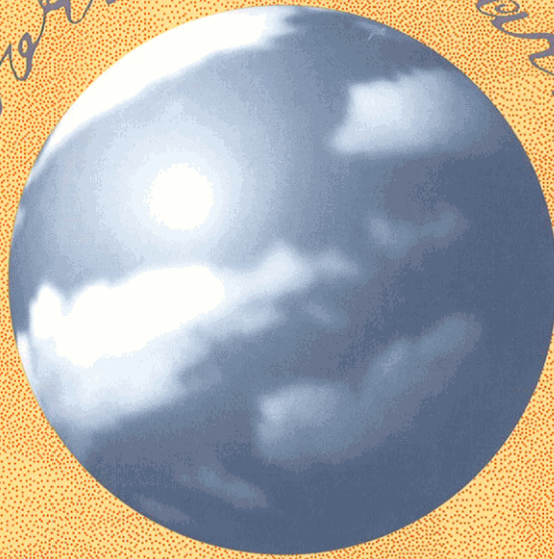


*A world of learning*



**CHEMEKETA**

CHEMEKETA COMMUNITY COLLEGE CATALOG 1993-1994



# CHEMEKETA

COMMUNITY COLLEGE CATALOG 1993-1994



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## PROGRAM CHOICES

## Select one of the following programs of study:

### PROFESSIONAL-TECHNICAL PROGRAMS

- Accounting (025)
- Automotive Technician (129)
- Auto Parts Sales (668)
- Banking and Finance (545)
- \* Building Inspection (635)
  - Pre-Building Inspection (29W)
- Civil-Structural Engineering (110)
- Computer-Aided Design/Computer-Aided Manufacturing (151)
- Computer Electronics Technology (123)
- Computer Programming (032)
- Computer Programming - Microcomputer Support Specialist (038)
- Computer Support (036)
- \* Construction Technology (701)
- Criminal Justice (044)
- \* Dental Assisting (081)
  - Pre-Dental Assisting (29C)
- Drafting Technology - CAD (142)
- Early Childhood Education (060)
- Electronic Engineering (120)
- \* Emergency Medical Technology (607)
  - Pre-Emergency Medical Technology (29L)
- Fire Prevention/Insurance Risk Inspection (571)
- \* Fire Suppression (052)
  - Pre-Fire Suppression (29D)
- Forest Resources Technology (056)
- \* Health Care Support Services - Claims Analyst/Medical Biller (702)
- \* Health Care Support Services - Health Information Technician (098)
- \* Health Care Support Services - Health Services Management (097)
- \* Health Care Support Services - Medical Office Assistant (083)
- \* Health Care Support Services - Medical Receptionist/Clerk (703)
- \* Health Care Support Services - Medical Transcriptionist (096)
- High School Completion (063)
- Hospitality Systems Management (624)
- \* Human Services - Alcohol/Drugs (092)
- \* Human Services - Gerontology (093)
- \* Human Services - Social Services (091)
  - Pre-Human Services (290)
- Industrial Electronics (126)
- Industrial Technology (160)
- \* Instructional Assistant - Multicultural/English as a Second Language (163)
- \* Instructional Assistant - Kindergarten/Primary (164)
- \* Instructional Assistant - Upper Elementary/Middle School (165)
- \* Instructional Assistant - Senior High School/Adult (166)
- \* Instructional Assistant - Special Education (168)
- \* Instructional Assistant - Vocational/Technical (169)
  - Pre-Instructional Assistant (29A)
- Management (026)
- Manufacturing Operations (148)
- Manufacturing Technology (147)
- Mechanical Design (143)
- \* Nursing (084)
  - Pre-Nursing (29H)
- Office Administration and Technology - Engineering Option (520)
- Office Administration and Technology - Executive Option (528)
- Office Administration and Technology - Information Processing (532)
- Office Administration and Technology - Legal Option (514)
- Office Administration and Technology - Medical Option (529)
- Office Administration and Technology - Office Accounting (525)
- Office Administration and Technology - One Year Option (523)
- Office Administration and Technology - Short Term Option (502)
- Professional-Technical Teacher Preparation (161)
- Real Estate (040)
- Survey Technology (638)
- \* Visual Communications (145)
  - Pre-Visual Communications
- Welding (137)
- Welding Fabrication (136)

### LOWER DIVISION COURSES OF STUDY WHICH MAY BE TRANSFERRED TO OREGON'S FOUR-YEAR COLLEGES AND UNIVERSITIES:

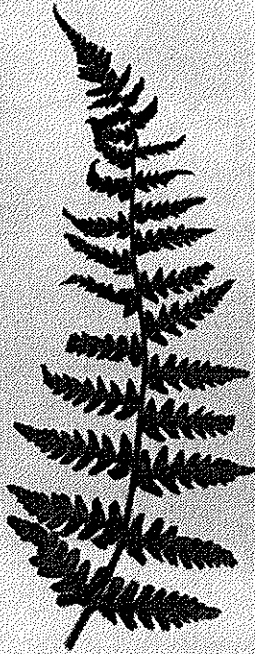
- LDC-BUSINESS (210)**
  - Accounting
  - \*\* Business Administration
- LDC-COMPUTER SCIENCES (320)**
  - \*\* Computer Science
- LDC-EDUCATION (220)**
  - \*\* Elementary
  - \*\* Secondary
- LDC-ENGINEERING (330)**
  - \*\* Engineering
- LDC-FORESTRY (340)**
  - \*\* Forestry
- LDC-GENERAL STUDIES (280)**
  - \*\* Exploratory
  - General Studies
  - Undecided Majors
- LDC-HEALTH (275)**
  - Community Health
  - \*\* Health Education
  - \*\* Nursing
- LDC-HOME ECONOMICS (240)**
  - Child Development
  - \*\* Home Economics
- LDC-HOTEL, RESTAURANT, AND RESORT MANAGEMENT**
  - \*\* Hotel, Restaurant, and Tourism Management (350)
- LDC-HUMANITIES (230)**
  - Architecture
  - \*\* Art
  - \*\* English
  - \*\* Foreign Languages
  - \*\* Journalism
  - Literature
  - \*\* Music
  - \*\* Philosophy
  - \*\* Speech
  - \*\* Theater
- LDC-MATHEMATICS (310)**
  - \*\* Mathematics
- LDC-PHYSICAL EDUCATION / HUMAN MOVEMENT STUDIES (270)**
  - \*\* Physical Education
- LDC-SCIENCE (300)**
  - \*\* Agriculture
  - \*\* Biology
  - \*\* Chemistry
  - \*\* Chiropractic
  - \*\* Dental Hygiene
  - Entomology
  - \*\* Geology
  - Horticulture
  - \*\* Oceanography
  - Physical Science
  - \*\* Physics
  - \*\* Pre-Professional Study  
(Medicine, Dentistry, and Veterinary Medicine)
  - \*\* Zoology
- LDC-SOCIAL SCIENCES (260)**
  - \*\* Anthropology
  - \*\* Economics
  - Ethnic Studies
  - \*\* Geography
  - \*\* History
  - Law Enforcement-Corrections
  - \*\* Political Science
  - Pre-Law
  - \*\* Psychology
  - \*\* Sociology

One star (\*) indicates programs which may have special admission requirements or enrollment limits. PLEASE CONTACT THE ADMISSIONS OFFICE.

Two stars (\*\*) indicate which courses of study are included in the college catalog.

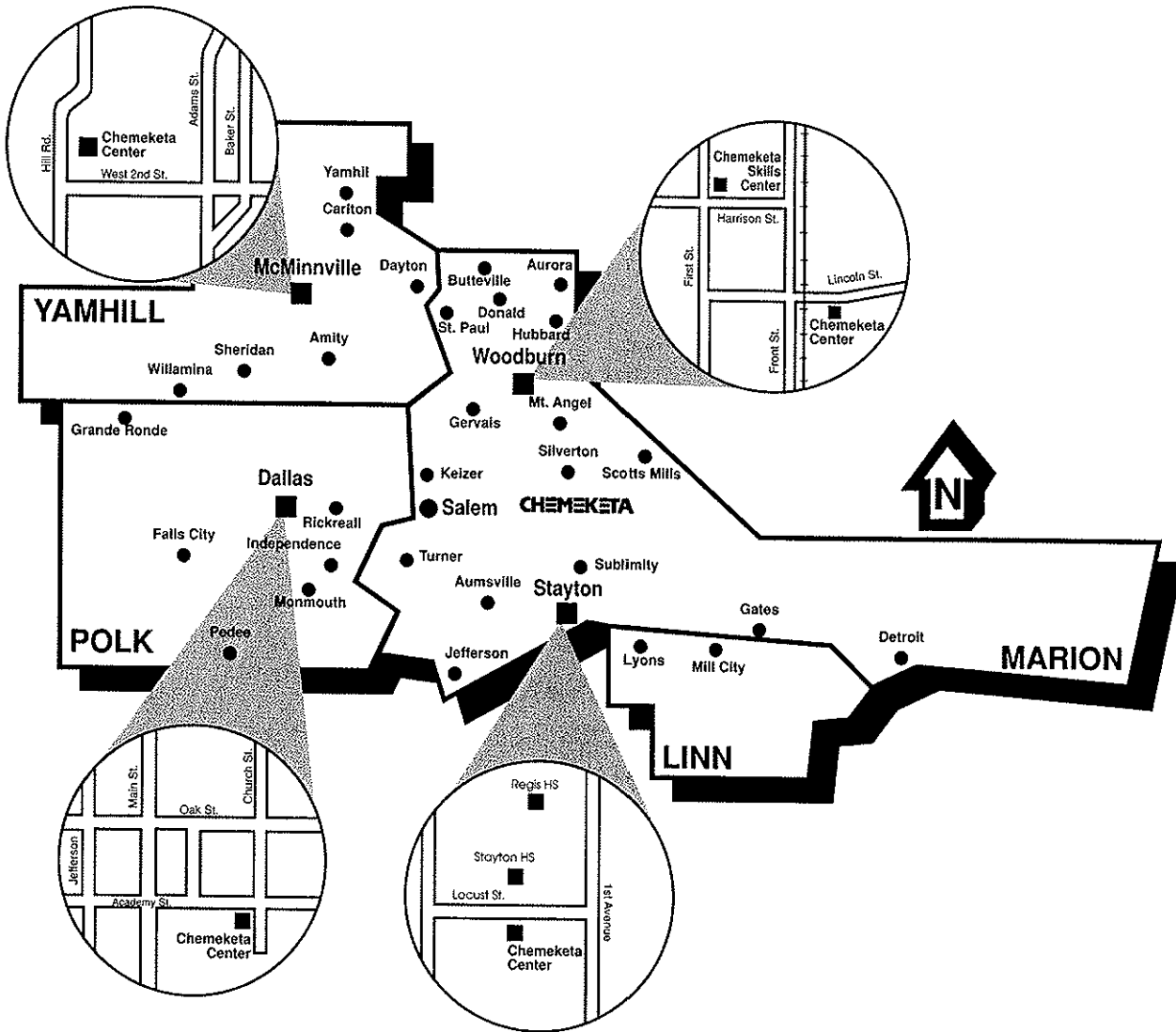


ABOUT CHEMEKETA





# Chemeketa Community College District



## LEGEND

**CHEMEKETA** Salem Campus

- Communities with Chemeketa Centers
- Other communities where Chemeketa classes are held

In addition to the Salem campus, Chemeketa has centers in Dallas, McMinnville, Stayton and Woodburn and offers classes in many other communities in the district.

For a map of the Salem campus, see page 162.





## Welcome to Chemeketa Community College

Chemeketa is your community college. Our goal is to serve all of our students in every way that we can.

You can finish your first two years at Chemeketa, take the professional-technical training you need to qualify for a job, or finish your high school education. You can explore career ideas, retrain or add to your job skills, or get professional help on how to run a business. You can pursue a special interest or broaden your education.

You can fit as much of this as you want into your life. You may go to school full time to finish a one- or two-year program. You may go part time to take a class or workshop or two. You may attend classes and special events on the Salem Campus or at one of our centers in Dallas, McMinnville, Stayton, or Woodburn. We also offer classes in schools and other locations in communities throughout the college district. You can even stay home and take a class by television.

Whatever your goals and interests, we are willing (and usually able) to meet your needs. We want to help you add to the quality of your life.

### What kinds of education does Chemeketa offer?

Basically, Chemeketa has four areas of study:

■ *Professional-technical* education trains students who want to qualify for work in specific fields. We offer more than 40 professional-technical training programs. In some of

these, you may earn a Certificate of Completion in one year. In most programs, you may earn an Associate of Applied Science degree. It usually takes two years to meet the requirements; it may take longer if you attend part time.

In addition to vocational classes, our professional-technical programs include general education courses. The aim of these courses is to help you become more competent in writing and mathematics and gain knowledge of humanities, communications, sciences, and social sciences.

■ *College transfer courses* are for students who wish to continue their education at a four-year college or university. If you successfully complete Chemeketa's two-year college transfer program, you may also earn an Associate of Arts degree. See Page 28 for requirements.

Some of our professional and technical programs also include courses which may be transferred for college credit. For more specific information, consult with a Chemeketa counselor or advisor, or with the four-year institution you wish to attend. Generally, transfer courses are numbered 100 or above.

■ *Lifelong learning* is important at Chemeketa. We encourage you to continue to learn throughout your life. We offer many credit and non-credit classes, workshops, and short courses. Chemeketa classes can help you to improve your technical, vocational, avocational, and academic knowledge and skills; to retrain for new positions; and to continue your personal development.



# Academic Calendar

	Fall 1993	Winter 1994	Spring 1994	Summer 1994	Fall 1994 (tentative)
Registration*	Sept. 23-24	Jan. 3	March 28	June 20	Sept. 22-23
Evening classes begin	Sept. 27	Jan. 3	March 28	June 20	Sept. 26
Day classes begin	Sept. 27	Jan. 3	March 28	June 20	Sept. 26
Last day to withdraw and receive a refund	Oct. 8	Jan. 14	April 8	July 1	Oct. 7
Last day to register or add classes	Oct. 15	Jan. 21	April 15	July 8	Oct. 14
Audit requests due	Oct. 22	Jan. 28	April 22	July 15	Oct. 21
Applications for next term's graduation due	Oct. 22	Jan. 28	April 22	July 15	Oct. 21
Holidays	Nov. 11 Nov. 25, 26	Jan. 17	May 30	July 4	Nov. 11 Nov. 24, 25
Last day to withdraw from classes without responsibility for grades	Nov. 29	Feb. 25	May 20	July 22	Nov. 28
Review and final examination	Dec. 13-16	Mar. 14-17	June 6-9	Aug. 8-11	Dec. 12-15
End of term	Dec. 17	Mar. 18	June 10	Aug. 12	Dec. 16
<b>Graduation</b>					
GED and High School Completion			June 11		
One- and two-year programs			June 11		

*\*Dates are subject to change. Please check each term's Schedule of Classes for registration and early registration information.*



■ *Developmental skill building classes* are offered for people who want to learn basic reading, writing, mathematics, and study skills, or finish high school, or learn English as a second language.

Chemeketa schedules classes during the day, evenings, and on weekends.

### **Chemeketa's faculty**

Chemeketa has over 250 full-time faculty members. In general, faculty who teach college transfer courses have at least a master's degree; some have doctorates. Faculty in professional-technical programs generally have a rich background which combines education with practical, on-the-job experience. In addition, we hire an average of 700 part-time teachers each year. Many of them teach evening classes on subjects directly related to their full-time jobs in the community.

### **How are we supported?**

As a public institution, most of Chemeketa's financial support comes from local property taxes, state school support funds, tuition, and fees.

### **What is our history?**

Chemeketa's roots began in 1955 when the local school district established Salem Technical Vocational School. The community college district was formed in September 1969.

### **Our credentials**

The Northwest Association of Schools and Colleges granted full accreditation to Chemeketa in December 1972. In addition, the Oregon Department of Education has approved all of our professional-technical programs and college transfer courses. Professional associations have also accredited those professional-technical programs which require approval.

For more information on accreditation and approvals, contact the office of the Vice President of Academic Services in Building 5 on the Salem Campus, at 399-5144.

### **Where is Chemeketa?**

The Chemeketa Community College district covers more than 2,600 square miles in Oregon's mid-Willamette Valley. It includes Marion, Polk, most of Yamhill, and part of Linn counties.

We consider the entire college district as our campus. Our 160-acre main campus is located at 4000 Lancaster Drive N.E., Salem. We have centers in Dallas, McMinnville, Stayton, and Woodburn. We also schedule credit and non-credit classes, workshops, seminars, and special programs in about 25 communities throughout the college district. These classes meet during the day, evening, and on weekends in schools, businesses, churches, and homes.

Our Training and Economic Development Center is located in Liberty Square, 365 Ferry Street S.E., in downtown Salem.

