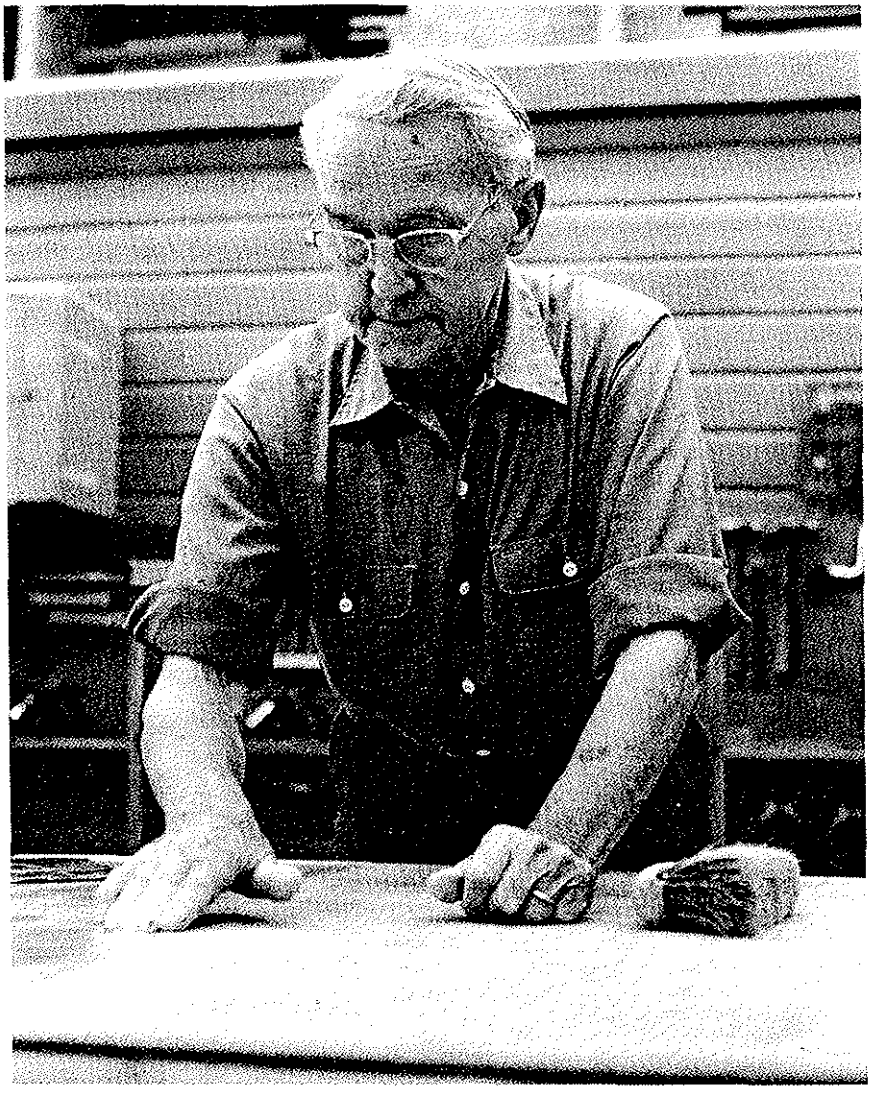
5162 Firefighters Law, 2 class hrs/wk, 2 cr. Firefighters' legal responsibilities in driving, inspection, alarms and communications, other fire protection activities, Firefighters' rights, duties, liabilities, and participation in legal activities including state and local fire marshal laws relating to fire protection. **Sp**

5163 Water Supplies, 1 class hr/wk, 1 cr. Mechanics of liquids, principles of the effect of pressure on liquids, pressure-static, operating, residual, flow, resistance, discharge, specific gravity, adequacy and degree of liability of various types of water sytems. Relative capacities of various sizes of mains, hydrant types, specifications, installation and maintenance, distribution, fire flow requirements, computing available water, fire flow tests, supplying installed fire protection equipment, pilot and pressure gauges and grid, and dead end water main systems. **Sp**

5164 Building Construction–Fire Protection, 3 class hrs/wk, 3 cr. Classification of buildings, structural features affecting fire spread, effect of fire on structural strength, fire stops, ratings of materials, fire retardants, sanborne maps. **Prerequisite:** Consent of instructor. **F**

5165 Industrial Fire Protection, 3 class hrs/wk, 3 cr. Specific concerns and safeguards related to business and industrial fire brigade organization and development, fire prevention programs, hazardous situations and prevention methods, gaining cooperation between the public and fire department organization, study of elementary industrial fire hazards in manufacturing plants. **W**

5166 Advanced Detection and Prevention Systems, 3 class hrs/wk, 3 cr. Heat, flame, smoke, ion detectors, alarm transmitting and receiving equipment, system inspecting and servicing requirements, extinguisher system design and installation standards, sprinkler system valves, water supply, piping, service testing, protection systems for special hazards. **Sp**



5167 Fire Insurance Fundamentals, 3 class hrs/wk, 3 cr. The relationship between fire defenses, fire losses, and insurance rates, basic insurance principles, fire loss experience, loss ratio, applying the ISO grading schedule, and state regulations of fire insurance. **Sp**

5168 Fire Service Instructor Training, 12 class hrs and 10 lab hrs/wk, 2 cr. The fire service instructor and his job, principles of learning, teaching procedures (preparing course outlines and lesson plans, managing the classroom environment, evaluation techniques), training aids, and devices. **Prerequisite:** Second year status with fire protection agency or consent of instructor.

5169 Introduction to Training Programs, 10 class hrs and 6 lab hrs/wk, 1 cr. Purposes of drills and training programs, planning training schedules and drill activities, records and reports, evaluation methods, ISO training requirements and records, motivating personnel to train. **Prerequisite:** Completion of Fire Service Instructor Training or three years fulltime experience.

5401 Expanded Duties I, 1 class hr and 2 lab hrs/wk, 2 cr. Theory and practice of new procedural responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration, and practical application of polishing silver alloys on simulated models and application of topical fluoride and rubber dams on simulated and real models. **Prerequisite:** 5411 or equivalent. **W**

5402 Expanded Duties II, 1 class hr and 3 lab hrs/wk, 2 cr. A continuation of 5401. Includes discussion, demonstration, and practical application of preventive dentistry presentations; removal of excess cement from orthodontic bands; and alginate impression taking. **Prerequisite:** 5401. **Sp**

5403 Chairside Assisting and Basic Lab Procedures, 1 class hr and 7 lab hrs/wk, 3 cr. Includes mixing filling materials, preparing impression materials for use, and processing impressions, practical experience in chairside assisting at the University of Oregon Dental School. **Prerequisite:** Completion of term I or consent of instructor. **W**

5404 Dental Materials and Instrumentation, 2 class hrs and 4 lab hrs/wk, 4 cr. An introduction to materials and instruments used in dental offices. Includes use, identification, chemistry, and manipulation of the dental materials, and use, identification, transfer, manipulation, and care of the dental instruments and equipment. Includes instructional demonstration. F

5405 Dental Anatomy and Physiology, 3 class hrs and 3 lab hrs/wk, 4 cr. Basic general and oral anatomical terminology and related physiological processes with emphasis on the mouth and associated structure. Covers the skeletal system, blood supply, innervation and musculature of the various oral structures, and developmental, anatomical, and functional characteristics of human dentition. F

5407 Advanced Laboratory Procedures, 2 class hrs and 4 lab hrs/wk, 4 cr. Principles of full and partial denture prosthesis and the use of laboratory equipment. Includes experience in investing and casting crowns and bridges and assisting in other advanced laboratory procedures. **Prerequisites:** 5403 and 5404. Sp

5408 Principles and Basic Application of Dental Radiology, 2 class hrs and 3 lab hrs/wk, 4 cr. Practical application of principles of radiology and practice in placement of film, cone angulation, machine manipulation, and film processing to develop proficiency in taking x-rays. **Prerequisite:** 5405, 5411 or equivalent. W

5409 Dental Office Practicum II, 16 lab hrs/wk, 5 cr. Practice and observation in an approved dental office. **Prerequisite:** 5413. Su

5410 Dental Office Management, 2 class hrs and 2 lab hrs/wk, 3 cr. Personal and vocational relationships, including telephone, reception and business office procedures, purchases, storage and care of supplies, and maintenance of office and equipment. **Prerequisite:** 5411. W

5411 Introductory Concepts in Dental Assisting, 4 class hrs/wk, 4 cr. A basic study of the dental assistant's role with reference to personal regimen, housekeeping, terminology, materials, instruments, and equipment. Emphasizes the qualifications necessary for success as a dental assistant. **Prerequisite:** Consent of allied health department director. F

5413 Applied Radiography II, 2 lab hrs/wk, 1 cr. A continuation of 5408. Develops further skills in producing diagnostic radiographs. Sp

5415 Dental Sciences I, 3 class hrs/wk, 3 cr. A study of the sciences associated with the practice of dentistry. Includes microbiology, oral pathology, sterilization, anesthesia, vital signs, therapeutics, pharmacology, and first aid. **Prerequisite:** 5411, 5601 or equivalent. F

5416 Dental Sciences II, 3 class hrs and 3 lab hrs/wk, 4 cr. A study of the various fields of specialized dentistry recognized by the American Dental Association and the sciences associated with them. Includes diet and nutrition, and the dental disciplines of oral surgery, periodontics, pedodontics, endodontics, orthodontics and public health dentistry. Role playing in simulated clinical situations. **Prerequisite:** 5415 or consent of allied health department director. W

5417 Dental Office Practicum I, 8 lab hrs/wk, 3 cr. Practice and observation in an approved dental office. **Prerequisite:** Completion of terms 1 and 2 in dental assisting curriculum, Sp

5435 Nursing Assistant, 5 class hrs and 25 lab hrs/wk, 14 cr. Basic health care duties. Open to men and women in satisfactory health. Includes practical experience in nursing assistant methods, procedures, and techniques. Students who successfully complete the nursing assistant program earn a basic certification. **Offered as needed.**

5436 Self Awareness and Interpersonal Skills, 3 class hrs/wk, 3 cr. An introduction to self-awareness, communication skills, and interpersonal skills primarily for human service trainees. Features individual and small group exercises to help students improve their skills in communication, values clarification, problem solving, decision making, and stress management. A prerequisite for most human resource technology courses and practicum. F, W

5437 Interviewing Theory and Techniques, 2 class hrs and 2 lab hrs/wk, 3 cr. Theoretical background and specific techniques of interviewing. Practice in interviewing situations, along with peer and professional observation and feedback. F, W

5438 Group Dynamics, HRT III, 3 class hrs/wk, 3 cr. Introduction to theory of groups and group functioning. Includes styles of group leadership, roles played by various group members, and supervisor-subordinate relationships. Sp

5440 Major Models of Personality, 3 class hrs/wk, 3 cr. Survey of major models of personality for students interested in human service work. Discusses various models and theories, psychological assesment, and diagnostic labels. F, W

5441 Intervention Strategies, 3 class hrs/wk, 3 cr. Second course of a two-term sequence on intervention strategies needed for social service work. Includes theory and practice in behavioristic, rational emotive, humanistic, social, and holistic counseling techniques. **Prerequisite:** 5440 or consent of allied health director. Sp

5442 Community Resources, 3 class hrs/wk, 3 cr. The social service delivery system, both locally and historically. **F and offered as needed.**

5443-48 Practicum: Human Resources Technology, variable hrs and cr. On-site clinical and community experience with human service organizations. **Prerequisite:** Admission to the HRT program and concurrent enrollment in 5450 or consent of allied health director. **F, W, Sp (Su as needed)**

5450 Introduction to Field Experience, 3 class hrs/wk, 3 cr. Background and specific skills for researching field placements. Required for first term of the Human Resource Technology program and a prerequisite for all HRT practicum courses 5443-5448. **Prerequisite:** Admission to Human Resource Technology program or consent of allied health director. F

5513 Multimedia First Aid, 1 class hr/wk, 1 cr. Fundamentals of first aid theories and procedures. Upon satisfactory completion, student receives American National Red Cross Multimedia First Aid card. Meets OSHA requirements. F, W, Sp, Su

5525 Gerontology, 3 class hrs/wk, 3 cr. Physical, mental, and cultural dynamics of aging as a continuation of the human growth process. An orientation of involvement of the aging with life rather than a preparation for death. Sp

5600 Medical Terminology I, 3 class hrs/wk, 3 cr. Analysis of anatomical terms, roots, prefixes, and suffixes as well as Greek and Latin verbs and adjectives in building a medical vocabulary. Examination of representative anatomical structures, diseases, operations, tumors, and descriptive terms through analysis of words. **Prerequisite:** Consent of allied health director. F, W, Sp

5601 Basic Science Principles, 2 class hrs and 2 lab hrs/wk, 3 cr. Introductory concepts of physics, chemistry, and microbiology. Includes practical application of problem solving, scientific observation and measurement, use of equipment, and basic laboratory techniques. F

5602 Medical Assisting, Basic Procedures, 2 class hrs and 2 lab hrs/wk, 3 cr. Survey of requirements and qualities for success as a medical assistant. Techniques, methods, and procedures including assisting the physician with examinations, medical and surgical aseptic procedures, obtaining vital signs, care of equipment, supplies, drugs, and solutions. **Prerequisite:** High school graduate or equivalent. F

5603 Medical Transcription, 1 class hr and 2 lab hrs/wk, 2 cr. Introduction to the techniques of transcribing from the recorded voice to the typewriter. Operation of a transcriber and transcribing mailable copy with speed and efficiency. Includes transcribing letters, case histories, pathological reports, and other medical records. **Prerequisite:** Basic knowledge of typing techniques, minimum typing speed of approximately 44 words per minute or consent of instructor. W

5604 Medical Office Procedures, 3 class hrs and 3 lab hrs/wk, 4 cr. Techniques and procedures used in the medical office: reception of patients, telephone use, appointment-making, and filing. Includes techniques, methods, and procedures of processing medical health records, forms, insurance claims, and travel arrangements. **Prerequisite:** SS122 or consent of allied health department director. W

5605 Introduction to Medical Science, 3 class hrs/wk, 3 cr. A survey of disease conditions, types of treatment, and medical surgical specialties. **Prerequisite:** 5600 or consent of allied health director. Sp

5606 Medical Assisting, Advanced Procedures, 3 class hrs and 2 lab hrs/wk, 4 cr. Theory and practice of basic diagnostic and treatment procedures. Collection, preparation, and preservation of specimens for diagnostic studies. **Prerequisite:** 5602, 5600 or consent of allied health director. Sp

5607 Medical Office Management, 3 class hrs/wk, 3 cr. Basic accounting procedures and practical experience working with financial records and account terminology. Includes the double-entry system, accounting for cash, payroll accounting, end-of-period worksheets, financial statements, and a medical office practice set. **Prerequisite:** 4201 or consent of instructor. Sp

5609 Medical Office Practice, 16 lab hrs/wk, 6 cr. Practice in clinical situation of medical assisting methods, procedures, and techniques. **Prerequisite:** 5600, 5602, 5610 or consent of allied health director. **W, Sp**

5610 Medical Terminology II, 3 class hrs/wk, 3 cr. Continuation of 5600. **Prerequisite:** Consent of allied health director. **F, W, Sp**

5611 Medical Law and Ethics, 3 class hrs/wk, 3 cr. Survey of laws affecting the practice of medicine and the codes of behavior the medical profession has set for itself. An introduction to medical economics and the history of medicine. **Prerequisite:** Consent of allied health department director. **Sp**

5612 Medical Terminology III, 3 class hrs/wk, 3 cr. Language development in medicine, pharmacology, oncology (cancer medicine), radiology, nuclear medicine, medical laboratory, and psychiatry. **Prerequisites:** 5600, 5610 or consent of instructor. **Sp**

5615 Body Structure and Function I, 3 class hrs and 1 lab hr/wk, 3 cr. The normal structures and functions of the human body, chemical principles, characteristics of the cell as basis for life, organization of tissues, organs, and systems. **F**

5616 Body Structure and Function II, 3 class hrs and 1 lab hr/wk, 3 cr. A continuation of 5615. **Prerequisite:** 5615. **W**

5620 Health Information Systems Procedures I, 2 class hrs and 4 lab hrs/wk, 4 cr. Focuses on knowledge, skills, and practice required for ward clerking and related entry occupations. Includes admitting and bed control, patient charts and transcription of physicians orders, admissions, preoperative and postoperative procedures, management techniques and human relations, and confidentiality of medical records as related to ward clerking. **Prerequisite:** Enrollment in health records option of either medical assisting or medical secretary programs.