### **What kind of facilities does Chemeketa have?**

Chemeketa's Salem Campus has seven major buildings and a number of smaller buildings. Building 2 houses the Advising and Counseling Center, Tutoring Services Center, the Planetarium and the Learning Resource Center. The Learning Resource Center includes the library, media services, telecommunications programs, and a television studio. A new bookstore and staff office building will be available for use in early 1994.

The Learning Resource Center, with its computerized card catalog, has a collection of approximately 50,000 books; over 1,000 periodicals; a large selection of maps and pamphlets; 1,400 audio cassettes; 2,000 video cassettes; and many other films, slides, and records. Within the Learning Resource Center students also have access to copy machines, typewriters, and computers.

Our science and health building has modern, well-equipped laboratories for science and health-related programs. In the physical education building are workout and weight rooms, racquetball courts, and a gymnasium. Other buildings provide modern classrooms, welding and manufacturing shops, and computer laboratories. There is a fire-training building that also serves as a fire station.

For more information about facilities on the Salem Campus, contact the Scheduler's Office in Building 22 or call 399-5008. Chemeketa's centers in Dallas, McMinnville, Stayton, and Woodburn have classrooms, up-to-date laboratories, and offices.

### **Who are Chemeketa's students?**

You will not find a "typical" student at Chemeketa. Our students are all ages, from recent high school graduates to retired grandparents. They have many different goals. Some persons come to Chemeketa to train or retrain for new careers or to update their professional-technical skills; others return to school to increase their knowledge, learn new skills, or to get to know more about themselves and their relationships with other people.

Some of our students attend full time, others, part time. Many combine work and school.

About 40,000 persons enroll in Chemeketa classes and workshops every year. Each term, about 3,500 students are enrolled full time.

### **The Chemeketa Creed**

The Chemeketa Creed is part of the Student Rights and Responsibilities Document which can be found on Pages 158 and 159 of this catalog. The creed lists standards of behavior



.....

## About Chemeketa's Diversity

*We are a college community enriched by the diversity of our students and staff. Each individual and group has the potential to contribute in our learning environment.*

*Each has dignity. To diminish the dignity of one is to diminish the dignity of us all.*

.....

expected of students as they become members of our educational community.

### 1.0 Preamble

Chemeketa Community College provides an environment that celebrates the freedom to learn and the freedom to teach. In that celebration of teaching and learning it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.

### 2.0 Code of Behavior

As a community of people seeking education, Chemeketa students are dedicated to improving personally and academically. Choosing to join the college community obligates each member to a code of behavior.

Chemeketa students will:

- 2.1 Practice personal and educational integrity.
- 2.2 Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.
- 2.3 Discourage bigotry and respect the diversity and dignity of all persons.
- 2.4 Respect the rights and property of all persons.
- 2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.

### 3.0 Student Rights

Each student in the college community has certain rights that accompany his/her responsibilities. Those rights are to be protected by both students and staff regardless of an individual's race, sex, religion, color, creed, disability, sexual preference, political affiliation, national origin, ancestry, or age.

The college will:

- 3.1 Provide access to education and campus facilities.
- 3.2 Assure the protection of confidential student records and information.
- 3.3 Provide opportunities for association and preserve freedom of expression.

## Admission and registration

### Who may enroll at Chemeketa?

(Admissions Office, 399-5006; FAX, 399-3918)

Chemeketa has an "open door" policy. In general, you may enroll in Chemeketa classes if you are 18 years of age or older and can benefit

from the instruction. If you are 16 or 17 years of age and have not graduated from high school, you may enroll if your high school issues you a release form allowing you to be admitted to Chemeketa.

Under special conditions, students under age 16 may enroll in certain classes during summer term only. The Admissions Office can provide details for this process.

The table on Page 5 lists the enrollment steps. Updated information is published each term in the *Schedule of Classes*.

You will find an Application for Admission Form on Page iii in the front of this catalog. Before you apply for admission, contact the Advising and Counseling Center in Building 2 on the Salem Campus, at 399-5120. Talk with a counselor about your academic and occupational plans and the requirements for the program which interests you. You may also meet with a counselor at Chemeketa's centers in Dallas, McMinnville, Stayton, and Woodburn.

### Placement tests (399-5120)

If you are a new student, Chemeketa requires you to take a free placement test in order to be accepted for admission. Test results more than two years old are not valid. The purpose of the test is to determine your skill levels in reading, English, writing, and mathematics so that you may choose courses that suit your abilities. Under certain conditions, you may be granted a test waiver.

Information about tests and test waivers may be obtained from the Advising and Counseling Center in Building 2 on the Salem Campus or from Chemeketa centers in Dallas, McMinnville, Stayton, and Woodburn.

### Orientation (399-5120)

After you have applied for admission, you will be invited to an orientation meeting before the term begins. The orientation, which is optional, will introduce you to Chemeketa and some of our instructors. You will receive information about registration and ways you may participate in college life at Chemeketa.

### Tours of campus (399-3995)

Tours of campus are available through the Chemeketa Internship Program (ChIPs) in the Student Life Office, Building 3, Room 101. You may stop by or call to schedule a student-guided tour.

### Registration (399-5001)

For registration dates and other information, see **How to Enroll at Chemeketa** on Page 5 and the **Academic Calendar** on Page 2. Each

# How to Enroll at Chemeketa

Student Classification	1. Academic and career decision making	2. Placement testing	3. Application for admission	4. Registration for classes
<b>Enrolling for MOST Salem Campus classes</b>	Contact Advising and Counseling Center, Building 2, Salem Campus (optional).	Contact Advising and Counseling Center, Building 2, Salem Campus.	■ File application with Admissions Office, Building 22, Salem Campus.	<b>New/Returning Students</b> —Register on Salem Campus following directions sent to all applicants by Admissions Office.  <b>Continuing Students</b> —Register on Salem Campus following directions published in the quarterly <i>Schedule of Classes</i> .
<b>Enrolling for classes held outside of Salem</b>	Contact Advising and Counseling Center, Building 2, Salem Campus or call nearest Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn (optional).	Contact nearest Chemeketa center.	■ File application with Admissions Office, Building 22, Salem Campus or at your nearest Chemeketa center.	■ Follow procedure above for enrolling on Salem Campus. or ■ Register at a Chemeketa center. or ■ Register at first class session (on a space-available basis).
<b>Enrolling for Salem evening, weekend, or non-credit classes</b>	Contact Advising and Counseling Center, Building 2, Salem Campus (optional).	Contact Advising and Counseling Center, Building 2, Salem Campus (optional).	■ File application with Admissions Office, Building 22, Salem Campus.	■ Follow procedure above for enrolling on Salem Campus. or ■ Register by phone for those classes identified as phone-in registration classes in the quarterly <i>Schedule of Classes</i> . or ■ Register at the first class session (on a space-available basis).
<b>Interested in GED or English as a Second Language (non-credit)</b>	Contact Advising and Counseling Center, Building 2, Salem Campus, or a Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn, the Downtown Learning Center in Salem, or the Yamhill County Learning Center in McMinnville (optional).	<b>GED:</b> Contact Developmental Education Office, Building 2, Salem Campus. <b>ESL:</b> Contact ESL Office, Building 18, Salem Campus.	Application for Admission not required. Students 16 and 17 years old must have a High School Release Form.	Consult quarterly <i>Schedule of Classes</i> . Open entry during term.
<b>Interested in earning a high school diploma</b>	Contact the High School Completion Office, Building 50, Salem Campus, or call nearest Chemeketa center in Dallas, McMinnville, Stayton or Woodburn (optional).	Contact Advising and Counseling Center, Building 2, Salem Campus.	■ File high school transcript with High School Completion Office, Building 50, Salem Campus. ■ File application for admission with Admissions Office, Building 22, Salem Campus. ■ Students 16 and 17 years old must have a high school release.	Follow directions sent by Admissions Office 10 days before registration.

These programs have special admission requirements or enrollment limits. Please contact the Admissions Office, 399-5006, for details.

Building Inspection  
Dental Assisting  
Emergency Medical Technology  
Fire Suppression

Health Care Support Services  
Human Services  
Nursing (RN, LPN, nursing assistant, re-entry courses)  
Visual Communications







## Student's Check List

Before you register:

1. If you are a new student, have you:

taken mathematics, reading, and English placement tests? Contact the Advising and Counseling Center, Salem Campus, Building 2, 399-5120.

applied for admission to the college? Contact the Admissions Office, Salem Campus, Building 22, 399-5006. An application form is on Page iii.

checked to find out if there are special 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:

tuition and fees?

special tools, equipment, uniforms, etc. required by your program?

These costs are listed in this catalog in the description of your occupational program.

3. Have you arranged for:

transportation?

child care?

4. Have you asked about financial aid? Contact the Financial Aid Office, Salem campus, Building 22, 399-5018, or a Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn.

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? A copy of the schedule should be delivered to you by mail before each term begins. If not, contact the Advising and Counseling Center, Salem Campus, Building 2, 399-5120, or the Chemeketa center in your community.



term the *Schedule of Classes* gives the step-by-step procedure for registering for classes.

You will receive college credit only if you officially register for the class during the term in which it is offered.

You may not register if you owe the college any money from previous terms.

### Class loads

(399-5001)

If you enroll in 12 or more credit hours, you are considered full time for academic purposes. The average class load is 15 credit hours per term.

### Class changes

(399-5001)

You may make changes in your class schedule before the deadline listed in the **Academic Calendar** on Page 2. To make changes, complete an Add-Drop Form. Forms are available in the Registrar's Office, staff offices, and the Advising and Counseling Center. The changes should be approved by your academic advisor. Turn in the Student Schedule Change (add-drop) Form at the Registrar's Office in Building 22. A fee may be charged for adding or dropping classes.

### Enrollment limitations

Even though Chemeketa has an open door policy, we cannot guarantee that you will be admitted to a particular program. The college may restrict enrollment in a class or program because we have limited staff, space, or equipment. Enrollment is also limited for some programs because of special admission requirements.

We urge you to apply early for all programs, especially for the following professional-technical programs which limit enrollment and have special admission requirements:

Building Inspection

Dental Assisting

Emergency Medical Technology

Fire Suppression

Health Care Support Services

(Health Information Technician, Medical Transcriptionist, Health Services

Coordinator, Medical Office Assistant)

Human Services

Nursing (Registered Nurse, Licensed

Practical Nurse, Nursing Assistant, and re-entry courses)

Visual Communications

You may still be admitted to the college even though you are not accepted in one of these programs. You may apply to enroll in a related pre-vocational program or some other program.

### Immunizations

The Oregon Department of Health requires community college students born on or after January 1, 1957 to have two doses of measles vaccine before participating in clinical experiences in allied health and nursing programs,

practicum experiences in education and child care programs, and intercollegiate sports. Students in nursing programs and in some allied health programs may also be required to be vaccinated for hepatitis B prior to entering any clinical experiences. For details about these requirements, contact the office of the department director who oversees the program in which you plan to participate.

### Transfer credits from other colleges, CLEP, Advanced Placement, and the military

(399-5006)

You may transfer credits from other colleges you have attended by requesting each of them to send an official copy of your transcript to our Admissions Office. (Official copies must include a signature from the issuing institution and its authorized seal and be delivered to Chemeketa in a sealed envelope.) You may then contact the Admissions Office and request, in writing, an evaluation of your transcripts.

In general, Chemeketa accepts in transfer college-level credits earned at a regionally accredited college or university. Work from unaccredited schools is evaluated in accordance with the institutions and policies listed in Transfer Credit Practices, published by the American Association of Collegiate Registrars and Admissions Officers. Credit given for a particular course will not exceed credit given for the equivalent corresponding Chemeketa course.

If you have taken the College Level Examination Program (CLEP) or the Advanced Placement Test, request that your scores be forwarded to the Admissions Office. Then contact the Admissions Office and request, in writing, an evaluation of your transcripts and scores. For more CLEP and Advanced Placement information, see Pages 14 and 15.

Chemeketa also accepts some credits from the military and the Community College of the Air Force. Submit an official copy of your CCAF transcript or a certified copy of your DD214 to the Admissions Office and request an evaluation of your credits.

Your accepted transfer credits and scores will become part of your permanent record at Chemeketa. Your record does not indicate your transfer grades; only the course grades you earn at Chemeketa are used to compute your grade point average.

### International students

(399-5006; FAX, 399-3918)

If you are a citizen of another country, you will be asked to meet certain federal immigration and college requirements before being admitted to Chemeketa. You are expected to maintain certain levels of academic achievement acceptable to the United States Immigration Service and to the college. Chemeketa's Admis-

## Tuition Clarification

Tuition for the 1993-94 academic year is \$30 per credit hour. The information found on Page 7 of the 1993-94 college catalog regarding full-time tuition refers to a class load of 12 credit hours.

Please use the chart below to calculate the cost of your credit class tuition.

<b>Credit Class Tuition</b>			
<b>No. of Credit Hours</b>	<b>Oregon Students</b>	<b>Out-of-State Students</b>	<b>International Students</b>
1	\$30	\$115	\$130
2	\$60	\$230	\$260
3	\$90	\$345	\$390
4	\$120	\$460	\$520
5	\$150	\$575	\$650
6	\$180	\$690	\$780
7	\$210	\$805	\$910
8	\$240	\$920	\$1,040
9	\$270	\$1,035	\$1,170
10	\$300	\$1,150	\$1,300
11	\$330	\$1,265	\$1,430
12	\$360	\$1,380	\$1,560
13	\$390	\$1,495	\$1,690
14	\$420	\$1,610	\$1,820
15	\$450	\$1,725	\$1,950
16	\$480	\$1,840	\$2,080
17	\$510	\$1,955	\$2,210
18	\$540	\$2,070	\$2,340

Over 18 hours: Multiply the number of credit hours by the cost given for one credit hour.





sions Office has special application materials for international students.

Chemeketa has established enrollment limits for international students. When those limits are reached each term, the Admissions Office will no longer accept applications. We suggest you apply as early as possible to the Admissions Office, Building 22, Room 110.

Services to help introduce international students to the college and Salem community are available through the Student Life Office, Building 3, Room 101.

### Readmission

(399-5006)

If you are a former Chemeketa student who was not enrolled in the college the previous term (or, for fall enrollment, was not registered the previous spring or summer), and you wish to return to the college, follow the enrollment steps for new students given in the **How to Enroll at Chemeketa** table on Page 5.



## Money Matters

### Tuition

(399-6580)

Tuition and fees are due in full when you register unless you make special arrangements ahead of time with the Cashier's Office. (See in-

formation under **Deferred tuition payments** on Page 8.)

### Credit courses

If you are a full-time student, you are required to enroll in 12 credit hours for full academic standing.

Tuition rates for 1993-94 are:

#### Oregon students

Full time..... \$360 per term

Part time ..... \$30 per credit hour

#### Out-of-state students

Full time..... \$1,380 per term

Part time ..... \$115 per credit hour

#### International Students

Full time..... \$1,560 per term

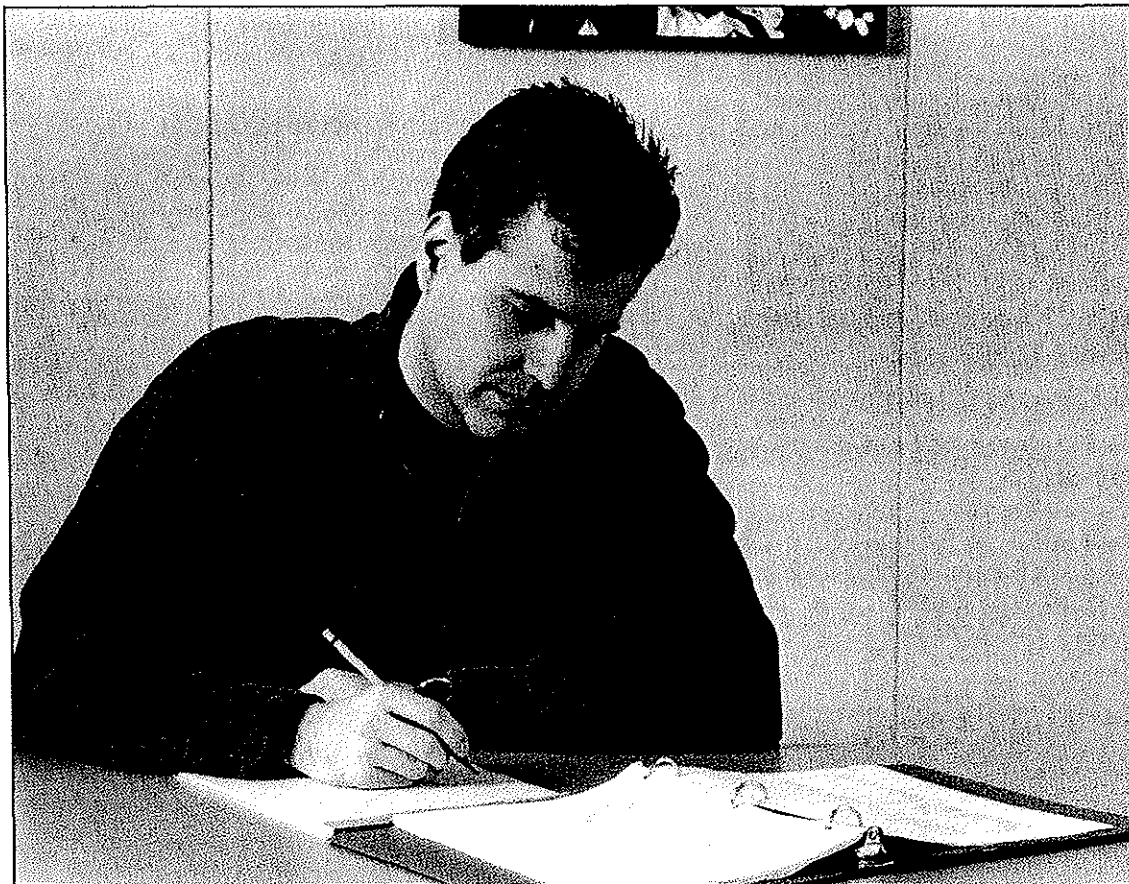
Part time ..... \$130 per credit hour

#### Non-credit courses

The cost of most non-credit courses is \$2 per class hour with a \$10 minimum charge, or as stated in the term *Schedule of Classes*.