5621 Health Information Systems Procedures II, 3 class hrs and 4 lab hrs/wk, 5 cr. Covers health information systems and skills necessary for health clerical functions including health care delivery systems, health information, medical records, and health record processing (medical transcription) of a variety of medical reports. Covers entry level skills for health record technical medical transcriptionist students and additional skills required for ward clerks. **Prerequisite:** 5620. **W**

5622 Health Records Processing, 20 lab hrs/wk, 5 cr. Processing of medical reports and records, including basic histories and physicals, discharge summaries, operative reports, medical specialty reports, and radiology, pathology, and autopsy reports. Offers variety of problem situations including actual experiences in, or from, a variety of offices and settings. Evaluation of students by demonstration of proficiency in typing, transcription speed, accuracy, and organization/processing of health record information. **Prerequisite:** 5621, 5616 or 5610, typing speed of 50 wpm on a five-minute timing and no more than five errors, or consent of allied health department director. **Sp**

5629 Legal Concerns in a Medical Office Practice, 1 class hr/wk, 1 cr. Theory and principles of behavior relating to legal aspects of the medical assistant and the physician in a medical office. Special emphasis on release of information, consents for care, principles of confidentiality in health care data, collecting and releasing patient information. **Prerequisite:** 5611 or current employment in a medical office or consent of instructor.

5700 Health Occupations Overview, 1 class hr/wk, 1 cr. Concepts for organization of resources for health care and services, the role of health workers as members of a health team, and the rights and responsibilities of patients as members of a health team. **F, W, Sp, Su**

6101 Plane Surveying, 2 class hrs and 6 lab hrs/wk, 4 cr. Fundamental concepts and methods in making surveying measurements for land surveying, mapping, construction, and civil engineering using conventional tapes, levels, rods, and compasses. Field labs provide practical applications. **Prerequisite:** Foresters: 4202 or enrolled concurrently; engineers: 6261 or enrolled concurrently. **F**

6103 Plane Surveying, 2 class hrs and 6 lab hrs/wk, 4 cr. A continuation of 6101. A study of distance and direction measurement, employing transits, theodolites, steel tapes, traversing, and associated office computations, areas, stadia, circular curves, and brief outline of public land surveys. **Prerequisite:** Engineers: 6101 and 6262; Foresters: 6101 and 4202. **W**

6105 Strength of Materials I, 2 class hrs and 3 lab hrs/wk, 3 cr. Stresses and strains in bodies subjected to tensile, compressive, and shearing forces, including common theory of beams. Examines distribution and magnitude of stresses in welded and riveted joints, thin wall cylinders, torsional members, and beams. Practice problems emphasize the materials studied. **Prerequisites:** 6109 and 6266 taken concurrently or equivalent. **F, Sp**

6109 Applied Mechanics, 2 class hrs and 3 lab hrs/wk, 3 cr. Static forces and their effect upon rigid bodies at rest. Includes resolution of forces, equilibrium, and resultants of force system. **Prerequisite:** Third term standing or approval of trades department director. **W, Sp**

6110 Construction Estimating, 2 class hrs and 3 lab hrs/wk, 3 cr. Estimating the amounts and cost of materials required and labor cost involved in various types of construction. **Prerequisite:** Second-year standing or approval of trades department director. **W**

6113 Hydraulics, 3 class hrs and 2 lab hrs/wk, 4 cr. Static and dynamic hydraulics and how to solve problems associated with them. Experiments allow students to visualize reaction of water as a force. **W**

6116 Building Code I, 3 class hrs/wk, 3 cr. Study and use of portions of the uniform building code manual that relate to occupancy classification. Includes detailed requirements relating to types of construction, and the physical locations of buildings and building areas. **F, W**

6118 Contracts and Specifications, 3 class hrs/wk, 3 cr. Common usage and practices in the preparation of contracts and attendant specifications. Examination of existing contracts covering current jobs will be used whenever possible with practical problems designed to teach the application of theory learned. **Prerequisite:** Second-year standing or approval of trades department director. **F**

6119 Building Code II, 3 class hrs/wk, 3 cr. Additional building code study concerning areas that present hazards in building construction, such as vertical shafts, treatment of exterior and interior surfaces, detailed exit requirements, fire protection systems, public property, and weather protection. **Prerequisite:** 6116. **W, Sp**

6120 Mechanical Code Inspection I, 3 class hrs/wk, 3 cr. An introduction to the state building code and building inspection certification requirements. Based on the needs of inspectors, contractors, and suppliers. **F, W**

6121 Dwelling Construction under the UBC, 2 class hrs and 3 lab hrs/wk, 3 cr. A study of the Uniform Building Code including state amendments. Covers specific code requirements relative to dwelling construction including occupancy standards, siting, footing and foundations, framing, and other materials of construction. Includes field inspection of dwellings in various stages of construction. **W**

6122 Soil Mechanics Fundamentals, 2 class hrs and 3 lab hrs/wk, 3 cr. A study of soil classifications and how they can be used in the construction field. Covers strength of soils, consolidation of soils in fills, construction site investigations, and soil reports. **Prerequisite:** Third term standing or consent of instructor. **Sp**

6123 Concrete Construction and Design, 2 class hrs and 3 lab hrs/wk, 3 cr. Theory and design of reinforced concrete structural members and the design and control of concrete mixtures. Includes construction inspection and field and laboratory testing procedures. **Prerequisite:** Sixth-term standing or approval of technology department director. **Sp**

6124 Soil Mechanics, 2 class hrs and 3 lab hrs/wk, 3 cr. Properties of soils including soil index properties, strength, compaction, permeability, and lateral pressures. Laboratory experiments cover each phase of study. **Prerequisite:** Second-year standing or approval of technology department director. **Sp**

6125 Timber and Steel Construction, 3 class hrs and 3 lab hrs/wk, 4 cr. Steel and wood fasteners and connections, timber beams and columns. Analyzes structural members for design features. Includes field trips to see applications. **Prerequisite:** 6120. **W**

6126 Building Codes III, 3 class hrs/wk, 3 cr. Review of the Uniform Building Code including pedestrian protection during construction, permanent occupancy of public property, prefabricated construction, fire extinguishing systems, fire detection systems, energy conservation, architectural barriers. **Prerequisite:** 6116 and 6119. **Sp**

6127 Zoning Enforcement and Administration 3 class hrs/wk, 3 cr. The purpose and intent of land use regulations including formulation and enforcement of zoning ordinances and regulations. **W**

6128 Strength of Materials II, 2 class hrs and 3 lab hrs/wk, 3 cr. A study of the stresses and strains that occur in bodies subjected to tensile, compressive, and shearing forces. **Prerequisite:** 6105 or equivalent. **F, W**

6129 Materials of Construction, 2 class hrs and 4 lab hrs/wk, 3 cr. Materials and processes which are regulated by the building code. Testing standards as a quality control of traditional and non-traditional building materials. W

6132 Survey Law, 3 class hrs/wk, 3 cr. Obligations, liabilities, and legal responsibilities of land surveyors, and basic principles of land survey law as evolved in the courts. W

6134 Public Land Survey, 3 class hrs/wk, 3 cr. Laws and procedures for surveying and subdividing of public lands of the United States, and for relocation of lost boundaries. Fundamental knowledge for land surveyors. **Prerequisites:** 4135, 6101, and 6103. W

6136 Engineering Technician Orientation, 1 class hr and 2 lab hrs/wk, 2 cr. How to operate an engineering calculator. (Calculators are evaluated for three weeks before the students must have one.) Includes a brief history of the engineering field and a study of the many details of the engineering curriculum. **Prerequisite:** Working knowledge of Hewlett-Packard model 25 or a similar model of other manufacturers. F, W, Sp

6138 Engineering Problems, 2 lab hrs/wk, 1 cr. Technical data and computations. Includes procedures for dimensional analysis, recognition and usage of unit systems, preparation and use of graphs and curves, and practical applications of such skills. **Prerequisite:** 6194 or consent of instructor. W

6139 Environmental Quality Control, 2 class hrs and 3 lab hrs/wk, 3 cr. Covers the major aspects of air and water pollution, their causes, the harmful effects to the environment, and methods of prevention and treatment. Includes water storage, treatment, and distribution. Sp

6140 Sanitary Engineering, 2 class hrs and 3 lab hrs/wk, 3 cr. A study of domestic and industrial water supply and waste disposal, collection, storage, and treatment facilities. Sp

6163 Basic Technical Photography, 3 class hrs and 6 lab hrs/wk, 5 cr. Fundamentals and technical aspects of photography including types of cameras, f/systems, shutter speeds, film types and specifications, developing, basic enlarging, composition, career opportunities, vocabulary, equipment, and display techniques. For students interested in photographic careers. Includes directed photographic assignments and photo lab work. F

6164 Intermediate Technical Photography, 2 class hrs and 9 lab hrs/wk, 6 cr. Professional and graphic arts photography incorporating light measuring, gamma, densitometry, interpretation and uses of technical data, technical aspects of photographic design, microfilm, shooting and processing of color slides, use of color analysers and densitometers; career opportunities, techniques of photographic copying, and retouching of negatives and prints. **Prerequisite:** 6163 and/or consent of instructor. W

6165 Science of Photography, 3 class hrs and 3 lab hrs/wk, 4 cr. Basic photography techniques emphasizing optics, physics, and chemistry as they relate to the Graphic Arts curriculum. W

6166 Graphic Design and Character Generation, 3 class hrs and 6 lab hrs/wk, 5 cr. Paste-up, character generation, art techniques, design principles, layout, proof reading, copy classification, photo composition, and typography. F, W, Sp

6167 Advanced Graphic Design, 3 class hrs and 9 lab hrs/wk, 6 cr. Practice and experience in visual communication and graphic technology relating to information design, multiple paste-up, register controls and systems, typographic design display and tabular composition, proofing, procedures, career opportunities, symbology and audience analysis. **Prerequisite:** 6166. F, W, Sp

6168 Process Photography, Stripping and Platemaking, 3 class hrs and 9 lab hrs/wk, 6 cr. Development of technical competency in production methods and knowledge of process photography, line copy, halftones, development methods, stripping (including multiple exposures), scribing, register systems, exposure computers, platemaking and elementary densitometry. Includes practical applications of the theoretical basis of process photography. F, W, Sp

6169 Image Conversion and Image Carriers for Offset Lithography, 3 class hrs and 9 lab hrs/wk, 6 cr. Image conversion, posterization, knockouts, chokes, spreads, duotones, densitometry, multiple color stripping, specialized films, photographic materials, plates and other image carriers, quality controls including graphic design, design element conversion into reproducible elements, assembly of the reproducible elements into an image carrier, and transfer of the image carrier to a transport. **Prerequisite:** 6168. F, W, Sp

6170 Press Work and Reproduction Systems, 3 class hrs and 12 lab hrs/wk, 7 cr. Image transfer systems, press designs, feeders, printing units, dampening units, inking systems, delivery systems, office duplication, pH control, and career opportunities. F, W, Sp

6171 Advanced Presswork, 3 class hrs and 9 lab hrs/wk, 6 cr. Practical experience relating to papers and inks, rollers and cylinder adjustments, multiple color runs, registration controls, pH control, and outside plant observations. **Prerequisite:** 6170. F, W, Sp, Su

6172-5 Special Problems in Graphic Communication, variable hrs and cr. Final course for graphic arts and photography students. After identifying a communication problem, a student and instructor write a contract which includes a proposal to solve the problem. It identifies objectives, procedures, equipment needed, and key check points for student-instructor conferences. Areas of consideration may include color separation, plant management, and quality control. Consideration and encouragement given for interdisciplinary teams of students working on common problems. Variable amounts of credit given, ranging from three term units to seven term units. **Prerequisite:** 6166, 6168, and 6170 or consent of instructor. F, W, Sp, Su

6192 Introduction to Engineering Calculators, 2 lab hrs/wk, 1 cr. How to select a pocket calculator adequate for use in a particular curriculum, and become proficient in its use. Begins with basic arithmetic and progresses to varied but typical formula and problems peculiar to curricular subjects. F, W, Sp

6194 Engineering Orientation, 2 lab hrs/wk, 1 cr. Introduction to electronic engineering. Emphasizes calculations, scientific notation, formula manipulation, and use of the calculator in solving problems associated with electronics. F, W, Sp

6195 Properties of Materials, 3 class hrs/wk, 3 cr. Properties of various materials and the effects of stresses and strain on them. Covers methods of measuring stress and strain. Sp

6196 Fluid Systems, 2 class hrs and 3 lab hrs/wk, 3 cr. Basic principles of fluid flows, circuits, and controls. Laboratory experiments demonstrate hydraulic and pneumatic devices and applications. F

6200 Electrical Theory DC, 3 class hrs and 3 lab hrs/wk, 4 cr. Introduction to electronics on the basis of direct currents. Emphasizes contemporary techniques as a supplement to basic concepts. Covers the principles of electron physics, unidirectional current and factors affecting its magnitude, series circuit analysis, parallel-circuit analysis, complex unidirectional-current circuits, and magnetism. **Prerequisite:** High school algebra or equivalent. F, W, Sp, Su

6202 Electrical Theory AC, 3 class hrs and 3 lab hrs/wk, 4 cr. Continuation of 6200. Covers principles of electron physics, bi-directional circuit analysis, magnetism and electromagnetism, and characteristics of inductance and capacitance. **Prerequisite:** Second term standing or consent of instructor. W, Sp

6203 Analysis of Electronic Systems, 3 class hrs and 3 lab hrs/wk, 4 cr. Study and combining of individual units into a useful working system. Individual units are analyzed and are interfaced together. Includes video, audio, and RF distribution systems. **Prerequisite:** 6228 or consent of instructor.

6204 Applied Electronic Calculations I, 3 class hrs and 2 lab hrs/wk, 4 cr. Calculations applying to direct current electrical circuits. Includes methods of calculations and practical story problem solving. **Prerequisite:** Knowledge of basic arithmetic. Sp

6205 Applied Electronic Calculations II, 3 class hrs and 2 lab hrs/wk, 4 cr. A continuation of 6204. Calculation of electronic circuits, methods of calculations, and practical story problem solving. **Prerequisite:** 6204. W

6206 Electrical Circuits, 3 class hrs and 3 lab hrs/wk, 4 cr. Continuation of electrical theory emphasizing analysis of the characteristics of complex wave form circuits. Covers passive filter networks, bi-directional waveforms complex waveform analysis of simple circuits, waveform analysis of combined network, series resonance, parallel resonance, and power. **Prerequisite:** Third term standing or consent of instructor. F, Sp

6207 Radio Circuits, 2 class hrs and 6 lab hrs/wk, 4 cr. Radio circuits and their problems, servicing techniques, service procedures, and case histories. Students analyze troubles installed in radio receivers to simulate actual field problems. **Prerequisites:** 6202 and a transistor theory class (may be concurrent) or consent of instructor. F, W, Sp

6208 Electricity, 3 class hrs and 2 lab hrs/wk, 4 cr. Introduction to electrical circuitry and equipment emphasizing the concepts of electrical physics. Includes electricity and magnetism, circuits and components, currents, power, basic electronics, motors, and controls. **Offered as needed.**

6209 Introduction to ICs, 3 class hrs and 3 lab hrs/wk, 4 cr. Introduction to linear and digital devices. Covers the theory and application of these devices to basic circuits. How to use specialized equipment for IC circuits and construct and check out basic circuits. **Prerequisites:** An understanding of AC and DC theories plus a working knowledge of transistor theory and operation. W

6212 Electronic Circuit Concepts, 2 class hrs and 6 lab hrs/wk, 4 cr. Basic circuits and components of electronics emphasizing designing and proving of design concepts. Covers solid state amplifiers, oscillators and power supplies. Design and proving of circuits, troubleshooting in theory and practice. **Prerequisite:** 6217. F

6215 Digital and Analog Circuits, 3 class hrs and 3 lab hrs/wk, 4 cr. The use of digital and analog devices in circuits. Discussion and application of these devices demonstrate principles and capabilities of circuits based on practical usage. F, W, Sp

6216 Advanced Electronic Circuits, 1 class hr and 3 lab hrs/wk, 2 cr. The use of operational amplifiers in circuits. Students analyze and construct circuits as a practical application of the devices and how they operate in circuits. **Prerequisite:** A course in operational amplifiers or consent of instructor. Sp

6217 Transistors, 3 class hrs and 6 lab hrs/wk, 5 cr. Principles of the transistor, the basic element of the semiconductor family, and its operation as a circuit element. Principles studied in theory classes are applied in the laboratory. **Prerequisites:** 6200 or equivalent and 6202, which may be taken concurrently.

6218 Industrial Electronics, 3 class hrs and 3 lab hrs/wk, 4 cr. Introductory class and laboratory covering principles and applications of electronic building-block circuits to simple control problems. Emphasizes industrial component and control symbols and operating principles of temperature, pressure, light, and related transducers. **Prerequisite:** 6212 and 6217 or consent of instructor. F

6219 Video Display Systems, 3 class hrs and 6 lab hrs/wk, 5 cr. A circuit analysis of video systems including theories of operation and purposes of various components. **Prerequisite:** 6217 or consent of instructor. F, W, Sp

6220 Electronic Instruments, 2 class hrs and 2 lab hrs/wk, 3 cr. Application of equipment and some circuits that could be used in instruments. Lab work uses the ICs in instrument type circuits demonstrating the principles of individual circuits operations. F, Sp

6221 Mechanical and Electrical Measuring Principles, 2 class hrs and 2 lab hrs/wk, 3 cr. Theory and operation of measuring units and devices. Uses of instruments in analysis, circuit evaluation, and instrument limiting factors. Laboratory experiments prove the theories. Sp

6226 Introduction to Communications, 3 class hrs/wk, 3 cr. Principles, operation and life of types of systems, noise factors, filter systems, amplitude modulation, frequency modulation, and single sideband techniques. F, W, Sp

6227 Transmitters and Receivers, 3 class hrs and 3 lab hrs/wk, 4 cr. Analyzes transmitter and receiver circuits and how they are interfaced to make an operational unit. Sets up and analyzes operation of two-way equipment. Includes AM and FM circuits. W, Sp

6229 FCC License Preparation, 3 class hrs/wk, 3 cr. A review of electronic circuits and discussion of FCC rules and regulations. Preparation for FCC examination. **Prerequisite:** 6226 and 6227 or consent of instructor. Sp

6231 Antennas and Transmission Lines, 2 class hrs/wk, 2 cr. Practical and theoretical aspects of transmission lines and antennas. Basic theory of antenna design, radiation patterns, phasing and coupling networks. Emphasizes coaxial and open-wire transmission line for all frequencies. W

6233 Introduction to Audiovisual Equipment, 2 class hrs and 3 lab hrs/wk, 3 cr. Setup and adjustment of audiovisual equipment. Covers types of equipment and how to make minor adjustments for optimum operation. F, W, Sp

6234 Wave Generation and Shaping, 2 class hrs and 3 lab hrs/wk, 3 cr. An introduction to pulse techniques including theory and operation of limiter and clipper circuits, multivibrator circuits, synchronization circuits, and applications of multivibrators. **Prerequisite:** Third term standing or consent of instructor. Sp

6236 Projector Maintenance, 2 class hrs and 6 lab hrs/wk, 4 cr. Operation and maintenance of 16 mm projectors. How to disassemble, reassemble, and check the projectors. W, Sp

6237 Semiconductors, 2 class hrs and 3 lab hrs/wk, 3 cr. Survey class and laboratory covering such operating principles of solid-state devices as the uninjunction transistor silicon-controlled rectifier transistor, field effect transistor, and photoconductors and their basic circuits and application. F, W

6238 Solid State Devices, 2 class hrs and 3 lab hrs/wk, 3 cr. Physical principles underlying the behavior of semiconductors, transistors and other solid state devices and their application to various electronic circuits. Discusses physics pertinent to transistors and semiconductors and their characteristics and how they operate. Covers use of semi-conductor devices in various amplifiers, oscillators, and switching circuits emphasizing developing concepts and knowledge basic to transistor and semi-conductor theory. **Prerequisite:** 6211 or approval of technology department director. F, W, Sp

6239 Audio-Visual Maintenance, 2 class hrs and 6 lab hrs/wk, 4 cr. How to service various types of AV equipment to gain a broad background of types and models. Sp

6240 Electronic Data Processing, 3 class hrs/wk, 3 cr. Introduction to principles of electronic digital computers. Covers application and programming of computers in business, industrial, and scientific organizations. Reviews numbering systems as they relate to computers, analyzes computer circuitry with emphasis upon solid-state switches, presents fundamentals of logic design with an introduction to Boolean algebra and analyzes major divisions of a digital computer with block diagrams. W, Sp

6241 Data Communications, 2 class hrs and 2 lab hrs/wk, 3 cr. Introduction to modern analog and digital devices and systems. Discussion of principle and practice of use of analog devices and digital devices including TTL, CMOS, and ECL devices. **Prerequisite:** An understanding of AC-DC theory and transistor circuits. W

6242 Telecommunications, 2 class hrs and 3 lab hrs/wk, 3 cr. Modern communications by air ways, land lines, and satellites. An update on transmission systems, teleprocessing, and data communications. Includes field trips. **Prerequisite:** 6231. Sp

6243 Electromechanical Devices, 2 class hrs and 3 lab hrs/wk, 3 cr. Introduction to mechanical devices and rotational actuators used in electromechanical systems. Covers theory of rotational actuators and study of belt and chain drives, gears, bearings, and clutches. **Prerequisites:** 6261 and 6371. Sp

6244 Electromechanical Shop Practice, 1 class hr and 3 lab hrs/wk, 2 cr. Use of hand tools and various types of machine tools. Includes interpretation and construction of designs from blueprint. F

6245 Electromechanical Fabrication, 1 class hr and 3 lab hrs/wk, 2 cr. Characteristics and methods of fabricating materials. Practice of gas and electric welding. Studies of ferrous and non-ferrous material and their application to industrial products. Construction of small sub-assembly units in the laboratory. F

6246 Electromechanical Maintenance Procedures, 2 class hrs and 3 lab hrs/wk, 3 cr. Proper approach and procedures needed to keep industrial equipment operating. Preventative maintenance and troubleshooting of mechanical and electrical problems, how's and why's of lubrication and cleaning of equipment including use of chemical and ultrasonic cleaners. Sp

6249 Microprocessor Systems, 2 class hrs and 3 lab hrs/wk, 3 cr. Basics of microcomputer systems, both hardware and software. Covers interfacing techniques and protocols. **Prerequisite:** 6267. Programming BASIC or FORTRAN courses recommended.

6250 Communication Systems, 3 class hrs/wk, 3 cr. Introduction to communication principles and systems. Covers principles, operation and types of systems, noise factors, filter systems, types of modulation, transmitter and receiver principles. **Prerequisites:** Background knowledge of AC, DC and solid state devices. F

6251 Linear IC Application, 1 class hr and 3 lab hrs/wk, 2 cr. Application of linear individual circuit divices to simple and complex circuits and circuit designs and their possible problems. **Prerequisite:** A course in linear and digital ICs or consent of instructor.

6252 Advanced Servicing, 2 class hrs and 6 lab hrs/wk, 4 cr. Solving of increasingly difficult service problems, simulating on-the-job conditions and problems. Practice of receiver circuits alignment. **Prerequisite:** 4274 or consent of instructor.

6255 Electrical Control Systems, 2 class hrs and 3 lab hrs/wk, 3 cr. Investigates various control systems commonly used in industry. Uses various methods of systems analysis to predict performances of systems. W

6256 Servo and Regulation Systems, 2 class hrs and 3 lab hrs/wk, 3 cr. Principles of open- and closed-loop control systems, servos, regulators, and valves. Includes performance evaluation. Discusses types and application of

these devices and reasons for choice of specified type for a particular system. Laboratory work consists of using and testing devices studied in theory sessions. **Sp**

6257 Electrical/Electronic Troubleshooting, 2 class hrs and 3 lab hrs/wk, 3 cr. Troubleshooting methods and applications as they pertain to electrical and electronic equipment. Laboratory sessions are practical applications of methods studied. **Sp**

6258 Consumer Electronic Systems, 2 class hrs and 6 lab hrs/wk, 4 cr. Principles, operation, and servicing of consumer products including stereo receivers, tape recorders, and record changers. Includes mechanical operation and lubrication of recorders and changers. **Prerequisite:** Second year standing in Electronics Technology program or consent of instructor. **W, Sp**

6259 Measurement and Instrumentation Systems. 2 class hrs and 3 lab hrs/wk, 3 cr. Devices used to measure physical quantities, including humidity, flow, pH, and biochemical oxygen demand. Instrumentation systems as they apply to process control. **W, Sp**

6261 Technical Mathematics I, 4 class hrs/wk, 4 cr. Basic algebraic operations. Includes study of monomials and polynomials, linear equations and systems of equations, quadratic equations, set-up and solution of story problems, graphs and slope of linear equations, and basic right triangle trigonometry. **Prerequisite:** B or better in 4200 or Mth10. **F, W, Sp**

6262 Technical Mathematics II, 4 class hrs/wk, 4 cr. Definitions of trigonometric functions and relationships between them, solution of right and oblique triangle problems, powers and radicals, complex numbers and vectors, log function and computations, algebraic fractions, factoring, and solution of fractional equations. **Prerequisite:** 6261. **F, W, Sp**

6266 Technical Mathematics III, 4 class hrs/wk, 4 cr. Applied mathematics at the technical level involving use of calculus. Covers plane analytical geometry differentiation with applications, integration with applications, and the differentiation and integration of transcendental functions. **Prerequisite:** 6262. **W, Sp**

6267 Digital Applications, 2 class hrs and 2 lab hrs/wk, 3 cr. An introduction for work in logic, digital, and computer areas. Includes binary, octal, and hexadecimal number systems with conversion to decimal, non-decimal arithmetic binary number codes, Boolean algebra principles and logic circuits with emphasis on hardware and simplification. Laboratory work in related electronics classes applies the topics studied in class. **F**

6268 Digital Control System, 3 class hrs and 2 lab hrs/wk, 4 cr. Input-output units, numerical control units and other digital readout devices. Theory, operation, and maintenance procedures of these units. Laboratory work is practical application, working with and maintaining equipment studied. **Sp**

6269 Computer Programming, 2 class hrs and 2 lab hrs/wk, 3 cr. An application of programming using basic and assembly languages related to control systems and industrial applications. **W**

6279 Wood Adhesives, Coatings and Plastics, 3 class hrs and 2 lab hrs/wk, 4 cr. Basic physical and chemical natures of wood, wood finishing, synthetic resins, plastics, adhesion principles, and coating techniques. Quality practices in paint, furniture, and glue manufacturing plants and laboratories. **W**

6280 Wood Structure and Identification, 1 class hr and 6 lab hrs/wk, 3 cr. A study of basic wood structure and the gross features of wood. Includes identification of common softwood and hardwood species. **W**

6281 Building Materials, 2 class hrs and 3 lab hrs/wk, 3 cr. Application of wood as a construction material. Grading rules and basic structural criteria, knowledge of building materials other then wood. Residential housing and some aspects of building codes, lumber retail, and prices. **Prerequisite:** Basic skills in reading, mathematics, and science and an interest in the subject. **F**

6282 Wood Preservation and Drying, 3 class hrs and 2 lab hrs/wk, 4 cr. Various methods of preserving wood against insects, decay, fire, and weathering. Includes wood preservatives, pressure and non-pressure treatments, preparation of material for treatment, and properties of treated wood. Explains methods of air seasoning and kiln drying, developing kiln schedules, drying defects type of equipment, shrinkage, swelling, dimensional stabilization of wood, and drying of specialty products. **F**

6285 Plywood, Composite and Laminated Wood Products, 2 class hrs and 4 lab hrs/wk, 3 cr. Manufacturing, properties, uses and testing of plywood, particle board, insulation board and lumber laminates, plastic overlays, and veneers. Commercial requirements, specifications and quality, log allocation, and optimum recovery. **W**