Tuition rates for non-credit courses apply even if you are considered a full-time student.

There is no charge for adult basic education, General Educational Development (GED), and non-credit English as a second language classes. There is a \$45 fee to take the GED test.





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## The meaning of Chemeketa

*The name Chemeketa is a Native American word meaning "place of peace." Long before white settlers came to this area, Willamette Valley Native Americans would gather at a place they called Chemeketa, today known as Salem. There they conducted their councils, renewed friendships, and shared old ideas and cultivated new ones. It is hoped that many who come to Chemeketa today will do just that.*

*The meaning of Chemeketa is illustrated on the sculptured wall panels (pictured below) which appear on Building 3 on our Salem Campus. Designed by graphic artist Arvid Orbeck, the panels symbolize the territorial divisions of the tribes and the movement of the tribes toward the established meeting place.*

*As the tribes move through the territorial divisions, the carved designs become less aggressive and less linear. Softer curves start to enter into the forms, showing more peaceful attitudes. The final points of the arrow shapes become completely calm upon reaching the center, where the individual chiefs, each indicated with his own form of dress, decoration, and behavior, sit down in a formal circle for peaceful work.*

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Certain courses, particularly some training classes, may require separate registration and tuition.

For some classes, there are additional charges to cover the costs of required materials.

### Oregon residency

You are considered an Oregon student if you have established a permanent residence within the state at least three months before you register for the first time. The college may ask you to provide information proving you meet the residence requirement.

You are considered an out-of-state student if your permanent address is outside of Oregon. If you are an international student who is required to have an I-20 immigration document, you are considered an international student as long as you are required to have that document.

### Auditing courses

(399-5001)

If you enroll in credit courses but do not wish to receive grades or credits, you may register as an auditor. However, you must pay full tuition and fees. Pick up and turn in an Audit Request Form at the Registrar's Office before the end of the fourth week of the term.

### Deferred tuition payments

(399-5011)

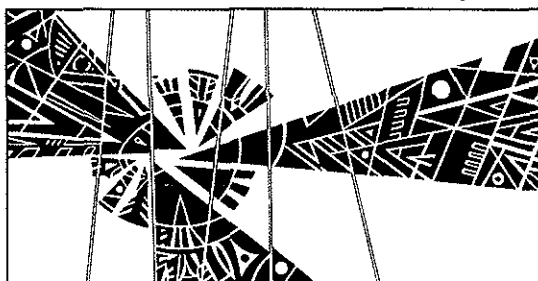
If you are enrolling in six or more credit hours, you may pay your tuition in installments, with the approval of the Cashier's Office. When you register, you pay one-third of your tuition for credit classes plus any non-credit-course tuition, lab fees, and all other charges. You enter a contract with the Cashier's Office to pay the remaining amount due. There is a \$15 non-refundable contract processing fee for this deferred tuition service. Make arrangements with the Cashier's Office before you register.

Some financial aid students may be subject to a separate refund policy.

### Tuition refund policy

If the college cancels a class, we will refund your tuition.

If you decide to withdraw from Chemeketa during the first two weeks of a term, you may receive a tuition refund. See detailed information under **Withdrawal from College**, Page 14.



If Chemeketa cancels a course because the enrollment is below a minimum number of students, we give you a full refund. You will not receive a refund if you are suspended from the college.

### Other costs and fees

(399-6580)

The cost of books and supplies for full-time students is about \$170 per term. However, in some of our programs you will also have to provide your own tools, equipment, and uniforms. These costs are included in the descriptions of professional-technical programs on Pages 39 to 100.

Fees vary by the course. They are included in the course descriptions in this catalog.

You may rent a hall locker for \$3.50 a term. Our physical education locker and towel fee is \$11 if you are not enrolled in a PE class.

Contact the Cashier's Office in Building 22 on the Salem Campus for more information on fees and program costs.

### Student health and accident insurance

(399-6580)

The college does not carry health and accident insurance for students. If you are enrolled for six or more credit hours, you may purchase health and accident insurance for yourself and your dependents at the Cashier's Office in Building 22 during the first two weeks of each term. If you enroll in Chemeketa fall, winter, or spring terms, you may purchase coverage to include summer term.

Chemeketa encourages you to buy insurance coverage if you are enrolled in classes involving risk and/or much physical activity. In some classes and activities where good safety practices are required, students will be asked to sign a risk waiver form.

Chemeketa requires all international students, as well as students from Micronesia and the Trust Territories of the Pacific, to obtain health and accident insurance. You must purchase insurance at the time of registration.

### Veterans' services

(399-5004)

If you are a veteran, contact the veterans' clerk in the Registrar's Office for information on Veterans Administration policies, procedures, and approved programs of instruction.

Chemeketa processes a veteran's application for certification as well as the necessary supporting documents (DD214, etc.) according to VA regulations. We forward certification information to the VA regional office in Portland. Usually this completes the application process for VA educational benefits. In addition, you must apply for admission through the Admissions Office.

If you have attended other colleges, arrange to have transcripts of your credits sent to the Admissions Office and request an evaluation.

**Policy of satisfactory progress:** In accordance with a Veterans Administration directive, if you receive veterans' educational benefits and are enrolled half-time (six credit hours) to full-time (at least 12 credit hours), you must comply with the following regulations:

- Receive no more than 44 deficiency course units over a two-year period.
- Accumulate a minimum grade point average (GPA) of 2.0 in your program. GPA is based on A=4, B=3, C=2, D=1, F=0.
- Make any changes which affect your certification status by the end of the fourth week of a term. After that, you are responsible for completing all certified credit hours in which you are enrolled.

Any term your GPA falls below 2.0 or you do not satisfactorily complete the required hours listed above, the Veterans' Clerk will advise you that you are on probation. If you do not maintain the GPA and/or credit hour requirements for two consecutive terms, the clerk will record a notice of unsatisfactory progress and forward it to the VA regional office in Portland.

Once you are placed on unsatisfactory progress, you must enroll in, and complete, one term before the Veterans' Clerk will submit your records to the VA for recertification. During this term, you must maintain the same credit-hour level as you did when you were certified. You must earn a minimum 2.0 GPA for the term.

### **Financial aid (399-5018)**

At Chemeketa, we believe that you, as a student, along with your family, are responsible for paying for your education. However, if you do not have enough money to attend Chemeketa, please contact our Financial Aid Office in Building 22, Room 118, on the Salem Campus. We are ready to help you apply for grants, loans, and part-time jobs.

### **Are you eligible?**

To qualify for financial aid, you must:

- Be at least 18 years of age or have a high school diploma or a General Educational Development (GED) high school equivalency certificate or have the ability to benefit from a college education.
- Be a United States citizen or able to provide I-94 or other documents showing you are an eligible non-citizen.
- Be registered with Selective Service if you are a male born after December 31, 1960. (If you are now on active duty in the United



States Armed Forces—not the reserves—you do not have to be registered.)

- Show need for financial help.
- Enroll in a degree program or a certificate program at Chemeketa.
- Enroll in six or more credit hours at Chemeketa with these restrictions:
  - 1) If you wish to receive aid as a full-time student, you must register for 12 or more credit hours. These may include only one three-credit-hour course by television, mail, or computer modem.
  - 2) If you register for six to 11 credit hours, you may not include any courses by television or by mail.
  - 3) You may not include audited and non-credit courses in these totals.
  - 4) You may not count a repeated course. An exception may be made if an instructor recommends, in writing, that you repeat a course in which you earned lower than a C grade.

# Kinds of financial aid available at Chemeketa

Except as listed below, all financial aid programs have the following requirements:

- You must file a Free Application for Federal Student Aid (FAFSA) to apply.
- You must be a United States citizen or an eligible non-citizen.
- If you are a male over 18 years of age and born after December 31, 1960, you must be registered with the United States Selective Service, unless you are currently on active duty with the armed forces. (Membership in the reserves does not count.)
- You must not be in default or owe a refund to any Title IV financial aid program.
- You must use the money you receive to help meet the costs of attending Chemeketa.
- You must be in a degree or certificate program.
- You must enroll for at least six credit hours each term.
- You must maintain satisfactory academic progress.

Program and source of funding	Eligibility requirements	Available amounts	Special information
<b>Grants and scholarships</b>  Federal Pell Grant	<ul style="list-style-type: none"> <li>■ You must not have a bachelor's degree.</li> </ul>	<ul style="list-style-type: none"> <li>■ Amounts are based on federal funding.</li> <li>■ The estimated highest award at Chemeketa for 1993-94 will be \$2,300.</li> </ul>	<ul style="list-style-type: none"> <li>■ Pell Grant will send you a Student Aid Report (SAR) indicating your eligibility. Take all three copies of SAR to the Financial Aid Office.</li> <li>■ Eligibility may be transferred to any post-secondary school participating in federal programs.</li> </ul>
Federal Supplemental Educational Opportunity Grant (FSEOG)	<ul style="list-style-type: none"> <li>■ You must prove an exceptional financial need.</li> <li>■ You must not have a bachelor's degree.</li> </ul>	<ul style="list-style-type: none"> <li>■ Amounts range from \$200 to \$2,000 a year.</li> <li>■ The estimated highest award at Chemeketa for 1993-94 will be \$600.</li> </ul>	<ul style="list-style-type: none"> <li>■ The Financial Aid Office will determine and then notify you of your eligibility.</li> </ul>
Oregon State Need Grant (funded by the state of Oregon and the federal government)	<ul style="list-style-type: none"> <li>■ You must enroll full-time (12 credit hours or more).</li> <li>■ You must be an Oregon resident.</li> <li>■ You must also apply for a Pell Grant.</li> <li>■ You must not have a bachelor's degree.</li> <li>■ You must attend a college in Oregon.</li> </ul>	<ul style="list-style-type: none"> <li>■ Amounts are based on state funding.</li> <li>■ The estimated highest award at Chemeketa for 1993-94 will be \$828.</li> </ul>	<ul style="list-style-type: none"> <li>■ Mark "yes" to release data to the state agency on the FAFSA.</li> <li>■ Your grant may be transferred to other Oregon colleges and universities.</li> <li>■ Your grant may be awarded for up to 12 quarters (terms) or for eight semesters.</li> <li>■ You must not be enrolled in a program leading to a degree in theology, divinity, or religious education.</li> </ul>
Talent Grants (funded by Chemeketa Community College)	<ul style="list-style-type: none"> <li>■ You must show outstanding ability and achievement in selected fields.</li> <li>■ You must enroll full-time (12 credit hours or more).</li> </ul>	<ul style="list-style-type: none"> <li>■ Amounts vary up to the cost of tuition.</li> </ul>	<ul style="list-style-type: none"> <li>■ No FAFSA is required.</li> <li>■ Contact an instructor or coach directly associated with your skills or ask at the Financial Aid Office.</li> </ul>



## Loans

### Federal Perkins Student Loan Program (FPSL)

- You may borrow up to \$3,000 in an academic year.
- The highest award at Chemeketa for 1993-94 will be \$1,500.
- You must complete a separate Perkins Loan application form.
- You do not have to pay any interest or principal while in school.
- You must begin payment six to nine months after you drop your enrollment to less than six credit hours.
- The current interest rate is 5 percent.
- You must repay Chemeketa.
- You must view an orientation video before funds are disbursed.
- Interest is paid by the federal government while you are enrolled in an approved program.
- You must attend an entrance and an exit interview.
- Contact the Financial Aid Office for information on repayment and deferments.

### Federal Stafford Student Loan (formerly GSL) (funded by commercial lenders with state or other agency guarantee and interest subsidy from the federal government)

- You may borrow up to \$2,625 to complete the first year of a program of undergraduate education.
- After completing your first year of undergraduate education, you may borrow up to \$3,500 to complete the remainder of a program of undergraduate study.
- Pick up the separate Stafford application forms (to be completed by the borrower, college, and lender) at the Financial Aid Office.
- Take the completed loan application to a lending agency such as a bank or a savings and loan association.
- Required fees will be deducted from your check.
- You must begin payment six months after you drop your enrollment to less than six credit hours.
- You may defer payment if you continue half-time or full-time study. Contact the Financial Aid Office for other possible deferments.
- You must attend an entrance and an exit interview.
- The variable interest rate is capped at nine percent.
- The federal government pays the interest while you are enrolled in an approved program.

### Federal Unsubsidized Stafford Loan (provides for insured loans for borrowers who do not qualify for federally subsidized Stafford loans. Terms and conditions for subsidized Stafford loans apply to unsubsidized Stafford loans.)

- You may borrow the cost of attendance minus the amount of estimated financial assistance, up to annual loan limits.
- Students who show need for only part of the annual subsidized Stafford loan limit may borrow the remainder through unsubsidized loans.
- Repayment of principal begins six months after the month in which you cease to be enrolled at least half-time.
- Interest during in-school, grace, and deferment periods may be paid monthly or quarterly, or may be added to the principal amount of the loan not more frequently than quarterly by the lender.

### Federal "PLUS" program (funded by commercial lenders with state or other agency guarantee)

- Some lenders will not loan money for students who are not enrolled full-time.
- Parents may borrow up to the cost of attendance minus the amount of estimated financial assistance.
- Only mothers, fathers, adoptive parents, or legal guardians may borrow for dependents.
- Pick up the application forms (to be completed by the borrower, college, and lender) at the Financial Aid Office.
- Pay the required fees.
- Variable interest rate may not exceed 10 percent.
- Lenders loan their own funds.
- Payment begins 60 days after the date funds are disbursed.

### Federal Supplemental Loans to Students (funded by commercial lenders with state guarantee)

- Independent undergraduates may borrow up to \$4,000 a year.
- You must apply for a Stafford loan first, if you qualify.
- Only independent students may apply.
- Variable interest rate may not exceed 11 percent.
- Other information is the same as the "PLUS" program, with the exception of the parental requirement.

## Work

### Federal Work Study Program (FWS)

- Amounts vary according to your financial need.
- Funds usually are no more than \$600 a term or \$1,800 a year.
- Jobs pay minimum wage or higher.
- Jobs are available both on and off campus.
- You must view a college work-study orientation video before job placement.
- Contact the Financial Aid Office for a placement appointment.

### Chemeketa part-time employment (funded by Chemeketa Community College)

- You must enroll in six credit hours or more.
- Pay varies according to the job.
- Jobs pay minimum wage or higher.
- No FAFSA is required.
- Apply at the Financial Aid Office.

### Part-time jobs (funded by private businesses)

- You must be willing to work.
- You must meet the qualifications of the employer.
- Pay varies according to the job.
- The average wage for 92-93 was \$5 an hour.
- No FAFSA is required.
- Apply at the Placement Resource Center in Building 17 on the Salem Campus.



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## Questions? Call for information

*Campus Information Center  
399-5155*

*Chemeketa's Information Center is located in the Advising and Counseling Center on the first floor of Building 2 on the Salem Campus. Staff will answer your questions about room locations, activities, workshops, meetings, academic advisor assignments, and instructional staff office locations. The Information Center also distributes class schedules and catalogs.*

### **Chemeketa Centers**

*If you live outside the Salem area, call one of our local centers for information:*

#### **Chemeketa Dallas Center**

*182 SW Academy Street  
623-5567 or 399-5206*

#### **Chemeketa McMinnville Center**

*500 N Hill Road  
472-9482 or 399-5219*

#### **Chemeketa Stayton Center**

*756 W Locust Street  
769-7738 or 399-5215*

#### **Chemeketa Woodburn Center**

*120 E Lincoln Street  
981-8820 or 399-5207*

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5) You may count up to 45 credit hours of developmental courses which were recommended by your advisor.

6) You may not count credits you earned by passing challenge examinations.