6287 Industrial Quality Control, 2 class hrs and 2 lab hrs/wk, 4 cr. Simple quality charts and calculations applied to mass produced items. Methods of testing and controlling effluents, industrial waste, sound, and air and water quality. Includes selective topics in quality control of specific interest to individual students. **Sp**

6300 Forest Mensuration I, 3 class hrs and 4 lab hrs/wk, 4 cr. First of two courses. Care and use of forestry instruments, measurement and appraisal of trees, stands and forest sites. Field labs emphasize mapping, fixed-plot, and variable-plot cruising. **Prerequisite:** 3610, 4204 (or concurrent enrollment), and 6101 (or concurrent enrollment). **Sp.**

6301 Forest Mensuration II, 3 class hrs and 4 lab hrs/wk, 4 cr. Second of two courses. Reviews subjects in 6300 and covers variable-plot and 3-P cruising methods in detail. Introduces regeneration surveys, stand inventory methods, growth and yield, stumpage valuation, and metric conversion. **Prerequisite:** 6300. **F**

6327 Chemical Laboratory Methods I, 3 lab hrs/wk, 1 cr. Techniques, methodology, and safety aspects of general chemistry. Introduction to simple instruments. **Prerequisite:** Ch104 or Ch204 or concurrent enrollment. **F**

6328 Chemical Laboratory Methods II, 3 lab hrs/wk, 1 cr. Continuation of 6327. Introduces qualitative ion identification and acid base titration. **Prerequisite:** Ch105 or Ch205 or concurrent enrollment. **W**

6329 Chemical Laboratory Methods III, 3 lab hrs/wk, 1 cr. Continuation of 6328. Includes kinetics, rates, and quantitative aspects. **Prerequisite:** Ch106 or concurrent enrollment. **Sp**

6330 Organic Chemistry I, 2 class hrs and 6 lab hrs/wk, 4 cr. Introduction to nomenclature and physical properties of major classes of organic compounds. Includes physical techniques of separation as distillation, recrystallation, and chromatography methods including instrumental. Introduces techniques of infrared spectroscopy as a means of identification. **Prerequisite:** Ch106 or Ch206. **F**

6331 Organic Chemistry II, 2 class hrs and 6 lab hrs/wk, 4 cr. Covers the chemical natural of the major classes of organic compounds. Techniques acquired in 6330 are applied in the identification and reactions of these classes. **Prerequisite:** 6330. **W**

6332 Natural Products and Synthetic Polymers, 2 class hrs and 6 lab hrs/wk, 4 cr. Continuation of 6331 covering nitrogen and sulfur compounds, heterocyclics, and the major natural product groups as well as an introduction to the vast field of synthetic polymers. Laboratory emphasizes practical methods and techniques with the use of instrumentation. **Prerequisite:** 6331. **Sp**

6333 Analytical Chemistry, 2 class hrs and 6 lab hrs/wk, 4 cr. Reviews principles of pH measurement and titrimetric analysis, techniques of sampling and sample preparation, sampling gases, gravimetric analysis, practical experiments using titrimetric analysis, oxidation and reduction, coordination compounds. Coordinated class and laboratory. **Prerequisites:** 6329, Ch106 or Ch206. **F**

6334 Instrumental Analysis, 2 class hrs and 6 lab hrs/wk, 4 cr. Introduction to use of optical, electro-analytical, and other instrumental methods for analysis. Experiments include IR, visible and UV spectrophotometry, emission spectroscopy, conductometry, potentiometry, atomic absorption, flame photometry, and gas chromatography. **Prerequisite:** 6333. **W**

6335 Land Division and Mapping, 2 class hrs and 4 lab hrs/wk, 3 cr. An introduction to basic principles of map layout, methods of platting, and basic photogrammetric procedures. **Prerequisite:** Second year standing or consent of instructor. **F**

6336 Instrumentation and Special Techniques, 2 class hrs and 6 lab hrs/wk, 4 cr. Continuation of 6334 with emphasis on electrochemistry, electrolytic cells, ion selective electrodes, thermal methods of analysis, nuclear magnetic resonance spectroscopy and mass spectrometry. Discusses new instrumental techniques such as the IC Plasma. **Prerequisite:** 6334. **Sp**

6339 Glass Blowing, 3 lab hrs/wk, 1 cr. Elementary techniques of glass blowing, types of glass, and the various uses. How to make useful glass laboratory equipment. **F**

6345 Radiation Measurement, 2 class hrs and 3 lab hrs/wk, 3 cr. Basic theories of nuclear chemistry. Detailed study of problems of safety in handling, storage, and other aspects of radioactive materials. Laboratory time allows students to become familiar with instrument and laboratory techniques dealing with radionuclides. **Sp**

6370 Applied Physics, 3 class hrs and 2 lab hrs/wk, 4 cr. Fundamental principles, concepts, and applications of work, energy and power; basic machines, and straight line and rotary motion. Use of vectors to analyze and solve problems. F, W, Sp

6371 Applied Physics, 3 class hrs and 2 lab hrs/wk, 4 cr. Applied physics at post-high school level covering mechanics of measurement, structure of matter, heat energy, heat engines, sound, and light. Laboratory time provides demonstrations and experiments to clarify principles and procedures covered in lectures. **Prerequisite:** 6370. W, Sp

6405 Plumbing Code and Inspection I, 3 class hrs/wk, 3 cr. Indepth study of plumbing code requirements related to drain, waste, and ventilation systems, water and gas supply systems, sizing systems, fitting, and fixture requirements. W

6409 Structural Plan Review, 2 class hrs and 3 lab hrs/wk, 3 cr. Structural requirements of construction for building inspectors. **Prerequisite:** 4202 or equivalent and 6411. W

6410 Non-structural Plan Review, 1 class hr and 4 lab hrs/wk, 3 cr. How to check and examine plans (except structural) and be able to recognize necessary corrections and additions to fulfill code requirements. **Prerequisites:** 6116 and 6119. Sp

6411 Engineering for the Building Inspector, 3 class hrs/wk, 3 cr. Review of structural plans as they relate to code requirements, including plumbing and mechanical codes correlation. Studies seismic and wind loading problems. **Prerequisite:** 6410. Sp

6415 Structural Inspection/Masonry, 2 class hrs and 4 lab hrs/wk, 3 cr. Covers specific code requirements for all types of masonry construction, both structural and non-structural. Includes an introduction to fireplace construction. W

6420 Techniques of Inspection I, 2 class hrs and 3 lab hrs/wk, 3 cr. *Practical experience of* inspection through the use of audiovisual materials, class discussions, and field trips. W

6421 Techniques of Inspection II, 8 lab hrs/wk, 3 cr. On-the-job training, under the supervision of an instructor or inspector. Various day long field trips allow students to participate in the inspection of buildings under construction. Discussions held during inspection trips. **Prerequisite:** 6420. Sp

6422 Structural Inspection-Steel, 2 class hrs and 3 lab hrs/wk, 3 cr. Steel as a construction material, including its identity as a construction type in light, medium, and heavy steel frame construction, methods of connections, its fire resistive qualities, manufacturing and fabrication processes. **Prerequisite:** 6116 or consent of instructor. W

6423 Introduction to Uniform Building Code, 3 class hrs/wk, 3 cr. Historical and legal foundations of building codes. Compares performance versus specification standards. Emphasizes Uniform Building Code, Uniform Building Code Standards, Uniform Mechanical Code, Uniform Plumbing Code, Uniform Housing Code, and National Electrical Code. General introduction to usage, development, and format of Uniform Building Code and supporting codes. F

6424 Structural Inspection-Concrete, 2 class hrs and 4 lab hrs/wk, 3 cr. A study of concrete as a construction material, as identified by the building code. Its physical properties including mix design, handling, storage, delivery, proper placement, and its fire-resistive qualities. **Prerequisite:** 6116 or approval of instructor. F

6425 Electrical Code and Inspection I, 3 class hrs/wk, 3 cr. Various wiring methods and basic installation standards. How to recognize numerous hazards in new construction as well as in existing construction, and safety procedures for all phases of construction. Sp

6426 Structural Inspection-Wood, 2 class hrs and 3 lab hrs/wk, 3 cr. An introductory course in building inspection of wood structures covering simple wood framing, the requirements of the Uniform Building Code, alternate materials, methods of construction and design, and wood frame design such as beams and shear diaphrams. **Prerequisite:** Dwelling construction under the Uniform Building Code or consent of instructor. F

6430 Building Department Administration, 3 class hrs/wk, 3 cr. An introduction to Oregon law as it relates to the building code. Discusses problems in administrating the code, under the law, enforcement of the law, and legal remedies. Study of case histories in detail. Sp

6500 Surveying Computations, 1 class hr and 6 lab hrs/wk, 3 cr. Introduction to problems normally met in plane surveying. **Prerequisite:** Current enrollment in 6266 and third term of *Civil/Survey Technology program.* Sp

6507 Route Surveying, 2 class hrs and 6 lab hrs/wk, 4 cr. Design and layout on the ground of horizontal and vertical control for boundaries and routes. **Prerequisites:** 6500 and math through trigonometry. Sp

6510 Forest Road Surveying, 2 class hrs and 6 lab hrs/wk, 4 cr. Principles and practices of forest road surveying, design, and layout, including locations in field, grades, profiles, drainage, curves, cross-sections, earthwork computations, slope-staking, and referencing. **Prerequisites:** 4204, 6101 and 6103. Sp

6530 Introduction to Oregon Soils, 2 class hrs and 4 lab hrs/wk, 4 cr. Survey of types of soils, problems of soil preparation, drainage, organic matter, soil supplement, pH and soil microorganisms, etc. How to evaluate soil and understand how to correct major soil problems for crop production. F

6531 Agriculture Career Survey, 3 class hrs/wk, 3 cr. Survey of such employment opportunities available in agriculture fields, as marketing, sales, management, processing, production. Guests discuss employment, training, and salary with students. F

6532 Plant Science, 2 class hrs and 4 lab hrs/wk, 4 cr. A basic course on anatomy, physiology, morphology, and genetics of agricultural plants. Covers basics of plant identification. F

6533 Basic Orchard Practices, 2 class hrs and 4 lab hrs/wk, 4 cr. Pruning, grafting, training and production of fruit trees. Basic requirements for establishing new orchards. **Prerequisite:** 6530, 6532, 6536 or consent of instructor. W

6536 Soil Management, 2 class hrs and 4 lab hrs/wk, 4 cr. Soils-crop relationship. How to collect soil samples for nematode, insect, and chemical analysis. Crop yield with relation to fertilizer recommendations and methods of applications. How to read and interpret soil and leaf analysis by Oregon State University soil lab. **Prerequisite:** 6530. W

6537 Pesticide Safety and Regulations, 3 class hrs/wk, 3 cr. Covers major topics in pesticide safety and current state and federal regulations. Preparation for both private and commercial pesticide applicators license exams. Sp

6538 Weed Identification and Control, 2 class hrs and 2 lab hrs/wk, 3 cr. How to recognize most of the common weeds in the valley. Methods of weed control and management. Students prepare weed collections. Sp

6539 Farm Survey and Measurement, 2 class hrs and 2 lab hrs/wk, 3 cr. Survey, measurements, and mapping farm lands to be used for basic construction of farm buildings, roads, irrigation, and drainage systems. **Prerequisites:** 4202 or equivalent, concurrent registration in 6540 or placement test and consent of instructor. Sp

6540 Irrigation and Drainage, 2 class hrs and 4 lab hrs/wk, 4 cr. Basic methods of irrigation and drainage. How to plan a sprinkler system, select sprinkler head, pumps and pipes. Basic water laws. Practice irrigation and drainage systems. **Prerequisites:** 4200, 4202, and 6539 or consent of instructor. Sp

6542 Plant Identification (Agricultural and Ornamental), 2 class hrs and 2 lab hrs/wk, 3 cr. How to recognize common agricultural and ornamental plants. Students prepare a plant collection. **Prerequisite:** 6532 or consent of instructor. Sp

6543 Agricultural Economics and Farm Management, 3 class hrs/wk, 3 cr. Introduction to farm management, marketing, finance, and land economics. **Prerequisite:** 4200, 4202, 6923 or equivalent or consent of instructor. F

6544 Orchard Production, 2 class hrs and 4 lab hrs/wk, 3 cr. Management and production of established orchard crops. Includes pruning, fertilizer, weed, insect, and disease management and other cultural and harvesting equipment. **Prerequisite:** 6530, 6532, 6533 and 6536 or consent of instructor.

6548 Field Crop Production, 2 class hrs and 4 lab hrs/wk, 3 cr. Management and production of grain and legume crops. Includes preparation and management of field crops and harvesting equipment. **Prerequisites:** 6530, 6532, 6536 or consent of instructor. F

6550 Agricultural Marketing, 3 class hrs/wk, 3 cr. Methods of marketing agricultural products, cooperative marketing, price determination, margins, costs, profits, marketing agreements, and commodity markets. **Prerequisites:** 4200, 4202, 6923, 6543 and 2109 or consent of instructor. W

6552 Agricultural Finance and Banking, 3 class hrs/wk, 3 cr. Farm finance requirements, credit arrangements and sources, cash flow, costs analysis, taxes, insurance, and farm capital management. Sp

6553 Vegetable Crop Production, 2 class hrs and 4 lab hrs/wk, 3 cr. Production and management of vegetable and seed crops, preparation, fertilization, weed and pest control, and harvesting equipment. Sp

6554 Agriculture Seminar, 1 class hr/wk, 1 cr. Formal presentation and discussions of topics in agriculture technology. Includes students and instructors. Sp

6556 Fertilizers and Plant Nutrition, 2 class hrs and 4 lab hrs/wk, 4 cr. Types of fertilizers, fertilizer requirements and regulations, fertilizers and crop problems, and fertilizer calculations and analysis. **Prerequisites:** 4200, 4202 (6530 and 6536 if possible) or consent of instructor.