Score at or above 39 in the reading section of the college's placement test. If you score below 39, you may not be eligible for financial aid. However, you may be eligible to re-take the placement test. Contact the Advising and Counseling Center.

### **What kinds of financial aid are available?**

There are three kinds of financial aid available for students enrolled at Chemeketa:

- Grants and scholarships which you do not repay.
- Loans which you must repay.
- Part-time jobs.

For detailed information, read the chart on Pages 10 and 11.

### **How to apply**

Follow these steps to apply for financial aid:

- Pick up (or ask us to mail you) a Free Application for Federal Student Aid (FAFSA) at the Financial Aid Office on the Salem Campus or at a center in Dallas, McMinnville, Stayton, or Woodburn.
- Fill out and mail your FAFSA, following directions on the form. Be sure to list Chemeketa as the college you are or will be attending.
- Take Chemeketa's placement test. Contact the Advising and Counseling Center on the Salem Campus or a Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn for an appointment.
- Apply for admission to Chemeketa.
- Ask other colleges you have attended to mail financial aid transcripts to Chemeketa.

After we have processed your Financial Aid Form, we will send you the forms you need to complete your file.

### **When to apply**

We suggest strongly that you apply for financial aid at least three months before you plan to enroll at Chemeketa. Applications are processed in the order we receive them. Since many students start fall term, it may take longer to process your application during the summer. If possible, file your Financial Aid Form by April 1 if you plan to begin fall term.

It takes at least eight to 10 weeks from the time you file your FAFSA before money can be available for you. If you apply near the beginning of a term, you will need to be prepared to begin paying for tuition, fees, and books with your own money while your financial aid file is being processed.

Final application dates for each term are posted in the Financial Aid Office and included with your FAFSA. If you apply after these dates, you will be eligible only for a Pell Grant and a Stafford Student Loan for the following term.

We accept financial aid applications throughout the academic year, which begins with fall term. If you do not apply before you start school and later find you need help, you may apply at any time. However, some financial aid programs have limited funds available. If you apply after these funds have been used up, the types and amounts of financial aid you can receive will be limited.

You must apply again for financial aid each school year. The forms for the next academic year are available in the Financial Aid Office each January.

### **How students are selected**

Pell Grant and Stafford Loan funds are available throughout the year for qualified students who complete the required processes and enroll for the required credit hours.

The Oregon State Need Grant is awarded to qualifying full-time students on an application-date basis determined by the state. Students eligible for the Perkins Student Loan, Supplemental Educational Opportunity Grant, and College Work-Study are awarded these funds on the basis of the date of completion of the student's file. Since these funds are limited, the earliest dates are given the highest priority. Not all eligible students will receive these funds.

The amount of the student's award will be determined each year by the Pell Grant and State Need Grant programs and by Chemeketa for the campus-based programs.

Most funds are disbursed at the beginning of each term. College Work-Study funds are paid on the last business day of the month.

### **How to stay eligible**

To continue to receive financial aid, Chemeketa requires you to register for, complete, and maintain a 2.0 grade point average (GPA) for the following number of credit hours:

- Full-time students: 12 credit hours.
- Three-quarter-time students: nine to 11 credit hours.
- Half-time students: six to eight credit hours.

### **Academic progress**

If you do not meet the minimum credit-hour and 2.0 GPA requirements each term, the Financial Aid Office reviews your progress and may either stop your aid or place you on probation and allow you one more term to meet the requirements. If, at the end of two terms, you still do not meet the requirements, your aid stops. However, you may receive it again if you:

- Continue at Chemeketa for one term, paying your own tuition **and**

- Complete a required number of credit hours with a 2.0 GPA.

Your aid stops if you withdraw from Chemeketa. If you do not earn at least three credits with a passing grade in any term, your aid stops and you may be required to repay all financial aid received.

At least once a year, the Financial Aid Office checks to make sure you have completed the minimum number of credit hours. If you have not, your financial aid may be withheld until you complete a required number of credit hours.

### How long are you eligible?

In general, you may receive financial aid at Chemeketa for 108 credit hours.

### Cooperative program with WOSC

Chemeketa and Western Oregon State College (WOSC) in Monmouth have an agreement regarding financial aid for students who are attending both colleges at the same time. Both colleges may accept credits from the other institution as part of the 12 credit hours required for you to be considered a full-time student. Call the college's Financial Aid Office for information on your eligibility.

### Refunds

Chemeketa has a tuition refund and repayment policy for students receiving financial aid. We ask you to read and sign a copy of this policy at the time you sign your financial aid offer. A copy of the policy will be provided for your reference. Refunds are credited to the student financial aid programs in the following sequence: 1) Stafford Loan, 2) Supplemental Loan for Students, 3) Federal "PLUS" Program, 4) Perkins Student Loan, 5) Pell Grant, 6) Supplemental Educational Opportunity Grant, and 7) Oregon State Need Grant.

### Appeals

You may appeal any action taken by the Financial Aid Office within two weeks of the time you were notified of a change in your status.

### Help is here

The Financial Aid Office will give you information on applying for aid, your rights and responsibilities in receiving aid, loan repayment schedules, general conditions of employment, and methods used to determine or re-establish your eligibility. The Financial Aid Office will also help you with your concerns about funds and budgeting.



## Academic Information

### Student records and transcripts (399-5001)

Student academic records are maintained in the Registrar's Office for 10 years. These records may include the application for admission, registration documents, other college transcripts, schedule changes, grade changes, waiver forms, evaluation of progress toward graduation, and current enrollment status.

Chemeketa transcripts are kept permanently. You may obtain an official transcript from the Registrar's Office by submitting a written request with the appropriate fee. If you have financial obligations to the college, we may deny issuing your transcript until the Cashier's Office clears your obligation.

### Student records policy (399-5001)

Chemeketa's policy is to protect your personal and academic records with the greatest privacy and security possible. This policy is based on concern for the integrity of the college and the welfare of the student. Most records may not be released without your permission, except to meet legal or audit requirements. You may go to the Registrar's Office to inspect Chemeketa's



student records policy and procedure, which are in compliance with the Federal Education Rights and Privacy Act.

### Grading system

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

A Excellent.....	4
B Above average .....	3
C Average.....	2
D Below average.....	1
F Failed.....	0
R Course repeated.....	0
N No grade assigned .....	0
I Incomplete.....	0
X Audit .....	0
Z Course in progress.....	0

Your grade point average is computed by dividing the total credit hours (except R, N, I, X, and Z) into the total points earned.

The N grade is used when student participation in class does not warrant a grade. It is to be used when the student's name is still on the final grade report and no other grade is possible.

An instructor may give you an "Incomplete" when, in his or her judgment, you have not finished a minor portion of the required class work although you have attended the class regularly.

You may remove an "Incomplete" from your record by completing some makeup work. Your instructor will provide you with a form, Notice of Incomplete Status in a Course, which states what you must do and sets a date for you to complete the assignments. The deadline may be any time up to one year from the end of the term in which you received the "Incomplete" grade. When you have met the requirements, your instructor will change the "Incomplete" to a new grade and inform the Registrar. The Registrar's Office will officially notify you of the change.

### Repeating a course

(399-5001)

We suggest you confer with your academic advisor before you repeat a course. If you do repeat a course and receive a **higher** grade, and want your old grade changed in your record, ask the Registrar's Office to change your grade to an R (Repeated). Please note that even if you repeat a course more than once, only your original grade can be changed to an R. If you repeat a course and receive a lower grade, both grades will remain on the transcript. An original grade of N or I may not be changed by repeating a course. The registrar does not include an R in computing your grade-point average and does not count courses with an R grade in determining the total number of credit hours you have earned.

If you are receiving veterans' educational benefits, you should be aware that this could create

an overpayment for the term for which you requested an R. Contact the Veterans' Clerk in Building 22 before making such a request.

### Course prerequisites

Prerequisites are specified in the course descriptions. These are conditions you must meet before enrolling in a course. It is your responsibility as a student to fulfill the prerequisite.

Some prerequisites indicate that you must complete certain preparatory courses or must have the consent of the course instructor. To gain consent, meet with the instructor. Consent is based upon the instructor's assessment of your readiness to enroll in the course.

### Auditing courses

(399-5001)

If you enroll in credit courses but do not wish to receive grades or credits, you may register as an auditor. See **Auditing courses** under Money Matters, Page 7.

### Withdrawal from college

(399-5001)

If you decide to withdraw from Chemeketa, obtain a Student Schedule Change (add-drop) Form from the Registrar's Office, the Advising and Counseling Center, or one of Chemeketa's centers in Dallas, McMinnville, Stayton, or Woodburn. Submit the completed form to the Registrar's Office or one of our centers as soon as possible. The last day to withdraw from classes without responsibility for grades is listed in the **Academic Calendar** on Page 2. If you leave Chemeketa without filing a Student Schedule Change Form, you are responsible for the final grades you receive; they will appear on your transcript of Chemeketa credits.

If you return the completed form to the Registrar's Office within the first two weeks of the term, you will receive a refund of the tuition and fees you paid. (Some exceptions apply for night and late-starting classes.) Amounts owed to any departments of the college will be deducted from your refund. There may also be a nominal deduction from the refund for processing the withdrawal. No refunds less than \$5 are made. The college cannot refund the cost of student insurance.

If you paid tuition with funds issued through Chemeketa's Financial Aid Office, your refund will be credited to your financial aid account. Any debts you owe the college will be deducted from those credits.

### Advanced Placement courses

(399-5006)

If you enrolled in an Advanced Placement course in high school and earned an acceptable score on the Advanced Placement Test, you may receive credit from Chemeketa for the course. Inquire at the Admissions Office

## Affirmative action and non-harassment policy

*It is the policy of Chemeketa Community College that discrimination on the grounds of race, color, religion, sex, national origin, marital status, age, disability, or family relationships will not exist in any area, activity, or operation of the college as required by Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973; Title VI and VII of the Civil Rights Act of 1964; the Age Discrimination Act; the Americans with Disabilities Act of 1990; Oregon Civil Rights Law (ORS659); and their implementing regulations.*

*College policy also prohibits harassment on the basis of any of the factors listed above. Harassment is any unwelcome behavior or display either verbal, physical, or visual in nature, which meets any of these criteria: 1) submission to such condition is either an implicit or explicit condition of employment or academic performance; 2) submission to or rejection of the condition by an employee or student is used as the basis for decisions affecting that person's employment or academic performance; 3) the condition has the purpose or effect of unreasonably interfering with an individual's work performance or academic performance or of creating an intimidating, hostile, or offensive work environment or academic environment.*

*Questions or complaints may be directed to Judy Gohring, Affirmative Action Officer, P.O. Box 14007, Salem, Oregon 97309, (503) 399-5009.*

about what courses and scores are accepted at Chemeketa.

## **College Level Examination Program (CLEP)**

**(399-5006)**

You may earn credit for some college courses through the College Level Examination Program (CLEP). Inquire at the Admissions Office to determine which examinations and scores Chemeketa accepts.

## **Credit by examination**

**(399-5120)**

Another way to earn credits for some courses is to prove your college level ability by successfully passing challenge examinations. These examinations are prepared by the college department directly responsible for the instruction of the courses. There is a fee of \$5 per credit hour for each exam. The availability of challenge exams may be limited during summer term.

Credits for successfully-completed exams are recorded for the term in which the challenge is completed.

Contact the Advising and Counseling Center for more information about earning college credits by challenge examinations.

## **Credit for prior learning**

**(399-5120)**

In certain professional-technical programs, Chemeketa will award you up to 24 credit hours for knowledge and skills you have learned outside the classroom. These may be skills you acquired through working, on-the-job training, volunteer service, non-credit courses or workshops, individual study, homemaking, and travel.

To learn how to gain such credits, enroll in CPL120 *Prior Learning Resume*, a three-credit-hour course.

## **Independent study**

**(399-5120)**

You may receive credit for an independent study of topics not included in the college's curriculum. If you are ready to learn on your own and are interested in studying a topic, contact your academic advisor or an instructor who teaches that subject. With that person, you can explore the possibility of an independent study project.

When you have agreed upon a subject, you and your appropriate faculty advisor can develop a learning contract for your proposed project.

This contract may include:

- A study of a topic which is not covered in an existing course.
- An in-depth study of a topic introduced in a course.

• Field studies.

• A study combined with tutoring sessions, regular meetings with your instructors, or seminars.

• Service activities.

After your faculty advisor and the program director approve the contract, you may register for independent study credit. When you complete your project, your grade will appear on your transcript. Your copy of the contract becomes the documentation of the content of the course. For more information, contact your academic advisor or the Advising and Counseling Center.

## **Distance Education**

**(399-5191)**

You may earn college credit hours by enrolling in courses offered by television, by mail, and by computer modem.

**Telecourses** allow you to earn college credits at home. Assignments are based on televised lectures. You may view the broadcasts on your own set or watch videotapes of these classes at the Salem Public Library, at the Salem Campus Media Center, or at Chemeketa centers in Dallas, McMinnville, Stayton, or Woodburn. Chemeketa charges a fee of \$10 per telecourse in addition to tuition.

**Chemeketa television (CTV)** broadcasts live telecasts of Salem Campus classes to local Chemeketa centers. Two-way communication allows students at the centers to participate in the classes.

**Courses by mail** allow you to mail your completed assignments to the instructor, who checks them and mails comments back to you.

**Courses by modem** allow you to take classes at your convenience from your home or workplace. You'll need access to a 1200-baud modem and an IBM-PC or compatible computer to send your coursework to campus and to communicate with your instructor.

Listings, registration procedures, and information about telecourses are published each term in the *Schedule of Classes*.



# **Student Development Services**

## **Student-instructor conferences**

You may confer with your instructors regarding class assignments and methods of study. Office hours are posted in each faculty office area.



## Student Rights and Responsibilities

*Chemeketa's Board of Education has approved a document outlining the rights and responsibilities of students. See pages 158 and 159.*



### Tutoring services

(399-5190)

For free tutoring, drop in at the Tutoring Center in Building 2 on the Salem Campus. If you have special needs or problems, contact the facilitator in the Tutoring Center.

### Volunteer tutoring services

(399-2557)

Volunteers offer basic-skills tutoring on a one-to-one basis in Salem and throughout the Chemeketa district. Contact the volunteer tutoring coordinator in Building 18.

### Learning assistance and skills development classes

(399-5093)

Learning assistance services and skill-building classes are available to help you improve the academic skills you'll need to succeed in college. We offer individual and lecture classes in reading, mathematics, spelling, vocabulary development, study skills, problem solving, thinking skills, and college success skills. Linked study skills and content classes are also available. For more information on these classes, contact the Learning Lab in Building 2, Room 112 on the Salem Campus.

### English as a Second Language and bilingual assistance

(399-3902)

If English is not your native language and you want to increase your English language skills, contact the ESL Office in Building 18 on the Salem Campus. Staff members will help you learn to speak, read, and write English.

Services on the Salem Campus include:

**Advising and Counseling Center**—Building 2, 399-5120, for admission and career-planning assistance.

**English as a Second Language program**—Building 18, 399-3902.

**Volunteer tutoring services**—Building 18, 399-2557.

Counseling, tutoring, and English as a Second Language classes are also available at Chemeketa's centers in Dallas, McMinnville, Stayton, and Woodburn.

### Adult Basic Education, General Educational Development (GED), High School Completion

For students who have not completed high school, Chemeketa offers Adult Basic Education, General Educational Development (GED), and High School Completion classes. See Page 30.

### Services for students with disabilities

(399-5192 voice/TDD) and

### Services for students who are deaf and hearing-impaired

(399-5022 voice or 399-5049 TDD)

The coordinator of services for persons with disabilities in Building 2 on the Salem Campus has information about services and facilities for students with disabilities.

Chemeketa's major buildings on the Salem Campus and at the Dallas, McMinnville, and Woodburn Centers are designed to provide access for students with physical disabilities. Parking spaces are reserved for persons with handicapped parking permits. Temporary permits are available from the Information and Public Safety Booth outside the main entrance to Building 2.

Assistance dogs may accompany their owners to Chemeketa, but no other animals are allowed.

The Technology Access for Life Needs (TALN) Project provides information and referral regarding the use of technology by persons with disabilities. These services include the use of adaptive computer systems, assistive communication devices, and other adaptive technology that may improve the performance of students with disabilities. For more information on the TALN Project call 399-6975.

If you have disabilities, including learning disabilities, you are encouraged to use campus support services. The coordinator of services for persons with disabilities is available to help you assess your needs, arrange for the use of adaptive equipment, and plan academic adjustments that will make classes accessible to you. If you need accommodations or academic adjustments, or an alternative format for this publication, call Alene Showers at 399-5192 as early as you possibly can.

Chemeketa offers additional services if you are deaf or hearing impaired. This includes counseling, interpreting, and special classes in language development and basic reading.