6557 Farm Equipment Repair and Maintenance, 2 class hrs and 4 lab hrs/wk, 3 cr. A review of the principles of maintenance and repair of farm equipment emphasizing locally used equipment. **Prerequisites:** 4172, 4200, and 4202. W

6558 Agricultural Insects, 2 class hrs and 4 lab hrs/wk, 4 cr. Common insects and their damage to crops. Insect survey and management, lab and field study. Students prepare insect collections. Sp

6559 Plant Diseases, 2 class hrs and 4 lab hrs/wk, 4 cr. Common diseases responsible for damage to crops, survey, and management. Recognition of diseases of agricultural crops through laboratory and field studies. Sp

6560 Christmas Tree Production, 2 class hrs and 3 lab hrs/wk, 3 cr. Methods of establishing, operating, and managing Christmas tree farms. **Offered as needed.**

6561 Construction of Farm Buildings and Farm Building Codes, 3 class hrs/wk, 3 cr. Proper design and material selection for agriculture building construction. Includes pole buildings, greenhouses, fencing, and other farm structures. Covers land use and building code regulations related to agriculture. **Offered as needed.**

6562 Crop Improvements and Certification Programs, 3 class hrs/wk, 3 cr. Methods of improving crop production emphasizing potato, mint, bean, stone fruit, and other certification programs. **Offered as needed.**

6563 Current Agriculture Problems and Environment, 2 class hrs/wk, 2 cr. Discusses agriculture problems with relation to environment, including pesticide residue, fertilizer contamination, farm waste, field burning, and possible alternatives. **Offered as needed.**

6564 Elevator Operations, 2 class hrs/wk, 2 cr. A study of elevator operations and maintenance and methods used for storage, fumigation, and cleaning. **Offered as needed.**

6565 Farm Records, 3 class hrs/wk, 3 cr. Farm record keeping and budget analysis. Cost accounting of different farm operations. **Offered as needed.**

6566 Grape Production and Management, 3 class hrs/wk, 3 cr. Establishing, training, managing, and marketing grapes in the Willamette Valley. **Offered as needed.**

6567 Introduction to Agricultural Microbiology, 2 class hrs and 4 lab hrs/wk, 4 cr. Basic study of such microorganisms as fungi, bacteria, nematode, and viruses related to agricultural crops. **Offered as needed.**

6568 Nursery and Greenhouse Problems, 3 class hrs/wk, 3 cr. Basic study of pest management (involves weeds, insects, and disease, etc.). Includes current pest and nutritional problems, soil mixes, and plant requirements. **Offered as needed.**

6569 Plant Clinic, 1 class hr and 3 lab hrs/wk, 2 cr. How to recognize problems associated with agricultural crops. **Offered as needed.**

6570 Plant Propagation, 2 class hrs and 4 lab hrs/wk, 4 cr. Methods of propagation of fruit and ornamental crops. **Offered as needed.**

6571 Seed Crop Production, 3 class hrs and 4 lab hrs/wk, 4 cr. Production and management of seed crops, their requirements, operations, and marketing. Reviews rules and regulations, governing seed production. **Offered as needed.**

6572 Seed Quality and Testing, 2 class hrs and 4 lab hrs/wk, 4 cr. Study of seed cleaning, processing, grading, and testing techniques. Basic identification of weed seeds, insects, and diseases associated with seeds. Reviews programs of seed certification and phytosanitary certificate requirements. **Offered as needed.**

6573 Small Fruit Production, 3 class hrs and 4 lab hrs/wk, 4 cr. Fundamentals of the establishment, operation, management, and marketing of small fruits. **Offered as needed.**

6574 Soil Preparation, Equipment Operation, and Maintenance, 2 class hrs and 3 lab hrs/wk, 3 cr. Review of basic soil preparation, equipment operation and maintenance, and the timing of fall and spring activities. **Offered as needed.**

6575 Spray Equipment, Operation, and Maintenance, 2 class hrs and 3 lab hrs/wk, 3 cr. Basic operations, calibrations, and maintenance of power equipment. How to assemble and calibrate different types of power sprayers. **Prerequisites:** 4200, 4202 or consent of instructor. **Offered as needed.**

6576 State Agriculture Laws, Grades, and Standards, 3 class hrs/wk, 3 cr. Study of federal and state laws governing crop production, interstate and international shipment of crops. **Offered as needed.**

6577 Nursery and Greenhouse Operations, 2 class hrs and 4 lab hrs/wk, 3 cr. The operation and management of nurseries, including an introduction to basic methods of plant propagation, fertilization, environmental control, and other operations. **Offered as needed.**

6600 Elements of Metallurgy, 3 class hrs/wk, 3 cr. A study of basic metallurgical theories as they apply to the welding industry. **Prerequisite:** 4300. Sp

6602 Metallurgy, 2 class hrs and 3 lab hrs/wk, 3 cr. Principles relating to metals, structures and physical properties. Explores the uses, heat treatments, and testing of various metals. Laboratory time provides demonstrations and experiments to aid classroom studies. **Prerequisite:** 6275 or equivalent. W

6606 Manufacturing Processes, 2 class hrs and 3 lab hrs/wk, 3 cr. Manufacturing materials and fundamental types of manufacturing methods as employed in cold working process. Lectures, demonstrations, and practical applications familiarize students with various types of machine tools, tooling, measuring, inspection procedures. Introduces automation and information on modern practices of numerical control for machine tools. W

6612 Electromechanical Devices II, 3 class hrs and 3 lab hrs/wk, 4 cr. Introduces basic electromechanical devices and combines them with units studied in 6243 and 6247 into basic control systems. Study of the effects of alignment, loading, and system response. Analyzes design and faults. **Prerequisite:** 6247 and 6243. F

6918 Applied Business Math, 3 class hrs/wk, 3 cr. Applications of arithmetic to the world of business and commerce. Includes insurance, depreciation, taxes, stocks and bonds. **Prerequisite:** 4201. W, Sp

6920 Computer Environment, 3 class hrs/wk, 3 cr. Computer systems, and how they affect our lives currently. Includes brief introduction to BASIC language. **F, W, Sp, Su**

6923 Accounting Procedures I, 4 class hrs/wk, 4 cr. Business accounting, including basic procedures using the double-entry system and accounting cycles for service and merchandising businesses. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's two-year accounting curriculum. **Prerequisite:** 4201 or consent of instructor. **W, Sp**

6924 Accounting Procedures II, 4 class hrs/wk, 4 cr. Double-entry accounting procedures used by merchandising businesses including bank accounts, petty cash, payroll, and voucher systems. Students work through a practice set for a retail business. For students who do not plan to transfer to a four-year college and/or who are not enrolled in Chemeketa's accounting curriculum. **Prerequisites:** 4201 and 6923 or consent of instructor. **W**

6925 Accounting Procedures III, 4 class hrs/wk, 4 cr. Accounting for partnerships, corporations, capital stock, corporate earnings, corporate bonds, investments, intangible long-lived assets, and annual reports, manufacturing business, and cost accounting. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's accounting curriculum. **Prerequisite:** 6924 and 6918 or equivalent, or consent of instructor. **Sp**

6930 Computer Applications Using Basic, 3 class hrs and 2 lab hrs/wk, 4 cr. How to load and access typical diskette files on small office computers. How to prepare reports, letters, and financial documents from computer files. **Prerequisite:** Mth151 or equivalent. **F, W**

6935 Basic for Programmers, 3 class hrs and 3 lab hrs/wk, 4 cr. A study of the features and instructions of the Basic language. How to write computer programs using Basic that print reports and build and maintain files. Students develop reports and file contents. **Prerequisite:** 6944 (or concurrently) and BA231 or CS213 or equivalent. **F, W**

6941 Fundamentals of Computer Programming II, 4 class hrs/wk, 4 cr. Continuation of 6948 emphasizing mathematics as applied to data processing. Covers numbering systems with emphasis on binary, hexadecimal, set theory, flow charting; logic problems involving single, double, and triple table handling; table searching, random and sequential file manipulation. **Prerequisite:** 6948; two years of high school algebra or consent of instructor. **W, Sp**

6944 Systems Analysis I, 3 class hrs/wk, 3 cr. Use of procedures as a basic administrative technique. The principles of organizing, planning, and administering a procedure program. Methods of carrying out individual systems and procedure studies. **F**

6945 Systems Analysis II, 3 class hrs/wk, 3 cr. Fundamentals of automated data systems and procedures. Techniques and principles of systems analysis, forms design and control, systems economics, feasibility studies, and the installation of electronic data processing systems. **Sp**

6946 Data Processing Management, 3 class hrs and 3 lab hrs/wk, 4 cr. An introduction to the fundamentals of management and coordination of a data center. **Sp**

6948 Fundamentals of Computer Programming I, 3 class hrs/wk, 3 cr. Beginning course in basic programming concepts oriented toward COBOL programming language. Emphasizes using flowcharts to solve business problems and learning good flowcharting techniques. **F**

6949 System 370 DOS/VS Job Control. 4 class hrs/wk, 4 cr. Advanced study of DOS/VS job control. Includes link edit statements, disk and tape label statements, and utilization of librarian programs for affecting system libraries. **Sp**

6950 Computer Center Operations, 3 class hrs and 8 lab hrs/wk, 5 cr. Study of computer center operations, while providing computer services. Comprehensive instruction in lecture room and data center. Instruction and work experience as data center supervisors, console operators, librarians, peripheral equipment operators, schedulers-dispatchers, and control clerks. Covers technical duties, skills, and responsibilities for each job as they relate to the operation and maintenance of a data center using an IBM 370 computer. **F**

6951 Computer Center Operations II, 3 class hrs/wk, 3 cr. An intermediate course in the operation of a computer center using the IBM/370 Model 125 computing system. Introduces operator commands, computer center standards and procedures, recovery procedures, scheduling considerations, and the physical organization of disks and tapes. Taken concurrently with either 6993 or 6991. **Prerequisites:** 6950 and 6940 (or BA131) or consent of instructor. **W**

6952 Computer Center Operations III, 3 class hrs/wk, 3 cr. Continuation of 6951. **Sp**

6956 System 370 Concepts and Facilities, 3 class hrs/wk, 3 cr. A study of the hardware and software components of the IBM System/370 Model 125 DOS/VS computing system plus an introduction to job control. **W**

6958 Computer Hardware and Software Concepts, 4 class hrs/wk, 4 cr. Hardware and software components of modern computer systems and introduction to job control language. **W**

6961 COBOL I, 3 class hrs and 6 lab hrs/wk, 5 cr. An introduction to ANS COBOL. Codes and documents simple business-oriented programs emphasizing the language structure, data formats, card and sequential disk files, table processing, problem statements, and documentations. Equivalent to BA231. **W**

6963 COBOL II, 3 class hrs and 6 lab hrs/wk, 5 cr. Intermediate course in ANS COBOL. Codes and documents business-oriented programs emphasizing table processing and indexing, sort features, subprograms, segmentation, and sequential and indexed sequential files. **Sp**

6964 COBOL III, 3 class hrs and 6 lab hrs/wk, 5 cr. Advanced course in ANS COBOL. Designing, coding, and documenting complete business application packages. Emphasizes efficiency techniques, VSAM files, independent research, and problem solving. **Prerequisite:** 6963. **W**

6969 Assembler I, 3 class hrs and 6 lab hrs/wk, 5 cr. Part of the computer programming technician curriculum designed to prepare persons for entry employment in computer programming. **F**

6971 OS Concepts and Facilities, 3 class hrs/wk, 3 cr. Concepts and facilities of the IBM OS/VS1 operating system. Introduces IBM OS job control language. Students run exercises on the IBM System 370, Model 125, at the college computer center. **W**

6975 DOS/VS Utility and Librarian Programs, 3 class hrs/wk, 3 cr. Students use utility programs to create and modify files as well as dumping files to the printer. Special purpose utilities copy and restore disk packs and initialize disk packs with label information. Librarian programs manage and update all system libraries. Designed for computer operations students. **Prerequisite:** 6956 or consent of instructor. **Sp**

6976 Data Communications, 2 class hrs/wk, 2 cr. Concepts of data communication and real time data collection. Includes systems as related to programming and operations management. **W**

6979 Keypunch I, 1 class hr and 4 lab hrs/wk, 3 cr. Keypunch machine operation including the preparation and use of drum cards and extensive keypunch practice. **Prerequisite:** 2606 or consent of instructor. **F, W, Sp**

6980 Keypunch II, 1 class hr and 4 lab hrs/wk, 3 cr. A continuation of 6979 with emphasis on speed building and accuracy. **Prerequisite:** 6979 or consent of instructor. **F, W, Sp**

6983 RJE Operation, 2 class hrs/wk, 2 cr. Introduction to concepts and applications of use of remote terminals for file inquiry and update and program processing. Studies of characteristics of different terminals. **W**

6988 RPG for Programmers, 3 class hrs and 3 lab hrs/wk, 4 cr. A study of the features of the RPG II language. Students write computer programs, using RPG II that print reports, and build and maintain files. **Prerequisites:** BA131 and at least one term of some other programming language course or consent of instructor. **Sp**

6991 Computer Center II, 9 lab hrs/wk, 3 cr. Laboratory course taken concurrently with 6951. Experience in the college computer center using an IBM/370 Model 125 computing system. **Prerequisite:** 6950 or consent of instructor. **W**

6992 Computer Center III, 9 lab hrs/wk, 3 cr. Laboratory course taken concurrently with 6952. Experience in the college computer center using an IBM/370 Model 125 computing system. **Prerequisite:** 6951, 6993 (or 6991) and 6956. **Sp**

6993 Computer Center Lab II, 18 lab hrs/wk, 6 cr. See 6991. **W**

6994 Computer Center Lab III, 18 lab hrs/wk, 6 cr. See 6992. **Sp**

6995 Fire Science I, 3 class hrs and 2 lab hrs/wk, 4 cr. Physical and chemical properties of substances, chemical bonds and reactions, ionization, covalent substances. Laboratory time for clarifying demonstrations and experiments. Must be taken in sequence. **Prerequisite:** 5103. **Sp**

6996 Fire Science II, 3 class hrs and 2 lab hrs/wk, 4 cr. Characteristics and behavior of

fire, fundamentals of physical laws, and chemical reactions occurring in fire and fire suppression. Analysis of factors contributing to fire-its cause, rate of burning, heat generation and travel, by-products of combustion and its confinement, control and extinguishment. **F**

7113 Administration of Child Care Centers, 3 class hrs/wk, 3 cr. Areas of administrative responsibility in child care centers. Finances, budget, sources of income, standards and regulatory agencies (local, state, federal), personnel, philosophy, staffing patterns, job descriptions, interviewing, evaluation, in-service training, over-all program planning, parent/community attitudes, and relationships. **Prerequisite:** Second year standing in early childhood education, or consent of instructor. **W, Sp**

7115 Child Nutrition, 3 class hrs/wk, 3 cr. Functional knowledge of human nutrition, emphasizing the needs of the young child. Includes development of sound attitudes and habits toward food and planning adequate meals and snacks for preschool children. **F**

7117 Children's Literature, 3 class hrs/wk, 3 cr. Introduction to literature for preschool children, including picture books, stories, poetry, and classic and current literature. Value of types of books, evaluating and choosing books, and ways to share books with young children. **Prerequisite:** Second year standing in early childhood education or consent of instructor. **W**

7119 Development in Childhood I, 3 class hrs/wk, 3 cr. Basic principles of growth and development, prenatal through age two. Emphasizes physical, intellectual, emotional, and social development in children. **F, occasionally Sp**

7120 Development in Childhood II, 3 class hrs/wk, 3 cr. Continuation of 7119. Basic principles of growth and development, ages three through eleven. Emphasizes physical, intellectual, emotional, and social development in preschool children. **Prerequisite:** 7119. **W, occasionally F**

7121 Directed Participation I, 3 class hrs and 12 lab hrs/wk, 7 cr. Supervised teaching of children in Chemeketa's child development center. **Prerequisites:** Second-year standing and 7135. **F, W, Sp**

7122 Directed Participation II, 3 class hrs and 15 lab hrs/wk, 8 cr. A continuation of 7121 with different age group of young children. Supervised teaching of children in Chemeketa's child development center. **Prerequisites:** Second-year standing and 7121. **F, W, Sp**

7123 Environments for Young Children, 3 class hrs/wk, 3 cr. Planning and evaluating environments for preschool children. Includes play, room arrangement, outdoor areas, equipment selection and sources, children's furniture, and "scrounging" for materials usable in a preschool environment. **Prerequisite:** 7124. **F**

7124 Learning Experiences for Young Children, 3 class hrs/wk, 3 cr. Developing, presenting, and evaluating various concepts and activities for preschool children including science, creative expression, nature study, language arts (stories, books, finger plays, dramatic play), numbers, space and time, field trips and visitors, and sensory perception. **Prerequisites:** 7119 and 7120. **Sp**

7125 The Exceptional Child, 3 class hrs/wk, 3 cr. Understanding the characteristics and world of the preschool child who deviates from the average or normal in mental characteristics, sensory abilities, neuromuscular physical characteristics, social or emotional behavior, communication abilities, multiple handicaps, and cultural or economic differences. Includes community resources, curriculum considerations and parent involvement. **Prerequisite:** 7119 and 7120 or consent of instructor. **W, Sp**

7126 Home, School, Community, 3 class hrs/wk. 3 cr. Establishing and maintaining school and community programs for parent education. Learning techniques and skills for developing rapport and communication with parents and families. Using conferences, meetings, and community resources as tools for fostering parent-child relations. **Prerequisites:** 7134 and second-year standing in early childhood education, or consent of instructor. **F**

7129 Introduction to Early Childhood Education, 2 class hrs and 2 lab hrs/wk, 3 cr. Beginning course in early childhood education focusing on historical development, basic philosophies, types of programs for children, and career possibilities in the field. Field trips include observation of preschools, nursery schools, kindergartens, day care centers, Head Start and parent cooperatives. **F, W, Sp**

7130 Music for Young Children, 3 class hrs/wk, 3 cr. Introduction to music and related activities appropriate for pre-school children. Includes rhythm and dance, songs and games, use of instruments, use of music for concept formation, enjoyment and appreciation. **Prerequisite:** Second-year standing in early childhood education or consent of instructor. **W**

7131 Observing and Recording in the Preschool, 2 class hrs and 2 lab hrs/wk, 3 cr. Beginning course focusing on the value and use of observations as a teaching tool. Emphasizes self-awareness as it relates to the study of children. Includes weekly lecture-discussions and weekly observations at child development centers. **F, occasionally Sp**

7132 Observing and Guiding Behavior, 2 class hrs and 2 lab hrs/wk, 3 cr. Continuation of the experiences gained in observing and recording in the preschool. Emphasizes the role of the teacher, guidance, and classroom management techniques, and improving and utilizing recording and reporting. Includes weekly observations at child development centers. **Prerequisite:** 7131. **W, occasionally F**

7134 Supervised Field Experience I, 1 class hr and 6 lab hrs/wk, 3 cr. Working with young children in an organized setting and assisting with supervision of various daily activities in a preschool program. **Prerequisite:** 7131, 7132, 7119, and 7120. **F, W, Sp**

7135 Supervised Field Experience II, 1 class hr and 9 lab hrs/wk, 4 cr. Continuation of 7134. Includes some planning, executing, and evaluating of curriculum materials appropriate for children. **Prerequisite:** 7134. **F, W, Sp**

7136 Creative Activities, 2 class hrs and 2 lab hrs/wk, 3 cr. Examination of and experience with various media and activities that promote creative growth in young children. Includes understanding the value of various activities, experiencing them in a laboratory, how to present them to children and appropriate selec-

tion and timing of activities. Includes art activities and materials, puppets, finger plays, flannel boards, and the use of nature. **Prerequisite:** 7119, 7120 or consent of instructor. Sp

7139 Child Abuse and Neglect, 3 class hrs/wk, 3 cr. Abnormal child rearing practices, including physical injury, child neglect, failure to thrive, and emotional abuse. Emphasis on how-to and what-to-do in dealing with problems relating to child abuse. Includes treatment alternatives for abusive parents or custodians. W

7140 Kindergarten Education, 3 class hrs/wk, 3 cr. Focuses on the kindergarten child and how he/she learns. Developing, planning, and implementing an appropriate kindergarten curriculum. Includes evaluation of materials and methods of kindergarten, current issues of kindergarten, education, and making the transition to elementary school. F, Sp

7142 Child Care for Elementary School Children, 3 class hrs/wk, 3 cr. Developmental approach to providing child care for elementary school children 6 to 11 years of age. Includes child development, needs, guidance, programs, environment, equipment, parent and community involvement, staffing, administration, finances, and state and federal standards. **F, other terms as needed.**

7145 STEP-Systematic Training for Effective Parenting, 3 class hrs/wk, 3 cr. A realistic approach to parent-child relationships. Students share experiences of common concern, identify typical responses to family problem situations, and learn to practice specific child-training principles and techniques. **Offered as needed.**

9184 Pre-Training Roofers, 3 lab hrs/wk, Technical and lab experiences to develop skills required of apprentice roofers.

9244 Introduction to Commercial Lending, 3 class hrs/wk, 3 cr. A survey of a bank's commercial lending division and its functions. Includes four aspects of commercial lending: economic process, lending process, management of loan portfolios, and influences of regulation and business development on commercial lending. **Prerequisite:** Current employment in banking, background in education or training in banking or consent of instructor. **Offered as needed.**

9245 Loan and Discount Series-AIB, 3 class hrs/wk, 3 cr. Covers promissory notes, supporting documents, concepts of secure transactions; how to calculate interests and discount commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by bonds, stocks, and savings accounts; and concepts of attachment, perfections, priority, defaults, and foreclosure. Specifically useful for notetellers and commercial lending clerks. **Prerequisite:** Employment in banking industry or consent of instructor. **Offered as needed.**

9246 Personality and Stress AIB, 3 class hrs/wk, 3 cr. Transactional analysis, stress management skills, and techniques useful in dealing with stressful situations on the job to help people understand why they react to people and situations as they do. How to analyze one's personality and learn to make needed changes to cope with day-to-day stress. **Offered as needed.**

9249 Speaking to Communicate, 1 class hr/wk, 1 cr. How to prepare and present speeches with a specific message for a specific audience in order to achieve a specific response. Sp

9250 Teller Training and Development, 3 class hrs/wk, 1 cr. Helps bank tellers develop and improve abilities and knowledge essential in performance of their duties. Emphasizes tellers' responsibilities in dealing with customers and in carrying out normal banking procedures. **Prerequisite:** Students must be employed by a bank and be recommended by their supervisors. F, Sp

9266 Consumer Counselor Training, 3 class hrs/wk, 3 cr. Effective interview techniques and strategies for discovering and meeting customer needs. Assertiveness training to help students develop expertise in effective communication with customers. **Prerequisite:** Business experience desirable, **Offered as needed.**

9267 Introduction to Savings Association Business-IFE 060, 3 class hrs/wk, 3 cr. The role of savings associations in the modern business world. Historical development, present day organization, competition and future direction. **Offered as needed.**

9272 Time Management, 3 class hrs/wk, 1 cr. A mini workshop on effective time management. **Offered as needed.**

9277 Supervisory Personnel Management I-IFE, 3 class hrs/wk, 3 cr. Basic knowledge and concepts necessary to be an effective supervisor. An up-to-date review of supervisory principles and concepts. **Prerequisite:** Business background helpful. **Offered as needed.**

9280 Mortgage Loan Servicing-IFE, 3 class hrs/wk, 3 cr. Procedures for loan servicing including processing payments, escrow accounts, real estate taxes, insurance and contract changes; securing delinquent loans; foreclosures and real estate are also examined. **Prerequisite:** Basic mathematical skills. 9253 is recommended. **Offered as needed.**

9283 Interviewing/Counseling, 1 class hr/wk, 1 cr. An in-depth study of various aspects of interviewing and counseling. May help students in supervising others and improving management skills. **Offered as needed.**

9289 Savings Accounts-IFE, 3 class hrs/wk, 3 cr. A study of savings and loan associations savings accounts, including types of ownership, and unique problems. Geared for employees in savings and loan association savings departments, especially those with customer of supervisor/manager responsibilities. **Offered as needed.**

9289A Savings Accounts Administration, 3 class hrs/wk, 3 cr. Continuation of 9289, emphasizing the administration and insurance of savings accounts. **Prerequisites:** 9267 and 9289. **Offered as needed.**

9298 Small Business Management I, 6 class hrs and 9 lab hrs/wk, 34 wks. Basic economic management principles and their practical application in each cooperating family's business operation. **Prerequisite:** Admission to small business management program. **One year course beginning fall term.**

9298A Small Business Management II, 6 class hrs and 9 lab hrs/wk, 34 wks. Continuation of 9298. **One year course beginning fall term.**

9298B Small Business Management III, 6 class hrs and 9 lab hrs/wk, 34 wks. Continuation of 9298A. **One year course beginning fall term.**

9464 Obstetrical Nursing, 2 class hrs and 1 lab hr/wk, 3 cr. Basic elements of parent and fetal responses to childbirth. Includes anatomy and physiology of reproduction, ante partum, birth, post partum, complications, fetal development and care of the newborn. For practicing nurses and students. 30 hours. **Prerequisite:** Registered Nurse or generic nursing student. **Offered as needed.**

9500 Elements of Supervision, 3 class hrs/wk, 3 cr. Basic duties, responsibilities, and role of a supervisor in a state or local government agency. F, W, Sp, Su

9501 Written Communications, 3 class hrs/wk, 3 cr. Assists employees to look critically at their writing styles and skills, develop new skills, and apply them on the job. F, W, Sp

9503 Oral Communications, 3 class hrs/wk, 3 cr. Communications systems in organizations and communications skills required of supervisors. Includes extensive skill practice exercises. F, W, Sp

9512 Work Analysis/Simplification, 3 class hrs/wk, 3 cr. Concepts and techniques of work simplification for employees. Approach to increased productivity through improved use of time and available resources. F, W, Sp

9524 Time Management Seminar: Management Skills for Bankers, 3 class hrs/wk, 1 cr. Identifies and examines key techniques, strategies and principles for time management. How to pinpoint key strengths and weaknesses and initiate corrective action if indicated. **Prerequisite:** Current employment in bank management, previous banking experience or training or consent of instructor. **Offered as needed.**

9535A Materials Selection, 3 class hrs/wk, 3 cr. How to select materials in different subject areas for small and medium-size libraries. Includes philosophy of selection, selection tools, weeding programs, and selection of materials by subject and type. **Prerequisite:** Current employment in a library, previous library experience or training or consent of instructor. **Offered as needed.**

9536 Government Documents/Oregoniana, 3 class hrs/wk, 3 cr. Selection, acquisition, organization, and use of state, local, and federal documents. Emphasizes use of census materials, government-produced maps, and OrDocs, a classification scheme for Oregon state publications. Includes information on location and content of Oregon historical records and major bibliographic guides to Oregon materials and authors. **Prerequisite:** For library employees only. **Offered as needed.**

9537 Building and Using a Library Catalog, 3 class hrs/wk, 3 cr. Theory and practice in organizing library materials and using library catalogs. **Prerequisite:** Library employees or persons with experience in library work. **Offered as needed.**

9538 Basic Reference, 3 lab hrs/wk, 3 cr. Introduction to basic reference sources and theory of reference services, with special emphasis on reference interviews. For library employees.

9539A Principles of Risk Management and Insurance-CPCU 1, 4 class hrs/wk, 4 cr. Insurance risk management concepts and framework, basic legal concepts and fundamentals of insurance contracts. **Offered as needed.**

9540 Economic Security and Individual Life Insurance (CLU-HS301), 4 class hrs/wk, 4 cr. Role of life and health insurance in meeting economic security needs, types of individual and special life and annuity contracts, individual health insurance contracts and mathematics of life insurance as related to premiums, reserves, nonforfeiture values, surplus, and dividends. **F**

9541 Life Insurance Law and Mathematics (CLU-HS302) 4 class hrs/wk, 4 cr. Legal aspects of contract formation, policy provisions, assignments, ownership rights, creditor rights, beneficiary designations, disposition of life insurance proceeds and settlement options. Covers mathematics of insurance such as probability concepts, premiums, policy reserves, non-forfeiture values, and surplus and dividends. **W**

9542 Group Insurance and Social Insurance (CLU-HS303), 4 class hrs/wk, 4 cr. Analysis of group life and group health insurance, including products, marketing, underwriting, reinsurance, premiums and reserves. Discusses socio-economic problems related to death, old age, unemployment, and disability. **F**

9543 Pension Planning (CLU-HS308), 4 class hrs/wk, 4 cr. Basic features of pension plans including cost factors, funding instruments and tax considerations involved in private pensions, profit-sharing plans, and tax-deferred annuities. Covers thrift and savings plans and plans for the self-employed. **W**

9544 Income Taxation (CLU-HS307), 4 class hrs/wk, 4 cr. The federal income tax system with particular reference to the taxation of life insurance and annuities. The income taxation of individuals, sole proprietorships, partnerships, corporations, trusts, and estates. Includes the income taxation of transactions involving annuities and life and health insurance. **F**

9545 Investments and Family Financial Management (CLU-HS306), 4 class hrs/wk, 4 cr. Various aspects of investment principles and their application to family management. Includes yields, limited income securities, growth factors, analysis of financial statements, family budgeting, property insurance, mutual funds, common stocks, real estate, variable annuities and aspects of other investment media. **W**

9546 Accounting and Finance (CLU-HS305), 4 class hrs/wk, 4 cr. Basic accounting principles including data accumulation systems, income measurement, valuation of assets and liabilities, and financial analysis. The accounting process from the recording of a business transaction in the books of account to the final preparation of financial statements. Various sources of short-term, intermediate-term, and long-term funds available to a business enterprise. **F**

9547 Economics (CLU-HS304), 4 class hrs/wk, 4 cr. An introduction to economics. Covers operation of mixed economy, measurement of national income, business cycles and forecasting, money, banking, monetary policy, fiscal policy/employment stability, supply/demand, competition, trust, and international trade. **W**

9548 Business Insurance (CLU-HS309), 4 class hrs/wk, 4 cr. Business uses of life and health insurance, including proprietorship, partnership and corporation continuation problems, and their solutions through the use of buy-sell agreements properly funded to preserve and distribute business values. Includes other business uses of life and health insurance, such as key man insurance, nonqualified deferred compensation plans, and split-dollar plans. **F**

9549 Estate Planning and Taxation (CLU-HS310), 4 class hrs/wk, 4 cr. Estate and tax planning, emphasizing the nature, valuation, disposition, administration, and taxation of property. The use of revocable and irrevocable trusts, testamentary trusts, life insurance, powers of appointment, wills, lifetime gifts, and marital deductions. The role of life insurance in minimizing the financial problems of the estate owner.