## Student Services

### Bookstore

(399-5131)

You may purchase books and supplies at the college Bookstore in Building 20 on the Salem Campus and at the McMinnville Center. (A new bookstore on the Salem Campus will be available for use in early 1994.) Textbooks also are available at the beginning of each term at our centers in Dallas, Stayton, and Woodburn. The cost of books is included in the description of each professional-technical program.



Costs range from \$450 to \$600 a year or about \$150 to \$200 a term.

**Refunds**—You may receive full refunds for books the first two weeks of each term for which they were purchased. All books must be returned in their original condition and accompanied by a sales receipt.

**Used book buy back**—Each term during finals week, the Salem Campus Bookstore pays cash (up to 50 percent of the purchase price) for used textbooks that are needed for the next term. At any time, the Bookstore buys used books at prices established by used book wholesalers.

**Computers and software**—Chemeketa students are eligible to purchase computers and software at special education prices. Some restrictions may apply. Contact the Salem Campus Bookstore for details.

### **Student identification cards (399-5116)**

A student photo identification card is recommended for all students. This card is necessary for access to computer labs; check-out and use of materials and equipment from the library, media services, and the gym; and the sale of used books back to the college Bookstore. The card also admits you to all college sporting events at no cost and entitles you to discounts for various activities.

You may obtain your student ID card at no cost during registration. Additionally, ID cards may be obtained in the Student Life Office in Building 3, Room 101, Mondays through Fri-

days, from 8 to 9 a.m. and Tuesday evenings from 6:30 to 8 p.m. Lost or stolen cards may be replaced for \$2.

### **First aid (399-5023)**

For first aid services on the Salem Campus, call 399-5023. There are also emergency red phones located throughout campus which will connect you directly with the college's Public Safety Office. As the college has no physician, you must rely upon your personal physician, dentist, or clinic to meet other medical needs.

### **Parking on Salem Campus (399-5023)**

If you are a Chemeketa student who drives a motor vehicle on the Salem Campus during the day, the college requires you to have a parking permit. Pick up your permit during registration or at the Student Life Office in Building 3, the Cashier's Office in Building 22, or the Information and Public Safety Booth outside the main entrance to Building 2. Visitors may pick up parking permits at the Information and Public Safety Booth.

Along with your permit you will receive a copy of Chemeketa's traffic code. The college expects you to know and follow the rules for operating a motor vehicle on campus. These rules apply to any car you own, regardless of who is driving it.

The college suggests that you lock your car at all times and park in well-lit areas when on campus at night. More information about cam-



pus safety is contained in an annual report available from the Public Safety Booth.

### Where to eat

**The Breezeway**, Building 2, 399-5180—sandwiches, soups, salads, pastries, and grilled items, and fast foods.

**Avenue 34**, Building 34, 399-2543—breakfast, deli lunch, fast foods and food-to-go, hot meals, fresh desserts, and bakery items.

**Slam Dunk Pizza and Espresso**, Building 7, 399-8895—Pizza (whole or by the slice), pasta, espresso, and desserts, Call in/take out orders accepted.

There are also a number of snack and beverage vending machines located in many buildings on campus.

### Student living accommodations (399-5116)

Chemeketa does not provide living accommodations. However, the Student Life Office in Building 3, Room 101 on the Salem Campus maintains a bulletin board listing available housing, including apartments for rent, rooms for rent in homes, homes for rent, and roommates wanted. You may post a notice and also check this bulletin board for housing. The office also publishes the *Apartment Guide*, which lists apartments in the Salem area. Also, read the classified section of local newspapers for housing vacancies.

### Child care

(399-5107 or 399-5174)

Chemeketa offers limited child care on the Salem Campus.

The Child Development Center, a training center for students enrolled in the Early Childhood Education program, offers full- or part-time care for approximately 35 children ages two-and-a-half to six years old. The college reviews the cost each year. Applications are accepted at any time, but we advise you to apply early.

The **Cooperative Child Care Center** accepts about 90 children ages six weeks to six years old for full-day or short-term care. Parents who assist staff in the classroom pay reduced rates. Parents register their children each term. Applications are accepted at any time for the current year.

The Financial Aid Office, Building 22, Room 118, has a list of day-care centers in the Salem area, or you may call Salem's Child Care Information Service, 585-2491. Local child care providers advertise their services on the bulletin board located outside the Student Life Office in Building 3, Room 101.

### Lost and found

(399-5116)

Lost and found items are kept in the Student Life Office, Building 3, Room 101. If you have lost or found an item, please check with this office.

### Bus passes

(399-5116)

You may pay for Cherriot bus passes at the Cashier's Office in Building 22. You will be given a receipt which may be exchanged for a bus pass at the Student Life Office in Building 3, Room 101. Cherriot bus schedules are available at the Advising and Counseling Center in Building 2.

### Ride sharing

If you would like to share a ride with another student, check the ride-share bulletin board on the first floor of Building 3. You can put up your own "ride-wanted" or "rider-wanted" notice by picking up a ride-share card from the Student Life Office, Building 3, Room 101, and posting it on the bulletin board across from the office.

### Alcohol and drug support groups

(399-5116)

Support groups for substance dependency are coordinated through the Student Life Office and staffed by volunteers. Times and locations of meetings vary each term. For more information contact the Student Life Office in Building 3, Room 101.

## Career and Employment Advising and Services

### Advising and Counseling Center

(399-5120)

If you are interested in educational, vocational, or personal counseling, contact our Advising and Counseling Center in Building 2 on the Salem Campus, or make an appointment to see a counselor at a Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn. Counseling services are available to both current and prospective students.

The Advising and Counseling Center offers the following services:

#### Individual assistance

Counselors offer individual help for program and course planning, career decision making, and personal problems. For assistance, drop in from 8 a.m. to 7:30 p.m. Mondays and Tuesdays or from 8 a.m. to 4:30 p.m. Wednesdays through Fridays. (Hours in summer and between terms are 8 a.m. to 4:30 p.m. Mondays

## About this catalog

*Chemeketa publishes this catalog to give you, our students and public, current information about the college.*

*We make every effort to be sure that this information is accurate at the time of publication. However, sometimes the college finds it necessary to make some changes before the next catalog is printed. These changes may affect the costs, college policies and procedures, the calendar, and some curricula and courses.*

*Therefore, we do not consider the catalog as a hard and fast contract between you and the college; rather, we are trying to give as much relevant information as possible to all of you who may use our services.*

through Fridays.) Diagnostic testing and assessment are available by appointment.

### **Career planning workshops**

Career planning workshops are conducted by counseling staff for persons trying to decide upon a career. In these workshops you may:

- gain a better understanding of your interests, values, and skills.
- relate those characteristics to a wide variety of careers.
- find accurate information about occupations and the labor market.
- develop a personal plan of action.

Each workshop consists of a series of two to four sessions held over a period of two consecutive weeks. A schedule of workshops is published in each term's *Schedule of Classes*.

### **Career Resource Center**

The Advising and Counseling Center maintains a comprehensive career resource center. You may use materials there to assist you in deciding upon a career. The center has information on career and job requirements, schooling and training opportunities, and the employment outlook. The center also has a library of current catalogs of Northwest colleges.

### **Career Information System**

A computer-based Career Information System (CIS) is available for current and prospective students to use in career decision making. In using CIS, you respond to questions from the computer concerning your interests, abilities, and preferences. The computer analyzes your responses and prints a list of occupations which may suit you.

In addition, you may:

- obtain descriptions of occupations.
- learn how to prepare and train for specific careers, and find out which schools offer such training.
- gather information about the availability of jobs.
- obtain salary information for occupations in Oregon.

Appointments are necessary. For more information or to arrange an appointment, contact the Advising and Counseling Center.

### **Micro-SKILLS program**

Micro-SKILLS is a computerized program which allows you to compare your skills with those required in certain occupations.

### **DISCOVER**

Another computer-based career information resource is DISCOVER. It complements CIS and provides a more in-depth assessment of your interests, abilities, and values. This system can search through 400 job titles, give informa-

tion about occupations, and suggest appropriate educational and training institutions.

### **Academic advising**

Chemeketa offers academic advising for all students. If you are enrolling in a program of study, you are assigned a faculty advisor in your program. If you are a full-time "exploratory" student who has not chosen a specific program of study, your assigned advisor will be one of your instructors. Some assignments are made through the automated computer system and notification mailed to the student. The Information Center in Building 2 on the Salem Campus keeps a current roster of advisor assignments.

If you attend only evening classes or are a part-time student, we encourage you to visit the Advising and Counseling Center periodically for academic advising. You may also consult with a counselor at one of our centers in Dallas, McMinnville, Stayton, or Woodburn.

### **Placement Resource Center**

**(399-5026)**

Chemeketa's Placement Resource Center in Building 17 on the Salem Campus offers the following free services for students looking for part-time jobs while going to school or for employment after they graduate:

#### **Individual job search assistance**

For individual assistance, make an appointment with the Placement Resource Center. If you are nearing graduation, we encourage you to visit the center at least one term before you will graduate. The Placement Resource Center helps students and graduates with resumes, interviews, and employer contacts.

#### **Job referral service**

Part-time and full-time job opportunities are posted on bulletin boards in the Placement Resource Center. Referrals are issued to qualified students and graduates who are registered with the Placement Service.

#### **Placement files**

Students and graduates may set up placement files which may help them in finding jobs. These files may include your resume, class and grade summaries, and recommendations from your instructors and/or employers. When completed, your file can be duplicated and sent to specific employers at your request. Contact the Placement Resource Center for information on how to start a file.

#### **On-campus recruiting**

The Placement Resource Center works with employers who wish to come to the Salem Campus to recruit and interview graduating students. These visits are announced through special recruitment mailings, job postings at the center, announcements in class, or adver-

tisements in the *The Chemeketa Courier*, the student newspaper.

### Job search information and resources

Chemeketa students and graduates may use computers, printers, typewriters, a FAX machine, and a resource library of employer contact information and job search guides at the Placement Resource Center.

Videotapes on job search techniques are available in the Media Services area and at the Advising and Counseling Center, which are in Building 2 on the Salem Campus. They are also available at Chemeketa centers in Dallas, McMinnville, Stayton, and Woodburn and the Salem Public Library.

### Job search seminars

These free seminars may make your job search easier and more productive. They are open to students and persons in the community. The series of five classes, meeting one hour a day, is offered three to four times a term. For more information, call 399-5026 or go to the Placement Resource Center.

Classes are:

- Skills: What You Have to Offer
- The Search: Where to Look and How to Apply
- Resumes: How to Present Yourself on Paper
- Interviewing: How to Impress an Employer

- Interviewing: Practice This Skill and Get Feedback

### Job Search Techniques class

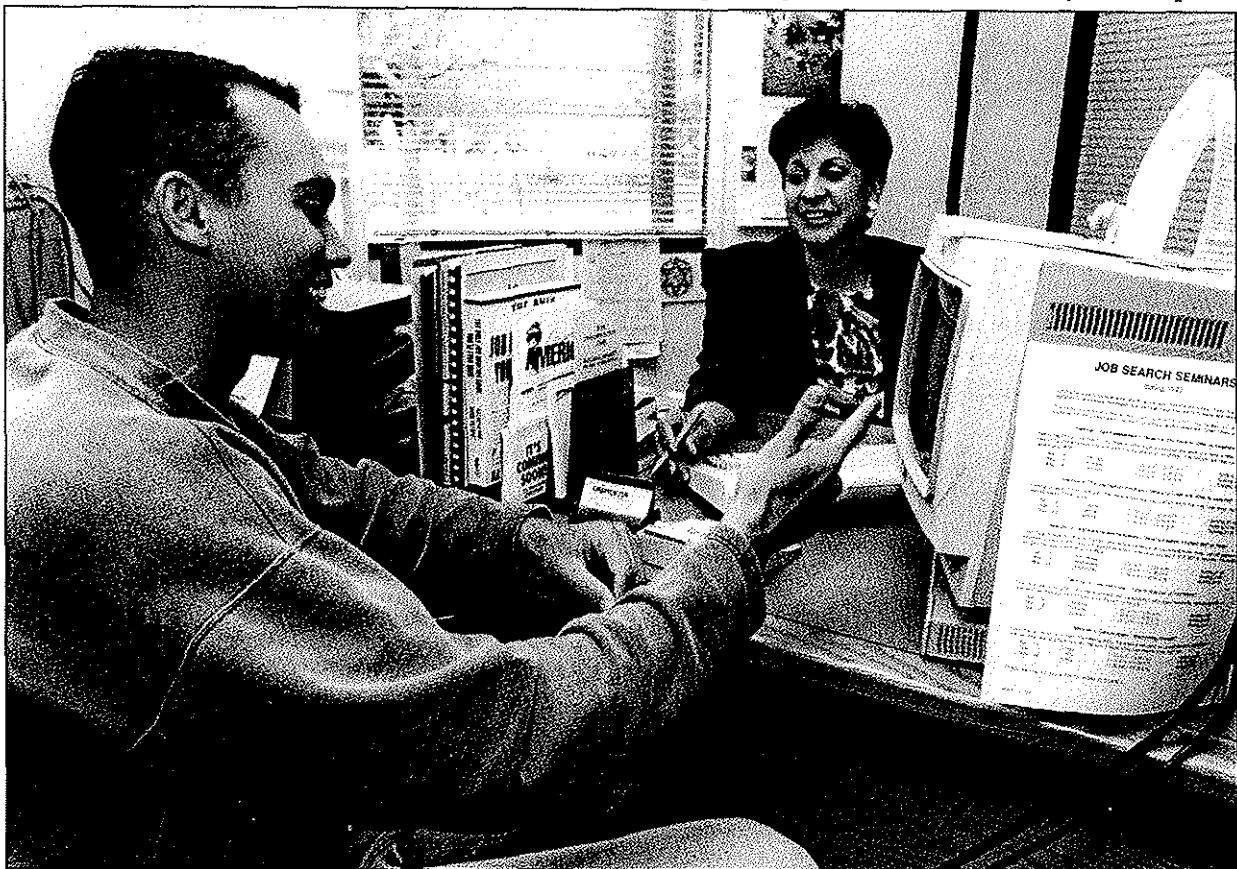
This one-credit-hour course includes information on how to prepare yourself to look for a job and how to find and apply for a job. The class covers preparing and writing resumes, identifying the requirements of a job, determining what an employer looks for in a new employee, and practicing interview techniques. The class is listed under Job Search in each term's *Schedule of Classes*.

### Cooperative Work Experience (399-5026)

As a full-time or part-time Chemeketa student, you may gain on-the-job training in your career field through our Cooperative Work Experience (CWE) program. This program allows you to combine your classroom studies with related job experiences.

In this program, you work with a CWE coordinator to find a qualified position, or your current job may qualify if it relates to your studies. The college must approve your training site and the learning objectives you and your supervisor develop.

CWE training can help you establish references for future employment and expand your knowledge of and experience in a particular kind of work while you are earning college credit. You may enroll for a variable number of credits depending on the number of hours you work per



week. You will participate in weekly seminars or meet with a faculty member on a regular basis to discuss your progress.

Most of Chemeketa's professional-technical programs include CWE either as an elective or as a graduation requirement. Transfer students may also participate in CWE for elective credit. The CWE office is in Building 17 on the Salem Campus.

## Services to the Community

### Golden Age Cards (399-5135)

If you are 62 years of age or older, you pay only 35 percent of tuition (minimum \$10) plus fees for most classes offered by the college. In addition, you are eligible for a free Golden Age Card which allows you free or reduced admission to college-sponsored films, dramas, and athletic events. You may obtain a card by calling the Salem Campus, 399-5139, or by contacting a Chemeketa center in Dallas, McMinnville, Stayton, or Woodburn.

### Training and Economic Development Center (399-5181)

Chemeketa's Training and Economic Development Center is a resource for business firms and organizations and for anyone who is starting a business. The center is located in Liberty Square, 365 Ferry Street S.E., in Salem.

The center assists our region's economic development by providing business assistance counseling as well as management and employee development workshops. You can choose from our regularly scheduled workshops or arrange for customized, on- or off-site training for your employees. Resources at the center include videotapes, books, periodicals, and computers for small business management use.

Chemeketa's one-year Small Business Management program is for business owners and operators. It includes counseling at the business site and evening classes on business topics.

The following services are available through the TED Center:

**Small Business Development**—Classes and counseling are offered for those who wish to start a business and for those currently operating a small business.

**American Management Association Extension Institute**—Courses developed to meet the needs of working professionals who want to learn up-to-date business and management skills.

**Oregon Marketplace**—This program helps local and international businesses by finding local suppliers of goods and services.

**Macintosh lab**—The lab contains 10 Macintosh SE computers plus additional equipment and software for group training. The lab is available for hardware and software training at the TED Center, on our Salem Campus, and at our centers in Dallas, McMinnville, and Woodburn.

**MS/DOS Computer Lab**—The portable lab contains 12 personal computers plus additional equipment and software for group training. The lab is available for hardware and software training at the TED Center, on our Salem Campus, at your business site, and at our centers in Dallas, McMinnville, and Woodburn.