9752 Selecting Data Processing Systems, 3 class hrs/wk, 3 cr. Application of system design techniques needed to define hardware and software requirements of a small business computer system and a survey of some available systems. Emphasizes cost justification of any system. **F, W, Sp**

9820 Farm Business Management I, 6 class hrs and 9 lab hrs/wk, 34 wks. Basic economic principles for farm operators. Assists in establishing a complete record keeping system including enterprise accounting. **Prerequisite:** Admission to farm business management program. **One year course beginning fall term.**

9821 Farm Business Management II, 6 class hrs and 9 lab hrs/wk, 34 wks. Application of economic principles and analysis of previous years' farm records to make sound management and marketing decisions. **Prerequisite:** 9820. **One year course beginning fall term.**

9822 Farm Business Management III, 6 class hrs and 9 lab hrs/wk, 34 wks. Continuation of records analysis and costs of production. Assists cooperating farm families in farm business reorganization, estate planning, and future transfer of operation. **Prerequisite:** 9821. **One year course beginning fall term.**

9825 Farm Business Management IV, 6 class hrs. and 9 lab hrs/wk, 34 wks. Continuation of 9822. **Prerequisite:** 9822.

9828 Farm Business Management V, 6 class hrs. 9 lab hrs/wk, 34 wks. Continuation of 9825. Includes analysis of records using home computers. **Prerequisite:** 9825.

9951 Teaching Basic Reading and Writing to Older Non-Readers, 1 class hr and 2 lab hrs/wk, 2 cr. Workshop and tutoring experience in teaching basic reading and writing skills to older non-readers. Covers problems of illiterates and implications, the Laubach method of basic language skills instruction, writing simple stories using a controlled vocabulary, and conducting tutorial teaching sequences. **Offered as needed.**

Board of Education

Members of Chemeketa's Board of Education are elected to represent seven geographical zones in the college district.

Cornelius C. Bateson, Salem, zone five, chairperson
Robert Marsh, Dallas, zone seven, vice-chairperson
Michael Holland, Salem, zone one
Roba Rathkey, McMinnville, zone two
Robert Putman, Salem, zone three
Wayne E. Feller, Silverton, zone four
Glenn W. Middleton, Salem, zone six

Staff

Adams, Ruth-Instructor, Science
Adelman, Richard-Instructor, Physical Education
Anderson, Frank-Assistant Director, Evening, Weekend, and Summer Courses
Anderson, Robert-Director, Computer Services
Anderson, Ronald-Instructor, Adult Basic Education/GED
Asher, Gregory-Instructor, Social Science
Atwell, Kenneth-Instructor, Small Business Management

Barnes, Nancy-Diagnostician, Counseling
Barrett, Arthur-Instructor, Electronics
Barth, H. Phil-Assistant Director, Business Services
Bay, Brian-Instructor, Fire Protection
Beckerman, Cecile-Instructor, Secretarial/Clerical
Beebe, Janell-Instructor, Secretarial/Clerical
Berg, Betty-Director, Business/Management
Berger, Gerard-Dean, Student Personnel Services
Berman, Arthur-Instructor, Business/Management
Betterton, Roe-Instructor, Real Estate
Bibler, Robert-Instructor, English and Humanities
Binnie, Arthur-President
Blank, Frank-Director, Registration, Records, and Admissions
Blodget, James-Specialist, Videomedia
Blodget, Kristine-Instructor, Science
Bode, Elizabeth-Instructor, Medical Assisting
Bodtker, Diana-Instructor, Science
Bodtker, Egon-Director, Public Services and Social Science
Borchgrevink, Nancy-Dean, Instructional Services
Bothwell, Bruce-Instructor, Electronics
Boyington, Gary-Instructor, Electronics
Brandt, Werner-Instructor, Data Processing
Briedwell, John-Director, Community Education
Brooks, Bobbie-Specialist, Business Education
Brooks, W. David-Instructor, Accounting/Management
Brown, June-Instructor, Office Skills
Bunch, A. Ray-Instructor, Data Processing
Burris, Jean-Instructor, Educational Aide
Butell, Sue-Instructor, Nursing

Butters, Carolyn-Coordinator, Stayton Center
Buttles, George-Instructor, Human Resource Technology
Byers, Maxine-Instructor, Study Skills

Campbell, Lorraine-Specialist, Family Development
Canning, Dawn-Instructor, Early Childhood Education
Caster, John-Instructor, Farm Business Management
China, Cheryl-Counselor
Circle, Mel-Instructor, Electronics
Close, Jimmie-Instructor, Accounting/Management
Clyde, John-Counselor
Cochrane, Edward-Instructor, Social Science
Cockrell, Barbara-Instructor, Secretarial/Clerical
Cockrell, James-Instructor, Insurance
Concepcion, Paul-Instructor, Human Resource Technology
Concepcion, Sandra-Instructor, English and Humanities
Connor, Marilyn-Instructor, Communication Skills
Cooter, Stephan-Instructor, English and Humanities
Cornutt, Delvin-Instructor, Social Sciences
Coskey, Jack-Instructor, Surveying/Forestry
Couse, Lyle-Instructor, Accounting/Management
Cox, Drexel-Director, Personnel

Davey, Don-Instructor, Civil Engineering
Davey, Stan-Director, Facilities and Operations
Davies, Henry-Instructor, Forestry
Davis, L. Anne-Counselor
Dethloff, Ralph-Instructor, Automotive Technology
Dill, Cecil-Specialist, Emergency/Fire Protection Services
Dixon, Robert-Instructor, Welding/Machine Mechanical
Dodge, Thomas-Instructor, Welding/Machine Mechanical
Doeneka, Molly-Instructor, Social Science

Eldred, Carolyn-Counselor
Elling, Kay-Instructor, Science
Elliott, Laverne-Instructor, Nursing
Emerson, Willard-Instructor, Fire Protection
Endler, Henry-Director, Trades
Eppstein, Robert-Instructor, Building Inspection
Erovick, Joyce-Instructor, Nursing

Farrell, Cathey–Instructor, Emergency Medical Technology
Faust, Dorothy– Instructor, Mathematics
Felton, Maureen–Instructor, Early Childhood Education
Fenske, Helen–Instructor, Human Resource Technology
Field, David–Instructor, Welding/Machine Mechanical
Fishfader, Randy–Instructor, Early Childhood Education
Fitzgerald, George–Instructor, Science
Foley, Dale–Instructor, Building Inspection
Ford, Ed–Instructor, Physical Education
Ford, Lowell–Director, Student Activities and Evaluation
Forest, Jacques–Instructor, Accounting/Management
Foster, Charles–Director, Targeted Services
Frank, R. Bruce–Instructor, Civil Engineering
Freeman, J. Tony–Instructor, Human Resource Technology
French, Marjorie–Instructor, English as a Second Language

Galbraith, Joan–Specialist, Senior Program
Garcia, Francisco–Counselor
Gassner, Gayle–Specialist, Inmate Education
Gerard, Kay–Instructor, Adult Basic Education/GED
Gilbert, Jeremy–Instructor, Social Science
Gill, Tom–Director, Humanities and Communications
Gillette, David–Instructor, Mathematics
Grant, Linda–Instructor, Early Childhood Education
Green, Constance–Director, Financial Aid
Greenbaum, Ken–Instructor, Dental Assisting
Guthrie, Paul–Specialist, Institutional Research and Development

Haines, Beverly–Assistant, Cooperative Work Experience
Hale, Robert–Instructor, Physical Education
Hanby, Steve–Instructor, Welding/Machine Mechanical
Hansen, Dorette–Instructor, Dental Assisting
Hardin, Brian–Director, Financial Services
Hargreaves, Hal–Instructor, English and Humanities
Harker, Keith–Director, Library and Audiovisual Services
Harmon, Millie–Instructor, Sociology
Harris, Lois–Instructor, Nursing
Harris, Ralph–Instructor, Mathematics
Hatfield, Gladys–Director, Allied Health
Heater, Steve–Instructor, Welding/Machine Mechanical
Held, Leonard–Instructor, English and Humanities
Henry, Max–Instructor, Mathematics
Hickok, Nell–Instructor, Nursing
Hilgemann, Vickie–Instructor, Communications
Hodges, Gary–Instructor, Automotive
Hofmann, Ron–Associate Dean, Curriculum and Evaluation
Hoobler, James–Instructor, Science
Houck, Midge–Director, Work Related Experience

Irving, Jan–Instructor, Clinical Nursing

Jackson, Lynn–Instructor, Machine/Mechanical
Jacobson, Lee–Instructor, Art
Jepson, Leland–Instructor, Mathematics
Johnson, Donald–Instructor, Drafting
Jolly, Dale–Instructor, Social Science
Jones, Ben–Counselor
Jones, Lee–Instructor, Mathematics
Judd, Connie–Instructor, Adult Basic Education/GED
Judd, Roger–Instructor, Mathematics

Kalb, Donald–Instructor, Automotive
Kelley, Janette–Counselor
Killpatrick, Paul–Instructor, GED
Kimmel, Fred–Instructor, Drafting
King, James–Instructor, Human Resource Technology
Kirk, Barbara–Instructor, Science
Kirksey, Nancy–Coordinator, Woodburn
Kizziah, John–Instructor, Welding
Koch, Alan–Instructor, Journalism
Koontz, Everett–Specialist, Media Production

Lane, Donna–Associate Dean, Developmental Learning
Langley, Gerald–Instructor, Automotive
Larkin, Hugh–Instructor, Commercial Food Production
Latham, Bob–Instructor, Technology
Lauck, Albert–Director, Science and Mathematics
Leach, Al–Dean, Community and Continuing Education
Leavitt, Judy–Director, Bookstore and Auxiliary Services
Longshore, Glen–Audiovisual Librarian
Loomis, Linda–Catalog Librarian
Lopez, Alberta Faith–Associate Dean, Curriculum and Evaluation
Lund, Eugenia–Instructor, GED, Dallas Center
Lytle, Pat–Specialist, Salem Campus Program

MacDonald, Lucy–Instructor, Developmental Education
Machunze, Diane–Instructor, Criminal Justice
Maguren, Janet–Assistant Director, Nursing
Mathews, Carl–Manager, Purchasing
McDonough, Thomas–Coordinator, Planetarium
McHargue, Ruth–Instructor, Nursing
McLain, Roger–Instructor, Criminal Justice
McLaughlin, Suzanne–Instructor, Romance Languages
McNicholas, Mike–Instructor, Science
McNicholas, Suzanne–Instructor, Human Resource Technology
Merola, Joe–Instructor, Visual Communications
Meyers, Dianne–Instructor, Nursing
Mills, Keith–Instructor, Accounting/Management
Mock, John–Instructor, English and Humanities
Moelhman, Jean–Reference Librarian
Mohn, Elaine–Instructor, Nursing
Moore, George–Associate Dean, Occupational Education
Morris, Martin–Assistant, Cooperative Education
Mount, Joan–Instructor, Adult Basic Education
Myers, James–Instructor, Social Science
Mylan, Irene–Specialist, Employee Development

Nagle, Priscilla–Instructor, Adult Basic Education/GED
Nava, Andy–Assistant Director, Security, Custodial, and Transportation
Neuendorf, Mary–Specialist, Public Information
Nichols, Van–Instructor, Drafting
Nordal, Dorothy–Instructor, Nursing
Nunnelley, Lewis–Instructor, Science
Nystrom, Peggy–Coordinator, Monmouth Center

O'Harra, Kris–Instructor, Communication Skills
Owens, Chris–Instructor, Health
Owings, Colleen–Assistant, Developmental Education

Paldanius, Ward–Director, Physical Education and Athletics
Panasuk, Eugene–Instructor, Farm Business Management
Pape, Becky–Instructor, Nursing
Pilcher, Imon–Instructor, Electronics
Pohl, Leslie–Instructor, Machine Mechanical
Portlock, Melinda–Assistant, Cooperative Work Experience

Reagan, Lucille–Instructor, Secretarial/Clerical
Reed, Donald L.–Instructor, Developmental Educational
Rhodes, Sandra–Instructor, Adult Basic Education
Rice, Leonard–Instructor, Drafting and Mechanical Design
Ringo, Al–Dean, Administrative Services
Ringwald, Beverly–Instructor, Office Occupations
Robinson, Marilyn–Instructor, Mathematics
Rollings, Ron–Instructor, Automotive
Roner, Bennie–Instructor, Electronics
Ross, Gertrude–Instructor, Drafting
Rude, John–Specialist, Project Development
Russell, Margaret–Instructor, Secretarial/Clerical

Samson, Elmer–Instructor, Criminal Justice
Sansone, Steven–Instructor, Physical and Health Education
Sauter, Betty–Instructor, Community Services
Schaefer, William–Instructor, Chemical Technology
Scherf, Joan–Coordinator, Dallas Center
Scheer, Sara–Instructor, Clinical Nursing
Scoggin, Paul–Manager, Food Service
Segura, Bill–Director, Counseling
Sharp, Grady–Instructor, Criminal Justice
Shaw, John–Instructor, Data Processing
Shaw, Robert–Instructor, Visual Communications
Shotts, Phyllis–Instructor, Secretarial/Clerical
Showers, Keith–Instructor, Science
Skirvin, Charles–Counselor
Slonecker, William–Director, Technology
Slosser, Joseph–Instructor, Social Science
Smith, Joseph–Instructor, Trades
Smith, Phyllis–Instructor, Nursing Skills
Smith, Warren–Instructor, Communications
Smith, William–Instructor, Emergency Medical Technology
Soderstrom, Duayne–Counselor
Sorensen, Maurice–Instructor, Developmental Education
Spurgeon, Roy–Specialist, Alternative Delivery Systems
Stafford, Sandra–Instructor, Early Childhood Education
Stam, Bruce–Instructor, Early Childhood Education
Steiner, Ann–Instructor, Adult Basic Education/GED
Steiner, Jerry–Instructor, Mathematics
Streight, Gene–Instructor, Agribusiness and Crop Production
Stubbs, Hazel–Instructor, Nursing
Suter, Paul–Instructor, Communications

Tabor, Patrick–Instructor, Social Science
Terhes, John–Instructor, Communications
Toman, William–Instructor, Emergency Medical Technology
Toole, Darlene–Instructor, Deaf and Hearing Impaired
Trapp, Barbara–Coordinator, Silverton Center
Triplett, Geary–Counselor
Trumbo, Mark–Coordinator, McMinnville Center

Varnum, Sara–Specialist, North and South Salem Programs
Vaughan, Joyce–Instructor, Dental Assisting
Vejlupek, Lillis–Instructor, Early Childhood Education

Wade, DeVon–Instructor, Accounting/Management
Waldroff, Helen–Instructor, Nursing
Wall, David–Instructor, Science
Ward, Harmony Jill–Facilitator, Deaf, Hearing Impaired, and Visually Impaired
Wasson, Barbara–Instructor, Developmental Education
Webster, Margaret–Instructor, Commercial Food Production
Welch, Ray–Director, Center for Alternative Learning
West, Susan–Instructor, Physical Education
White, Howard–Assistant, Apprenticeship and Work Related Experience
White, Robert–Instructor, Electronics
White, Vernon–Instructor, Forestry
Wigginton, Barbara–Instructor, English and Humanities
Wilson, Dan–Instructor, Agribusiness and Crop Production
Wintermeyer, Larry–Instructor, Accounting/Management
Woodnutt, Tom–Specialist, Placement
Wright, Larry–Instructor, Accounting/Management