### Oregon Advanced Technology Consortium (OATC) (399-6058)

Five Oregon community colleges—Chemeketa, Clackamas, Linn-Benton, Mt. Hood, and Portland—have joined together to form the Oregon Advanced Technology Consortium (OATC) and concentrate their individual expertise in advanced technology.

The OATC's mission is to improve competitiveness through training in advanced technology and through technology transfer, which aims to reduce the time lag between technology innovation and actual application in the work place.

Examples of the services provided by the OATC include identifying potential new technologies for specific industries, demonstrating and testing those technologies, and training for managers who implement those technologies.

Watch the quarterly *Schedule of Classes* for OATC course listings.

### Short-term training 399-6989

Chemeketa has a variety of short-term training options which may lead to employment opportunities for you.

Currently Chemeketa's short-term training consists of more than 40 offerings including office administration and technology, basic computer literacy, nursing assistant, medication aide, medical claims analyst, medical receptionist/clerk, construction, family day care provider, and custodian. Offerings range in length from one week to two terms, and students in some programs may be eligible for Pell Grants.

Some short-term training opportunities start at the beginning of the term and run for the length of a term, usually 11 to 12 weeks. Others are offered on an open entry/open exit basis in which students may begin at any time during the term, and leave when they have





## Definitions

**Class** - See course.

**Course** - A course is a subject or an instructional subdivision of a subject, usually offered during a single term.

**Credit Hour** - The number of credit hours granted for each course varies. In general, a student earns one credit for a lecture class that meets one hour per week per term, or three credits for a lecture class that meets three hours per week.

Courses with labs and some other courses may vary from this pattern.

The Course Description section of this catalog lists the value of each course in credit hours.

**Curriculum** - An organized program of study arranged to provide integrated cultural or professional education leading to a certificate or degree.

**Elective** - An optional rather than required course.

**Sequence** - Closely related courses extending through three terms.

**Term** - Approximately one quarter of the academic year. Fall, winter, and spring terms range in length from 11 to 12 weeks. Summer term runs for eight weeks.



completed the requirements of the program. Nearly all of the short-term training options include practical experience at a local job site. Some of the classes offered are credit, while others are non-credit.

New short-term training is designed as employment information indicates that it would be useful. Check with the Advising and Counseling Center in Building 2 on the Salem Campus (399-5120) for the most current list of short-term training options.

## Campus Gallery

(399-2533)

Chemeketa's art gallery is in Building 3, Room 122 on the Salem Campus. It presents juried exhibits of professional artists from around the country. Several shows a year, featuring a wide variety of media, are open for viewing by students, staff, and the public.

## Chemeketa Cooperative Regional Library Service

(399-5119)

The college library is part of the Chemeketa Cooperative Regional Library Service (CCRLS), along with 17 public libraries in the college district.

This cooperative, tax-supported effort provides library service to district residents who have no access to a local library. Member libraries share their resources and honor library cards issued by all member libraries and the CCRLS bookmobile. CCRLS also provides central reference services and book delivery between libraries.

An automated, on-line catalog listing over 300,000 titles found in CCRLS libraries is available in each library. Patrons can search by author, title, or subject to find materials in any member libraries. Dial-in access is also available for those who have modems.

## Planetarium

(399-5161)

Chemeketa's Planetarium is in Building 2 on the Salem Campus. It features a Spitz model 512 sky instrument which projects 2,500 stars, five planets, the sun and moon, and sky coordinates on a 35-foot metal dome. This instrument can project the sky for any date—past, present, or future—as seen from any location on earth, and can simulate all motions of the earth.

Chemeketa usually presents two sky shows each fall, winter, and spring term. Showings are scheduled each week during a term. There is an admission fee with a special rate for families. Call 399-5161 to arrange group showings for schools, clubs, and organizations.

## Technology Access for Life Needs (TALN) Project

(399-6975)

The TALN Project provides information and referral regarding the use of technology by persons with disabilities. For more information on the TALN Project see **Services for students with disabilities** on Page 16.

## Student Life

### Special programs and activities

(399-5116)

At Chemeketa, we believe that activities outside the classroom are important, for they involve students more fully in their education. Our student activities program is designed to respond to your recreational and social interests and needs.

Students assume most of the responsibilities for Salem Campus activities, with guidance and advisement from the Student Life Office staff. Students develop and administer most programs, including clubs and campus social and recreational programs.

Activities vary throughout the year, depending upon student interests. These activities and opportunities are planned for you. For more information, contact officers of the Associated Students of Chemeketa Community College (ASCCC) or the Student Life Office in Building 3, Room 101 on the Salem Campus.

### Associated Students of Chemeketa Community College

(399-5117)

Associated Students of Chemeketa Community College (ASCCC) is the official organization for students. Membership is open to all registered Chemeketa students.

There are two representative bodies of ASCCC: the Student Senate and the Executive Council. The Student Senate consists of 11 appointed student representatives. The Executive Council consists of five elected and appointed officers: president, vice president, programming director, budget director, and public relations director.

### ASCCC activities

ASCCC sponsors films, dances, concerts, excursions, lectures, and other entertaining, educational, recreational, and cultural activities. These are planned to meet the needs and interests of the diverse student population.

ASCCC coordinates numerous service projects for students and the Chemeketa community. These projects include the Red Cross blood drive, recycling efforts, blood and cholesterol screenings, food drives, and a student-to-student book exchange.

## Student clubs and organizations

ASCCC recognizes a number of organizations which provide a variety of activities for students. Among them are:

- American Society of Certified Engineering Technicians (ASCET)
- Christian Fellowship Club
- Data Processing Management Association (DPMA)
- Deaf and Hearing Impaired Club
- Delta Epsilon Chi
- Fire Protection Club
- Forestry Club
- German Club
- Health Occupation Students of America (HOSA)
- Hiking Club
- Institute of Management Accountants (IMA)
- Instrument Society of America (ISA)
- International Conference of Building Officials (ICBO)
- International Students Club
- Juntos Club
- Latter Day Saints Club
- Native American Club
- Phi Theta Kappa
- Ski Club
- Society of Hosteurs (hospitality management)
- Soccer Club
- Society of Manufacturing Engineers (SME)
- Student Nurses Organization (SNO)
- Taking Education Seriously Today (TEST)
- Triangle Society
- Writers Club

For more information about clubs and organizations on the Salem Campus, contact ASCCC or the Student Life Office in Building 3.

### New ideas welcomed

If you are interested in organizing a new club or organization, contact the Student Life Office in Building 3 for information on obtaining a charter.

Ideas for activities and excursions are also welcomed. Students' interests are considered when activities are planned.

### *The Chemeketa Courier* (student newspaper) (399-5134)

*The Chemeketa Courier*, Chemeketa's student newspaper, is published weekly during fall, winter, and spring terms. Written and prepared by journalism students using electronic desktop publishing equipment, the newspaper has won several awards from the Oregon Newspaper Publishers Association.

If you are interested in joining *The Chemeketa Courier* staff as a reporter or photographer, apply for a staff position by contacting the newspaper advisor.



### Literary publication

(399-5184)

A select humanities faculty group solicits student literary contributions throughout the year. Works are reviewed and selected entries are published as a literary supplement to *The Chemeketa Courier*.

### Community Colleges of Oregon Student Association and Commissions

ASCCC has a representative on the board of the Community Colleges of Oregon Student Association and Commissions (CCOSAC), a state-wide student-run organization representing more than 260,000 community college students in Oregon.

CCOSAC has various paid and unpaid positions for students who lobby the state government about community college concerns. If you are interested in such work, contact the student body president.

### Intercollegiate athletics

(399-5081)

Chemeketa is a member of the Northwest Athletic Association of Community Colleges (NWAACC). The association includes all community colleges in western Oregon and western Washington. A highly organized program affords quality competitive opportunities for students. In keeping with the standards of the program, emphasis is put on academic progress as well as athletic opportunity.

Chemeketa fields teams in men's baseball, men's and women's basketball, men's and women's track, and women's volleyball.

If you participate in interscholastic sports, a physical examination and documentation of immunization for measles are required. Team travel, uniforms, and health insurance are provided. Contact the Physical Education Office in Building 7 for more information.

## Education for the Community

### Off-campus classes

We hold classes not only on the Salem Campus but also at a number of off-campus Salem locations; at our college centers at Dallas, McMinnville, Stayton, and Woodburn; and at other convenient sites in the district and communities.

Committed to lifelong learning, the college schedules a wide variety of credit and non-credit classes, workshops, seminars, and special programs which meet during the day, evening, and on weekends. These include college transfer courses; professional-technical and job skill-upgrading classes; and personal enrichment classes in languages, art, first aid, health, and other areas. In response to your requests, we are willing to develop and schedule other classes.

Chemeketa's centers also provide Adult Basic Education, General Educational Development (GED) test preparation, and High School Completion programs. Each center has a mathematics lab for individualized, self-paced instruction and an office occupations program which includes training on computers and word processors.

### Outreach center services

In addition to classes, Chemeketa's centers in Dallas, McMinnville, Stayton, and Woodburn provide these services:

- Academic advising, program planning, and course selection guidance.
- Career counseling.
- Information on financial aid and veterans' benefits.
- Placement and vocational interest testing.

### College for Older Adults

(399-5135)  
Chemeketa plans classes, workshops, and other activities which may especially interest older adults. We hold these classes at a number of Salem locations, including the Salem Senior Center, and in various communities throughout the college district. Topics range from personal growth and history to nature studies, writing, and arts and crafts. For more information on Golden Age Cards see Page 21.

### Agriculture classes

(399-5135)  
Chemeketa offers non-credit classes to meet continuing educational and self-improvement needs of persons involved in agriculture.

A variety of classes are offered in each of the following:

Landscape and nursery  
Christmas tree production  
Pesticide application license  
examination preparation  
Sheep production  
Horse care and horsemanship

The program strives to be relevant and responsive to the agricultural community by adjusting course offerings regularly. Suggestions are welcome.

### Farm Business Management

(399-5089 or 472-9482)

Chemeketa's three-year Farm Business Management program assists farm operators with the financial aspects of farm management. For more information see Page 65.

### Family programs

(399-3915)

Chemeketa offers a variety of courses and workshops related to the needs of families and family members. Topics range from family life, parenting, and human relations to financial planning, clothing, health and nutrition, and home management. Classes and workshops meet both on and off-campus in Salem and also are scheduled by our centers in Dallas, McMinnville, Stayton, and Woodburn.

### New Workforce program

(399-3920)

The New Workforce program aims to help single parents, displaced homemakers, dislocated workers, and other individuals in transition move from economic dependency to financial self-sufficiency. The program begins with an intensive two-week seminar on confidence building, career planning, and job search techniques to help you develop your plan for acquiring occupational skills and finding employment. Follow-up sessions continue for eight weeks. Some financial assistance is available for child care, transportation, tuition, and supplies.

### New Workforce/Life Skills Resource Center

(399-5236)

The New Workforce/Life Skills Resource Center is located in Building 19 on the Salem Campus. It provides support and encouragement for the concerns of individuals and directs them to campus and community services. People are welcome to drop in, talk, and browse through books and materials.

### Work and family seminars

(399-3915)

Chemeketa offers a series of seminars which focus on work and family issues. These seminars are intended to help employees be productive on the job while maintaining a caring family relationship.

## Chemeketa Centers

Extended Learning (formerly known as Community Education) information may be obtained in Building 50 on the Salem Campus, or by calling 399-5135. If you live outside the Salem area, call one of our local centers for information:

### Chemeketa Dallas Center

182 SW Academy Street  
623-5567 or 399-5206

### Chemeketa McMinnville Center

500 N Hill Road  
472-9482 or 399-5219

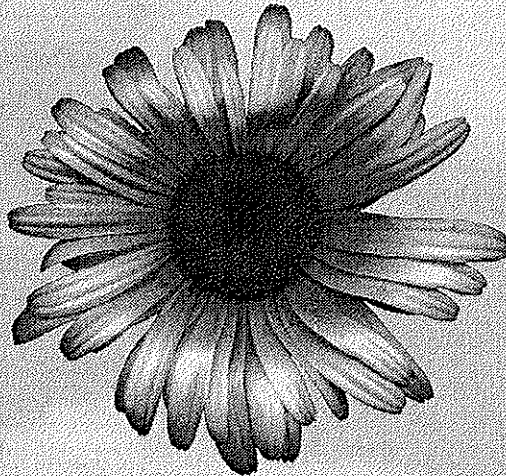
### Chemeketa Stayton Center

756 W Locust Street  
769-7738 or 399-5215

### Chemeketa Woodburn Center

120 E Lincoln Street  
981-8820 or 399-5207

DEGREES, DIPLOMAS, CERTIFICATES  
AND TRANSFER INFORMATION



# Program Guide

Here's a quick reference listing of the programs of study and courses available at Chemeketa. If you don't find the program or course you are looking for, check the index in the back of this catalog. For more information, call the Advising and Counseling Center at 399-5120.

- C = Certificate of Completion  
 A = Associate of Applied Science Degree  
 T = Transfer Program and/or Associate of Arts Degree  
 O = Other (classes for personal or professional skill development)

Program Name	C	A	T	O
Accounting		✓		
Adult Basic Education				✓
Adult High School Diploma				✓
Agriculture			✓	
Anthropology			✓	
Art			✓	
Automotive Technology				
Automotive Technician		✓		
Automotive Parts Sales	✓			
Banking and Finance	✓	✓		
Biology			✓	
Botany			✓	
Building Inspection Technology	✓	✓		
Business Administration			✓	
Chemistry			✓	
Chiropractic			✓	
Civil-Structural Engineering Technology				
Survey Technology	✓			
Civil-Structural Engineering Technology		✓		
Computer Programming		✓		
Microcomputer Support Specialist		✓		
Computer Science			✓	
Construction Skills Training (Short-Term)	✓			
Criminal Justice		✓		
Dental Assisting	✓			
Dental Hygiene			✓	
Drafting Technology-CAD				
Drafting		✓		
CAD-CAM		✓		
Mechanical Design		✓		
Early Childhood Education				
One-Year	✓			
Two-Year		✓		
Economics			✓	
Education (Elementary and Secondary)			✓	
Electronics Technologies				
Computer Electronics		✓		
Electronic Engineering Technician		✓		
Industrial Electronics		✓		
Emergency Medical Technology		✓		
English as a Second Language				✓
Engineering			✓	
English			✓	
Entomology			✓	
Farm Business Management				✓
Fire Protection Technology				
Fire Suppression		✓		
Fire Protection-Insurance Risk Inspection		✓		
Foreign Languages			✓	
Forest Resources Technology		✓		
Forestry			✓	
General Educational Development (GED)				✓
General Science			✓	
General Studies			✓	
Geography			✓	
Geology			✓	
Health			✓	
Health Education			✓	
Health Care Support Services				
Claims Analyst/Medical Biller (Short-Term)	✓			

Program Name	C	A	T	O
Health Information Technician	✓			
Health Services Management		✓		
Medical Office Assistant	✓			
Medical Receptionist/Clerk (Short-Term)	✓			
Medical Transcriptionist		✓		
History			✓	
Home Economics			✓	
Hospitality Systems Management		✓		
Hotel, Restaurant, and Resort Management			✓	
Human Services				
Alcohol and Drugs		✓		
Gerontology		✓		
Social Services		✓		
Industrial Technology and Apprenticeship		✓		
Instructional Assistant				
Kindergarten/Primary		✓		
Multicultural/English as a Second Language		✓		
One-Year	✓			
Senior High School/Adult		✓		
Special Education		✓		
Upper Elementary/Middle School		✓		
Vocational/Technical		✓		
Journalism			✓	
Management		✓		
Manufacturing Engineering Technologies				
Manufacturing Operations	✓			
Manufacturing Technologies		✓		
Mathematics				✓
Nursing				
Nursing Assistant	✓			
Licensed Practical Nurse	✓			
Registered Nurse		✓		
Nursing			✓	
Occupational Skills Training (Short Term)	✓			
Office Administration and Technology				
Engineering		✓		
Executive		✓		
Information Processing		✓		
Legal		✓		
Medical		✓		
Office Accounting		✓		
One-Year	✓			
Short-Term	✓			
Philosophy			✓	
Physical Education/Human Movement Studies			✓	
Physics			✓	
Political Science			✓	
Pre-Law			✓	
Pre-Professional Study (medicine, dentistry, veterinary)			✓	
Professional-Technical Teacher Preparation	✓			
Psychology			✓	
Real Estate		✓		
Small Business Management				✓
Sociology			✓	
Speech			✓	
Visual Communications Technology		✓		
Welding				
Welding Technology	✓			
Welding Fabrication		✓		
Zoology			✓	



As you begin classes at Chemeketa Community College, you may already have an educational goal in mind. If not, you have several options from which to choose.

Chemeketa's academic programs allow you to earn either an Associate of Arts or an Associate of Applied Science degree or a Certificate of Completion. Or you may wish to complete the first two years of college at Chemeketa and then transfer credits to a four-year college or university.



## Degrees

Graduates of Chemeketa's two-year programs are awarded Associate of Arts or Associate of Applied Science degrees. Both are nationally-recognized degrees.

### Associate of Arts degree

The Associate of Arts degree program encompasses the core curriculum of a liberal arts education. This core includes coursework in each of the areas of communications, humanities, social sciences, mathematics, sciences, computer science, and physical education or health. In addition, students are encouraged to explore a broad range of subjects through elective course work.

You may wish to pursue an Associate of Arts degree while earning college transfer credits. It is easy to earn an A.A. degree while at the same time preparing to transfer to a four-year school or university. If you enroll full time, it usually takes two years to meet the A.A. degree requirements.

See the Program Guide on Page 26 for a complete list of our transfer programs. Information and curriculum outlines of these programs begin on Page 39.

Students who earn an Oregon Associate of Arts transfer degree from Chemeketa will have fulfilled the lower division general education requirements at any of the schools in the Oregon State System of Higher Education.

To qualify for an Associate of Arts degree, you must meet the requirements listed on Page 28.

### Associate of Applied Science degree

Chemeketa, with its emphasis on professional-technical education, offers training in more than 40 occupations.

In most of these programs, you may earn an Associate of Applied Science degree. If you enroll full time, it usually takes two years to meet the A.A.S. degree requirements.

See the Program Guide on Page 26 for a complete list of A.A.S. degree programs. Information and curriculum outlines of these pro-

grams begin on Page 39 along with college transfer curricula.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on Page 29.

### Graduation

As a student, you, with the guidance of your advisor, are responsible for fulfilling the requirements for graduation.

As a candidate for graduation, fill out an Application for a Degree or Certificate form. Return the form to the Registrar's Office by the fourth week of the academic term before the term in which you will complete the program requirements. Dates when applications for graduation are due are listed in the calendar published each term in the *Schedule of Classes*.

Degrees and certificates become official when graduation information is recorded on your transcript.

If you plan to complete the requirements for your degree during summer term, you may request to participate in graduation exercises held the preceding June. To do this, contact the Student Life Office, Building 3, Room 101.

If your studies are interrupted by two years or more, you may find upon your return to Chemeketa that some of the requirements for graduation have been changed. You may have to complete the new requirements in order to earn your certificate or degree.

You may be allowed to make substitutions in the curriculum and still meet graduation requirements by following these steps:

- Discuss the substitutions with your program director or academic advisor.
- Gain approval of the program director to make the substitution.
- Submit a Curriculum Deviation Form, signed by your program director, to the Registrar. This form shows that the substitution will benefit you without changing the quality of your program. The Registrar may then grant the substitution.

Chemeketa awards adult high school diplomas through its High School Completion program. The Oregon Department of Education issues General Educational Development (GED) certificates. Students receive these diplomas and certificates at a graduation ceremony in June. For details on the High School Completion and GED programs, see Page 30.

Classes required to complete the programs outlined in this catalog are offered on the Salem Campus. Some of the classes are also offered at Chemeketa's Centers in Dallas, McMinnville, Stayton, and Woodburn.

# Associate of Arts Degree Requirements (Oregon Associate of Arts transfer degree)

Requirements	Credit hrs.	Courses which satisfy requirements
Complete a minimum of 93 credit hours. These must include the following:	93	
<i>Writing</i> (with grade "C" or better)	9	WR121, WR122, and WR123, or WR227
<i>Math</i> (with grade "C" or better)	4	MTH105 or above
<i>Oral Communication/Rhetoric</i> (with grade "C" or better)	3	SP111, SP112, SP113, SP114, SP115, SP130, or SP230
<i>Physical Education or Health</i>	3	Any PE180, PE185, or PE190 classes (one credit each); HE250 (three credits); or HPE295 (three credits). No more than 12 credits of PE185 may be applied toward an A.A. degree.
<i>Computer Studies</i>	3	CIS120, CS101, CS131, CS133B, CS161, or other computer information science or computer study courses.
<i>Humanities</i> sequence	9	ART115, 116, 117; ART204, 205, 206; ENG101, 102, 103; ENG104, 105, 106; ENG105, 106 and one from 261, 262, 263; ENG107, 108, 109; ENG201, 202, 203; ENG253, 254, 255; ENG261, 262, 263; FA255, 256, 257; MUS201, 202, 203; PHL201, 202, 203; R201, 202, 203
<i>*Arts and Letters/Humanities</i> courses (A minimum of two or three courses from either the list above or from the courses listed in this row. These courses must be from a different discipline than the sequence selected above. A course taken as oral communication/rhetoric requirement may be used as one of these courses.)	6 to 9	ART101, 119, 154, 155, 156, 197, 221, 225, 231, 232, 233, 244, 245, 246, 254, 260, 261, 271, 272, 273, 274, 281, 284, 285, 286, 291, 292, 293, 299; ENG116, 260; FA251; FR201, 202, 203; GER201, 202, 203; HUM100, 199; J215, 216, 224, 225, 226; JPN201, 202, 203; MS251, 252, 253, 259; MUP100, 101, 105, 174; MUS134, 197, 199; PHL204, 205; R199; SP105, 111, 112, 113, 114, 115, 118A, B, C, 130; SPAN201, 202, 203; TA110, 121, 122, 123, 261, 285ABC; WR241, 242, 243, 248A, B, C, 270A, B, C, D, E
<i>Social Science</i> sequence	9	ANTH101, 102, 103; ANTH207, 208, 209; EC201, 202, 203; GEOG105, 106, 107; HST110, 111, 112; HST157, 158, 159; HST201, 202, 203; HST257, 258, 259; PS201, 202, and 203 or 205; PSY201, 202, 203; SOC204, 205, 206; WS101, 102, 103
<i>*Social Science</i> courses (Two or three courses from either the list above or from the courses listed in this row. These courses must be from a different discipline than the sequence selected above.)	6 to 9	EC200; GEOG201, 202; PSY100, 101, 102, 114, 119, 199, 206, 211, 219, 237, 239, 246, 298; SOC210, 221, 227, 250, 291, 292; SSC150; WS199A, B, C
<i>Life Science or Physical Science</i> sequence	12	BI101, 102, 103; BI231, 232, 233; BOT201, 202, 203; CH104, 105, 106; CH115, 116, 117; CH121, 122, 123; CH201, 202, 203, CH221, 222, 223; CH241, 242, 243; G142, 143, 144; G201, 202, 203; GS104, 105, 106; GS141, 142, 143; PH201, 202, 203; PH207, 208, 209; PH211, 212, 213; ZOO201, 202, 203
<i>*Science/Mathematics</i> courses (Two or three additional courses from either the list above or from the courses listed in this row. These courses must be from a different discipline than the sequence selected above. Courses taken as math and computer studies requirements may be used as two of these courses.)	6 to 12	BI103A, 200, 234; CH150; CIS120, 121, 122; CS100, 101, 104Q, 113, 125DB, 125FX, 125P, 125SS, 131, 133A, B, C, E, F, R, U, 135DB, 135SS, 140A, B, C, M, U, 145, 161, 162, 171, 233A, B, C, I, M, R, U, 234C, 234L, 235, 236, 237, 240, 244, 246, 252B, 260, 270, 271, 275, 278, 279, 285; G160A, B, C, D, E; GS120; MTH105, 111, 112, 211, 212, 213, 231, 232, 241, 243, 251, 252, 253, 254, 255, 256; OC133; PH121
Earn a cumulative grade point average (GPA) of 2.0 or above in all work to be applied toward the degree.		
Complete a minimum of 30 credit hours at Chemeketa.		
Up to 12 credit hours in specialty program courses may be applied toward the 93 credit hours required for the A.A. degree. All other courses must be numbered 100 or higher.		All courses numbered 050 through 099 except the following: COM051, 052, 053; MTH051 through 095; OA084, 085; RD090  A maximum of 12 CWE credits will be allowed toward graduation.

Notes: \*Three additional classes must be selected from two of the three groups (Arts and Letters/Humanities, Social Science, and Science/Mathematics) listed above. Two courses must be chosen from the remaining group.

# Associate of Applied Science Degree Requirements

Requirements	Courses/areas which satisfy requirements
Satisfactorily complete the required courses and credit hours listed for each program in the Programs of Study section of this catalog.	
<p><b>General Education Requirements</b> You will meet the general education requirements if you follow the curriculum outline listed for your program. In some cases the program specifies exactly which of the courses you should take. The courses listed below meet the college's general education requirement.</p>	
<b>Writing</b>	One class of WR115, WR121, BA214, COM051, or OA084 or any higher numbered writing class
<b>Math</b>	One class of MTH052 or any higher numbered math course
<b>Computer Literacy</b>	Approved program-related instruction on computers or three credit hours of computer studies
Three credit hours from each of three of the four following areas:	
<b>Social Science</b>	Anthropology, Economics, Geography, History, Human Development/Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies
<b>Humanities/Fine Arts</b>	Art, English, Film Art, Foreign Language, American Sign Language, Humanities, Multidisciplinary Studies, Music, Philosophy, Religion, Theater Arts
<b>Science/Applied Science</b>	Approved program-related instruction may satisfy this requirement, or courses in Biology, Botany, Chemistry, Foods and Nutrition, General Science, Geology, Oceanography, Physical Science, Zoology
<b>Communications</b>	Communication Skills, English as a Non-native Language, Journalism, Speech, Writing, Reading, plus these specific classes: RD115, RD116, and HD112
Three additional credits from any of these areas:	
<b>Communications</b>	
<b>Health Education</b>	
<b>Humanities/Fine Arts</b>	
<b>Math</b>	
<b>Physical Education</b>	
<b>Science</b>	
<b>Social Science</b>	
Complete a minimum of 30 credit hours at Chemeketa.	
Earn a cumulative grade point average (GPA) of 2.0 or above for all course credits which apply toward the degree. Only courses numbered 050 or higher apply toward the degree.	

- Notes:**
1. We recommend that you see an advisor for guidance before you enroll.
  2. Some of Oregon's four-year institutions accept certain courses in professional-technical programs as college transfer courses. If you are interested in continuing your education after completing a Chemeketa program, check with the institution you plan to attend.



## Certificate of Completion

You will receive a Certificate of Completion if you meet the requirements of certain one-year professional-technical programs.

See the Program Guide on Page 26 for a complete list of Certificate of Completion programs. Information and curriculum outlines of these programs begin on Page 39 along with college transfer curricula.

You may earn a Certificate of Completion by meeting these requirements:

- Satisfactorily complete the required courses or credit hours listed for each program.



- Earn a cumulative grade point average of 2.0 or above for all course work which applies to the certificate.
- Complete a minimum of 15 credit hours at Chemeketa.
- All courses to be applied toward a certificate must be numbered 050 or higher.

## High School Completion, GED, and ABE

Chemeketa has several programs to help you earn the credits you need to receive a high school diploma or its equivalent. The college also offers special classes to help you improve the basic skills which are important when you enroll in college-level courses.

### Adult high school diploma program (399-5115)

In Chemeketa's adult high school diploma program, you may earn the credits you need to receive a high school diploma.

To enroll in the adult high school diploma program, take copies of your high school and college transcripts to the High School Completion Office in Building 50 on the Salem Campus or to one of Chemeketa's centers in Dallas, McMinnville, Stayton, or Woodburn. Chemeketa staff members will evaluate your transcripts.

At Chemeketa, you may earn credits toward a high school diploma in three ways:

- Enroll in high school completion classes offered on the Salem Campus and at Chemeketa's centers in Dallas, McMinnville, Stayton, or Woodburn.
- Earn high school credit for most Chemeketa classes.
- Receive credit for some of your life experiences. These may be skills and knowledge you learned on a job, doing volunteer work, managing a home, or serving in a branch of the military service. Chemeketa staff members will evaluate your experiences to award you credit.

Twenty-two credits and 13 competencies are required to complete the high school diploma program. To be in the program, you must be 16 years or older. You must have a release from your high school if under 18 years old.

### General Educational Development (GED)

(399-5224)

You may earn a high school equivalency certificate by passing General Educational Development (GED) tests. These are five tests covering

writing skills, social studies, the sciences, literature and the arts, and mathematics.

Chemeketa offers free classes throughout the college district to help you prepare for these tests. You may enroll any week during the term and progress at your own pace. Classes are held at our centers in Dallas, McMinnville, Stayton, and Woodburn; the Yamhill County Cooperative Learning Center; the Salem Campus; and at the Downtown Learning Center. Generally, you must be 18 years or older, but if you are 16 or 17 years old, you may enroll if you have a release from your high school.

GED tests are given in Salem, McMinnville, and Woodburn. The testing fee is \$45.

## Adult Basic Education

(399-5224)

If you do not have a high school diploma or if you need to upgrade your basic skills, you may sign up for free, non-credit classes in basic English, mathematics, and reading. These classes and General Educational Development (GED) classes meet together. Classes are held on the Salem Campus, at the Downtown Learning Center and the Yamhill County Cooperative Learning Center, and at our centers in Dallas, McMinnville, Stayton, and Woodburn.



## College Transfer Information

Chemeketa offers courses for students who wish to pursue a four-year degree at a public or private college or university. You can complete all or most of the general education requirements of the four-year institution and begin work on the requirements for a specific major. (General education requirements are the courses required of all students, regardless of major or type of degree, in order to graduate from a college or university.)

The advantages of beginning college studies at Chemeketa include smaller classes, lower costs, individual help from instructors, and an opportunity to improve basic skills.

Chemeketa's college transfer programs are adapted from curriculum requirements listed in the most recent catalogs of Oregon's public four-year colleges and universities. The Advising and Counseling Center in Building 2 on the Salem Campus and academic advisors have the catalogs. You may also meet with a counselor to review the requirements at Chemeketa's Dallas, McMinnville, Stayton, and Woodburn centers.

It is the responsibility of students to learn the program requirements of the school to which they plan to transfer. Students should periodically contact the Advising and Counseling

Center or their advisor for academic advising and to learn of any possible changes in a program.

See the Program Guide on Page 26 for a list of our college transfer programs. Information and curriculum outlines for these programs begin on Page 39.

If you are interested in a field not listed in this catalog, you may be able to arrange a satisfactory program of study by consulting with one of our counselors and with the institution to which you plan to transfer.

If you plan to transfer credits toward a bachelor's degree, follow these steps:

- Contact the four-year college you plan to attend to check entrance requirements and the suggested freshman and sophomore classes required in your chosen field.
- Confer with a Chemeketa counselor or an academic advisor before you register.
- Check with the four-year college a term or two before completing your work at Chemeketa to make sure you are meeting all requirements.
- Apply for admission and transfer your credits to the four-year institution.

Should you wish to transfer to a private college or university, consult with one of our counselors or with the institution you plan to attend for help in determining the education requirements.

The Advising and Counseling Center has advising sheets available for programs at Bassist College, Concordia College (Business, Education, Management and Communications, Health Care Administration, and Social Work), George Fox College (General Education and Management of Human Resources), Linfield College (Business, General Education, Management, and Nursing), Oregon Health Sciences University (Nursing), Pacific University (General Education, Occupational Therapy, Optometry, and Physical Therapy), University of Portland (Business, Education, Engineering, and Nursing), Warner Pacific College (Business Administration), Western Baptist College (Elementary Education and General Education), Western States Chiropractic College, and Willamette University (General Education), as well as for Oregon's public four-year colleges and universities.

While our college transfer courses are similar to those offered by Oregon's four-year institutions, all of these institutions may not accept all Chemeketa credit courses as transfer credits. Check with the institution you plan to attend.

General education requirements for seven public four-year schools in Oregon are listed on the following pages.