Zacharias, Patricia–Instructor, Medical Assisting/Health Records

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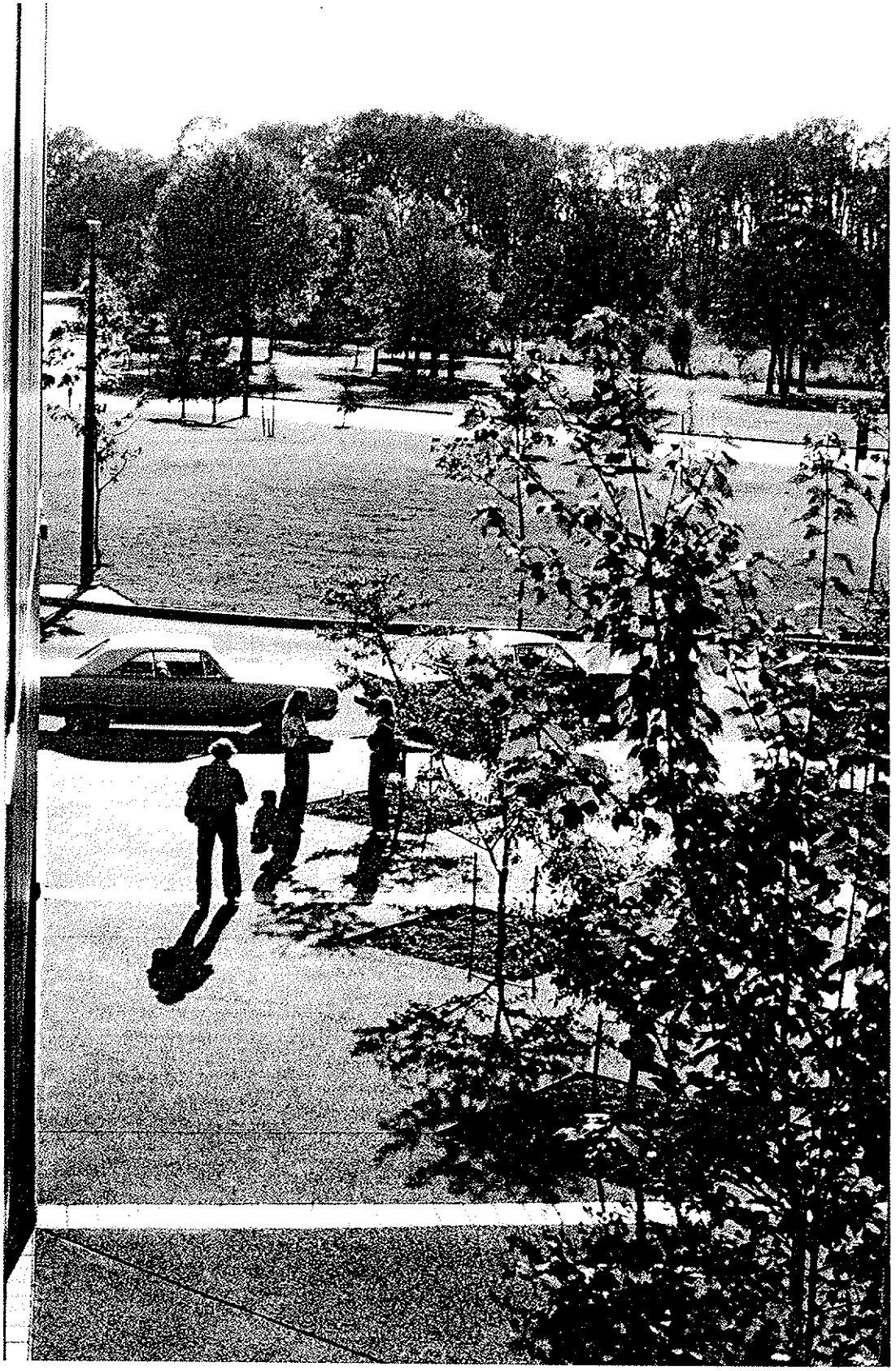
Credits

• Special thanks and recognition go to production supervisor Anne Baum, a second-year Visual Communications student, and to other Visual Communications students who helped with typesetting and production.

• More special thanks to Corinne Loomis whose photographs appear on the front and back covers (art student, greenhouse, and sheet metal machine) and on pages ii, 8, 11, 17, 19, 21, 25, 38, 52, 62, and 73.



CHEMEKETA COMMUNITY COLLEGE

4000 LANCASTER DRIVE N.E. P.O. BOX 14007 SALEM, OREGON 97309 (503) 399-5000

APPLICATION FOR ADMISSION

To be admitted to Chemeketa Community College in any of the programs listed on the reverse side of this form you must complete and return this form to the Admissions Office. You may do this by mail to the above P.O. Box or in person to Building 22, room 110. Questions regarding limited programs, admission requirements for specific programs, or the status of your application should be directed to the Admissions Office at (503) 399-5006.

PLEASE PRINT

Name _____ ☐☐☐ ☐☐ ☐☐☐☐
Last (Maiden Name) First Initial Social Security Number

Mailing Address _____ City _____
Number Street

County _____ State _____ Zip _____ Phone _____

Permanent Address _____ City _____
Number Street

County _____ State _____ Zip _____ Phone _____

Date of Birth ___ | ___ | ___ Age _____ Sex ☐ Female ☐ Male U.S. Citizen ☐ No ☐ Yes
Month Day Year

Schools Attended	Name & Location	Grade Completed	Last Year Attended
Last High School Attended			
College			
Other			

Program Choice _____ Term You Intend to Enter ☐ Fall ☐ Winter ☐ Spring ☐ Summer
(See reverse side)

In Case of Emergency Notify:

Name _____ Address _____ Phone _____

To the best of my knowledge, the above information is correct: Signature _____ Date _____

Chemeketa Community College complies with provisions of the Fair Employment Practices Act and/or Title IX Regulations in employment and educational programs and activities.

5/78 ADM

PROGRAM CHOICES

Your PROGRAM CHOICE must be selected from the following:

ONE AND TWO YEAR VOCATIONAL TECHNICAL PROGRAMS:

Accounting (025)
Agribusiness/Crop Production (625)
Auto Parts Sales (668)
* Automotive Technology (135 - 29A)
Banking & Finance (545)
Building Inspection (635)
Business/Management (026)

Chemical Technology (150)
Civil - Survey Engineering (110)
Clerical Technology (one-year) (023)
Commercial Food Production (one-year) (100)
Computer Operations (one-year) (031)
Computer Programming (032)
Criminal Justice
  Administration Option (048)
  Corrections Option (047)
  Law Enforcement Option (050)
  Law Enforcement Technician Option (046)
  Security Systems Option (049)

* Dental Assisting (one-year) (081 - 29C)
Drafting Technology (142)
Early Childhood Education (060)
Educational Aide (062)
  Classroom Aide
    Kindergarten/Lower Elementary Aide
    Junior/Senior High Educational Aide
  Bilingual/Bicultural Educational Aide
  Handicapped Learner Educational Aide
  Vocational/Technical Educational Aide
Electronics Technology (120)
* Emergency Medical Technology (607 - 29L)

Fire Protection
  Fire Prevention/Insurance Risk Insp. Option (571)
  * Fire Suppression Option (052 - 29D)
Food Service Management (622)
Forest Technology (056)
* Health Records Technology (088 - 29P)
* Human Resource Technology (086 - 29E)

Industrial Technology (160)
Insurance Technology (024)
* Machine Shop Technology (134 - 29F)
* Medical Office Assisting (one-year) (083 - 29M)

* Nursing (084 - 29H)
Office Occupations (500)
Real Estate (040)
Records Management (533)
Secretarial Science
  Engineering Secretary Option (02A)
  Insurance Secretary Option (02C)
  Legal Secretary Option (512)
  Medical Secretary Option (029)
  Professional Secretary Option (028)
* Visual Communications (145 - 29J)
* Welding (one-year) (137 - 29K)
* Welding & Fabrication (136 - 29N)

High School Completion (063)

* Programs which may have special admission requirements or enrollment limits. Please contact the Admissions Office.

AD-15/3/81

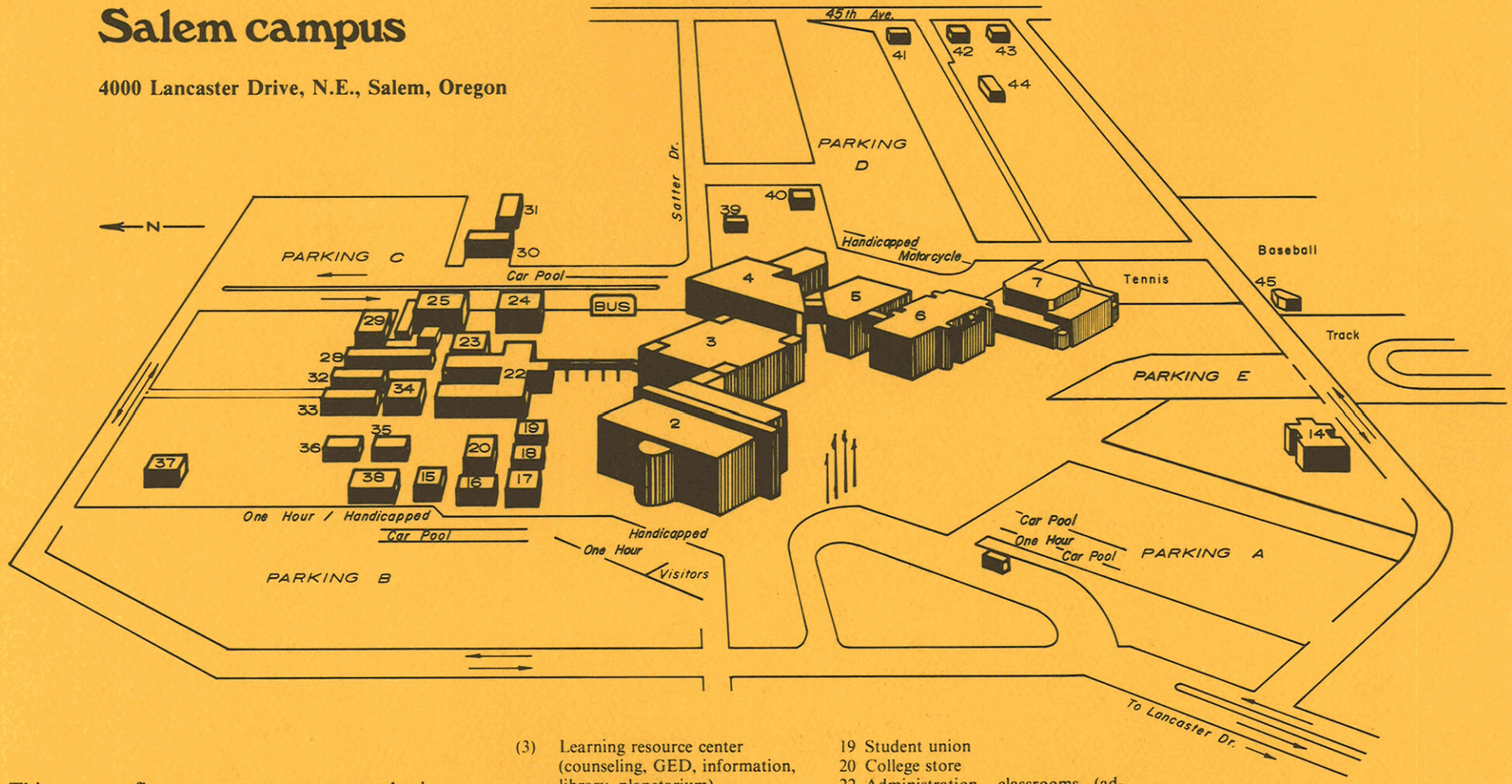
LOWER DIVISION CURRICULUM MAJORS TRANSFERRABLE TO OREGON'S FOUR-YEAR COLLEGES:

LDC - BUSINESS (210)
** Business Administration
** Business Education
  Hotel and Restaurant Management
  Residential Institution Management
LDC - EDUCATION (220)
  Adult and Community Education
  Child Development
** Elementary
** Home Economics
** Secondary
  Special Education
LDC - HEALTH (275)
  Community Health
  Environmental Health
** Health Education
** Nursing
LDC - HUMANITIES (230)
** Art
** English
** Foreign Languages
** General Studies
** Journalism
  Literature
  Music
** Philosophy
** Speech
  Theater
LDC - MATHEMATICS (310)
  Architecture
** Computer Science
** Engineering
** Mathematics
  Statistics
LDC - PE (270)
** Physical Education
  Recreation and Park Management
LDC - SCIENCE (300)
** Agriculture
  Atmospheric Sciences
** Biology
** Botany
** Chemistry
  Fisheries & Wildlife
** Forestry
** Geology
  Horticulture
** Medicine, Dentistry and Veterinary Studies
  Oceanography
  Physical Science
** Physics
** Zoology
LDC - SOCIAL SCIENCES (260)
  American Studies
** Anthropology
  Community Service and Public Affairs
** Economics
  Ethnic Studies
** Geography
** History
  Law Enforcement - Corrections
** Political Science
  Pre-Law
** Psychology
** Sociology
LDC - EXPLORATORY (280)
  Undecided Majors

** Outlines for these selected transfer curriculums are contained in the College catalog.

Salem campus

4000 Lancaster Drive, N.E., Salem, Oregon



This map reflects a new campus numbering system which will take effect between the 1981 summer and fall terms. Before then visitors to the campus will find some buildings numbered differently than they are on the map. For these buildings, the current numbers are indicated in parentheses in the legend below.

(3) Learning resource center (counseling, GED, information, library, planetarium)
3 (1) General classrooms
4 (2) Wilmeth Trade and Industry
5 (2) Technical education
6 (4) Science and health
7 (5) Physical education
14 Fire science
15 Conference/seminar room
16 Staff offices
17 Community and continuing education
18 Student personnel services, administrative services
19 Student union
20 College store
22 Administration, classrooms (admissions, registrar, business office)
23 Staff offices
24 Machine shop
25 Welding shop
28 Classrooms A–F
29 Offices, apprenticeship
30, 31(26, 31) Maintenance and repair
32 Classrooms A–D
33 Shipping and receiving
34 Food service
35 Staff offices
36 Staff offices
37 Child development
38 Math lab, classrooms
39 Staff offices
40 Staff offices, classrooms
41(42)Music annex
42(41)Pottery lab
43 Facilities planning
44(43)Pole building
45(44)Athletic field

Chemeketa Community College
4000 Lancaster Drive N.E.
P.O. Box 14007
Salem, Oregon 97309