# Eastern Oregon State College

General Education Requirements  
(General Education Distribution Requirements)

Requirements	Credit hours	Chemeketa courses which satisfy requirements
<b>Humanities</b> (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ART101, 204, 205, 206; ENG101, 102, 103, 104, 105, 106, 107, 108, 109, 201, 202, 203, 253, 254, 255, 260, 261, 262, 263; FA255, 256, 257; HUM100; MS251, 252, 253; MUS201, 202, 203; PHL201, 202, 203; SP115; TA110; R199
<b>Natural Science</b> (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ANTH101; BI101, 102, 103, 200; BOT201, 202, 203; CH104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; G201, 202, 203; GEOG105; GS104, 105, 106, 120, 141, 142, 143; OC133; PH121, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY211, 219; Z00201, 202, 203
<b>Social Science</b> (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ANTH102, 103, 207, 208, 209; EC200, 201, 202, 203; GEOG106, 107, 201, 202; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY201, 202, 203, 237; SOC204, 205, 206
<b>Arts, Languages, and Logic</b> (Choose courses outside of your major.)	Minimum 15 hours	
<b>Artistic Creation</b> (Sub-Area 1)	3 to 12 hours	ART115, 116, 117, 154, 155, 156, 221, 225, 231, 244, 254, 260, 261, 271, 272, 281, 284, 291, 292, 293; MUP100, 174; MUS199; TA121, 122, 123, 261; WR199A, 241, 242, 243
<b>Languages and Logic</b> (Sub-Area 2)	3 to 12 hours	CS140B; FR101, 102, 103, 150, 151, 201, 202, 203; GER101, 102, 103, 150, 151, 201, 202, 203; JPN101, 102, 103, 201, 202, 203; MTH105, 211, 212, 213; NOR101, 102, 103; PHL204, RUS101, 102, 103; SP114; SPAN101, 102, 103, 150, 151, 201, 202, 203

- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. The Writing Proficiency Exam (WPE) must be attempted prior to admission to a major degree program and must be passed prior to graduation from Eastern. Students are required to complete writing courses through WR121 or, upon entering, demonstrate a Test of Standard Written English (TSWE) score of 45 or better before attempting the WPE given at Eastern.
  3. Students who have earned an Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the lower division General Education Distribution Requirements at Eastern.
  4. General Education Distribution Requirements: In the absence of an A.A. degree from an Oregon community college, students must complete a minimum of 15 credits in each of the following four areas: Humanities; Natural Science; Social Science; and Arts, Languages, and Logic. Within each of the four areas a student must have completed courses with at least two different prefixes other than the prefix or prefixes of the student's major. No more than 12 hours in a discipline may be applied in an area.
  5. For the Bachelor of Science (B.S.) degree: In addition to completing the General Education Distribution Requirements, students are required to demonstrate the application of mathematics at the college level. Means for satisfying this requirement are described in each major at Eastern.
  6. For the Bachelor of Arts (B.A.) degree: In addition to completing the General Education Distribution Requirements, students are required to demonstrate proficiency in a single foreign language (two years or completion of a second-year foreign language course sequence or equivalency).
  7. Courses in which "D" grades have been earned will transfer to Eastern.
  8. This guide is subject to change without notice and should not be regarded as a contract between Eastern and students attending Chemeketa Community College.

# Oregon Institute of Technology

General Education Requirements

Requirements	Credit hours	Chemeketa courses which satisfy requirements
<b>Communication</b>		
Speech	3	SP111
English Composition	6	WR121 and 122
Nine additional credits from speech/writing courses having WR1122 OR SPE111 as a prerequisite; specified by the major department from the following: WR1123, 214, 227; 230, 231, 322, 323, 327; SPE321.	9	WR123, 227; BA214; SP113; no equivalent courses for WR230, 231, 322, 323, 327
<b>Business</b>	9	BA200 courses that are appropriate to the projected major at OIT
Nine credits of business and industrial management.		
<b>Humanities</b>	9	ART101, 115, 116, 117, 119, 154, 155, 156, 197, 204, 205, 206, 221, 225, 231, 232, 233, 244, 245, 246, 254, 260, 261, 271, 272, 273, 274, 281, 284, 285, 286, 291, 292, 293, 299; ENG101, 102, 103, 104, 105, 106, 107, 108, 109, 201, 202, 203, 253, 254, 255, 260, 261, 262, 263; FA251, 255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM100, 199A; JPN201, 202, 203; SPAN201, 202, 203; MUP105, 199; MUS134, 197, 201, 202, 203; PHL201, 202, 203, 204, 205; TA110, 121, 122, 123, 285
Nine credits selected by student or specified by a major department.		
<b>Social Sciences</b>	12	ANTH101, 102, 103, 207, 208, 209; CJ101, 110, 131, 200, 202, 206, 220, 226; EC200, 201, 202, 203; GEOG105, 106, 107, 201, 202; HDFS222; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY100, 101, 201, 202, 203, 206, 211, 219, 237, 239, 246; SOC198, 204, 205, 206, 210, 221, 227, 291, 292; SSC150; WS101, 102, 103, 199A, 199B, 199C
12 credits selected by student or specified by a major department.		
<b>Technology</b>	12	ENGR211, 212, 213. Select computer course from CIS120, 121, 122; CS101, 131, 133A, 133B, 133C, 133F, 133U, 140B, 140U, 161, 162, 233C, 233I, 233M, 233U, 240, 244, 246, 260
Twelve credits selected by student or specified by a major department from technical electives offered by a major department. At least one computer course is required.		
<b>Science/Mathematics</b>	4	MTH111
College Algebra		
Twelve additional credits selected by student or specified by a major department from biological sciences, mathematics, or physical science.	12	BI101, 102, 103, 103A, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; G142, 143, 144, 201, 202, 203; GS104, 105, 106; HE268; MTH105, 112, 231, 243, 251, 252, 253, 254, 255, 256; OC133; PH120, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203

- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. Courses in which "D" grades have been earned will not transfer to OIT.
  3. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the lower division General Education Requirements at OIT.
  4. This guide is subject to change without notice and should not be regarded as a contract between OIT and students attending Chemeketa Community College.



Requirements	Credit hours	Chemeketa courses which satisfy requirements
Writing I	3	WR121 (must be completed before transferring)
Writing II	3	BA214; J216; WR122, 123, 227, 241, 242, 243
Writing III/Speech	3	Any courses listed to meet Writing II requirements not taken to meet the Writing II requirements or SP111, 112
Mathematics	4 or 5	MTH105, 111, or higher math (must be completed before transferring)
Fitness	3	HPE295
Writing Intensive Course		(Must be taken at OSU as part of major.)
Physical Science Including lab	4 to 5	CH104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; G201, 202, 203; GS104, 105, 106; PH201, 202, 203, 207, 208, 209, 211, 212, 213
Biological Science Including lab	4	BI101, 102, 103, 200, 234; BOT201, 202, 203; ZOO201, 202, 203
One additional Physical Science or Biological Science course	4 to 5	Any courses listed for Physical or Biological Science above.
Western Culture	3	ART101, 204, 205, 206; ENG101, 102, 103, 107, 108, 109, 201, 202, 203, 253, 254, 255; FA 255; GEOG106, 201; HST110, 111, 112, 201, 202, 203; PHL201, 202, 203; R201, 202, 203
Cultural Diversity	3	GEOG202; HST157, 158, 159, 257, 258, 259; R199, 201, 202
Literature and the Arts	3	ART101, 204, 205, 206; ENG101, 102, 103, 104, 105, 106, 107, 108, 109, 201, 202, 203, 253, 254, 255, 260; HUM100; MUS201, 202, 203
Social Processes and Institutions	3	ANTH103, 207, 208, 209; EC201, 202, 203; PS201, 202, PSY201, 202, 203, SOC204, 205, 206
Two additional courses from two of these areas: Western Culture, Cultural Diversity, Literature and the Arts, and Social Processes and Institutions	6	Any courses listed for Western Culture, Cultural Diversity, Literature and the Arts, and Social Processes and Institutions above.
Global Issues	3	(Upper division course; must be taken at OSU.)
Science, Technology and Society	3	(Upper division course; must be taken at OSU.)

- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. In general, only courses with letter prefixes and numbers above 100 are accepted at OSU.
  3. Students with vocational/technical credits (courses numbered 50-99) should contact the assistant registrar at OSU for assistance in determining transferability of these courses to an OSU major.
  4. Departments, schools, or colleges at OSU may restrict the courses used by their major students to satisfy each general educational component.
  5. OSU will accept "D" grades. Some departments, schools, or colleges may not accept "D's" in required courses.
  6. Courses from the major department may not be used to fulfill the Baccalaureate Core Curriculum requirements.
  7. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met OSU's lower division Baccalaureate Core Curriculum requirements.
  8. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.

Requirements	Credit hours	Chemeketa courses which satisfy requirements
English Composition WR121, 323	6	WR121 (WR323 must be taken at junior level; no equivalent course is available at Chemeketa. Students who have earned an Oregon Associate of Arts transfer degree will have WR323 waived.)
Health/Physical Education HE295	3	HPE295
Arts and Letters (These credits must be earned in two departments with a minimum of six credits in each of these departments.) This requirement must be met by courses outside the student's major department.	18	ART101, 115, 116, 117, 119, 154, 155, 156, 197, 204, 205, 206, 221, 225, 231, 232, 233, 244, 245, 246, 254, 260, 261, 271, 272, 273, 274, 281, 284, 285, 286, 291, 292, 293; CHN101, 102, 103; ED201, 202, 204 (maximum of six credits as speech elective); ENG101, 102, 103, 104, 105, 106, 107, 108, 109, 201, 202, 203, 253, 254, 255, 260, 261, 262, 263; FA251, 255, 256, 257; FR101, 102, 103, 201, 202, 203; GER101, 102, 103, 201, 202, 203; HUM100; JPN101, 102, 103, 201, 202, 203; MUP100, 101, 105, 174; MUS134, 197, 201, 202, 203 (no course number may be taken for more than six credits); PHL201, 202, 203, 204, 205; R201, 202, 203; RUS101, 102, 103; SP105, 111, 112, 113, 114, 115A, 115B, 115C, 130; SPAN101, 102, 103, 111, 112, 113, 201, 202, 203; TA110, 121, 122, 123, 261, 285; WR241, 242, 243
Social Science (These credits must be earned in two departments with a minimum of six credits in each of these departments.) This requirement must be met by courses outside the student's major department.	18	ANTH101, 102, 103, 207, 208, 209; BA207 (economics elective); CJ206 (sociology elective); EC200, 201, 202, 203; GEOG105, 106, 107, 201, 202; GS120 (geography elective); HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY100, 201, 202, 203, 206, 211, 219, 237, 239, 246; SOC204, 205, 206, 210, 221, 227, 292; SSC150; WS101, 102, 103
Science (These credits must be earned in two departments with a minimum of six credits in each of these departments.) This requirement must be met by courses outside the student's major department.	18	BA232 (math elective); BI101, 102, 103, 103A, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 115, 116, 117, 121, 122, 123, 150, 201, 202, 203, 221, 222, 223, 241, 242, 243; CIS120, 121, 123; CS100, 101, 104Q, 106, 107, 113, 125DB, 125FX, 125P, 125SS, 133A, 133B, 133C, 133E, 133F, 133R, 133U, 135DB, 135SS, 140, 140A, 140B, 140C, 140M, 140U, 145, 161, 162, 171, 233A, 233B, 233C, 233I, 233M, 233R, 233U, 234C, 234L, 235, 236, 237, 240, 244, 246, 252B, 260, 270, 271, 275, 278, 279, 285; FN225 (chemistry elective); G142, 143, 145A, 145B, 160, 201, 202, 203; MTH105, 111, 112, 211, 212, 213, 231, 232, 241, 243, 251, 252, 253, 254, 255, 256; PH121, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203 (biology elective)
Diversity	3	ANTH101, 102, 103; ENG260; WS101 (See Chemeketa's Advising and Counseling Center for additional courses.)

- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. In general, only courses with letter prefixes and numbers above 100 are accepted at PSU.
  3. PSU accepts credit in certain vocational/technical courses when these are equivalent or parallel to PSU courses.
  4. Students must have achieved a 2.25 cumulative GPA with 36 transferable credit hours to be considered a transfer student.
  5. PSU does not accept courses in which "D" grades have been earned.
  6. Eighteen hours of the Arts and Letters, Social Science, and Science general education requirements must be taken as upper division (300 and 400 numbered courses).
  7. Students who have earned an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met PSU's lower division general education requirements. The diversity requirement is not satisfied by completion of the A.A. degree unless one of the approved courses is taken as part of the A.A. degree.
  8. This guide is subject to change without notice and should not be regarded as a contract between PSU and students attending Chemeketa Community College.



# Southern Oregon State College

General Education Requirements  
(Core Curriculum)

Goals	Credit hours	Chemeketa courses which satisfy requirements
1. To be able to express ideas in clear, logical, and grammatically correct written English. To be fluent and confident in writing ability, including formal and technical writing styles, and in the preparation of a research paper.	9	WR121, 122, 123, 227
2. To be able to communicate clearly and effectively in oral English.	3	SP111, 112, 113, 114, 130
3. To be able to appreciate and use mathematics as a language that expresses, defines, and answers questions about the world.	3 to 4	MTH105, 112, 212, 213, 241, 243, 251, 252, 253, 254, 255
4. To understand the role of the natural sciences in the world. <i>(Students must take courses in at least two sciences. At least two courses must include a laboratory component. No more than nine credits from one department may be used to satisfy requirement.)</i>	12	Choose nine to 12 credits from these laboratory courses: <b>BIT</b> 101, 102, 103; <b>BOT</b> 201, 202, 203; <b>CH</b> 121, 122, 123, 201, 202, 203, 221, 222, 223; <b>G</b> 201, 202, 203; <b>GS</b> 104, 105, 106, 113; <b>PH</b> 201, 202, 203, 207, 208, 209, 211, 212, 213; <b>ZOO</b> 201, 202, 203 Choose up to three credits from the following non-laboratory courses: <b>GEOG</b> 105; <b>GS</b> 120
5. To appreciate the creative processes, the aesthetic principles, and the historical traditions of one or more of the fine and performing arts. <i>(A maximum of three credits may be from studio courses.)</i>	9	Choose six to nine credits from these non-studio courses: <b>ART</b> 101, 204, 205, 206; <b>HUM</b> 100; <b>MUS</b> 201, 202, 203 Choose up to three credits from the following studio courses: <b>ART</b> 115, 116, 117, 119, 154, 155, 156, 221, 225, 231, 232, 233, 244, 245, 246, 254, 260, 261, 271, 273, 274, 281, 284, 285, 286, 291, 292, 293; <b>MUSP</b> 100, 174; <b>MUS</b> 134, 197; <b>TA</b> 121, 122, 123, 261, 285A, 285B, 285C; <b>WR</b> 241, 242, 243
6. To recognize the way that perspectives on the human condition and human values are expressed in works of literature and philosophy and/or transmitted in the media. <i>(A maximum of three credits may be from media courses.)</i>	9	Choose six to nine credits from the following literature and philosophy courses: <b>ENG</b> 104, 105, 106, 107, 108, 109, 201, 202, 203, 260; <b>PHL</b> 203 (No more than three credits from <b>ENG</b> 201, 202, 203 may be applied toward this goal.) Choose up to three credits from the following media courses: <b>FA</b> 255, 256, 257; <b>J</b> 224
7. To be able to understand world history, geography, and culture as forces that shape human experience. <i>(A maximum of three credits may be from U.S. history, U.S. geography, or U.S. culture courses.)</i>	9	Choose six to nine credits from the following world history, geography, and culture courses: <b>ANTH</b> 103, 207, 208, 209; <b>GEOG</b> 107, 201, 202; <b>HST</b> 110, 111, 112 Choose up to three credits from the following U.S. history, U.S. geography, and U.S. culture courses: <b>HST</b> 201, 202, 203, 257, 258, 259
8. To understand the function and influence of national or international political, economic, and/or legal systems in human affairs.	6	<b>CJ</b> 100; <b>EC</b> 115, 201, 202, 203; <b>LA</b> 101; <b>PS</b> 201, 202, 205; <b>SOC</b> 205
9. To understand how humans function in society.	3	<b>CJ</b> 101; <b>HE</b> 250; <b>PSY</b> 100, 101, 201, 202, 203, 206; <b>SOC</b> 206, 227

- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. Courses in the major, including course work from supportive areas that is required of the major, and courses toward a minor may also be used to meet general education requirements.
  3. In satisfying the total set of requirements of Goals 2 through 9, a student may use at most nine credits from one department.
  4. A single course may not be used to satisfy more than one general education goal.
  5. Only courses with a letter prefix and a number of 100 or higher are considered transferable.
  6. A maximum of 24 credit hours of vocational/technical courses are accepted as free electives.
  7. Courses in which "D" grades have been earned are accepted by SOSOC.
  8. Students who have earned an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the Core Curriculum requirements at SOSOC.
  9. This guide is subject to change without notice and should not be regarded as a contract between SOSOC and Chemeketa Community College.



Requirements	Units	Chemeketa courses which satisfy requirements
<b>Written English</b>	6 credit hours	WR1 21 (must be completed before transferring) and WR1 22 or WR1 23 (with grade "C" or better)
<b>Arts and Letters</b> No more than three courses from any one department may be used to satisfy group requirements. Courses in the major may not be used to satisfy cluster requirements but may be used for the required group courses.	6 courses of at least 3 credit hours each, 3 of which must be an approved cluster of 3 related courses	Choose one of the following clusters: ART204, 205, 206; ENG101, 102, 103; ENG104, 105, 106; ENG107, 108, 109; ENG201, 202, 203; ENG253, 254, 255; FA255, 256, 257; MUS201, 202, 203; PHL201, 202, 203, 204 (any three) Choose an additional three courses from the courses listed above or from the following: ART101; ENG260, 262; FR201, 202, 203; GER201, 202, 203; HUM100; JPN201, 202, 203; MUS101; SPAN201, 202, 203; TA110
<b>Social Science</b> No more than three courses from any one department may be used to satisfy group requirements. Courses in the major may not be used to satisfy cluster requirements but may be used for the required group courses.	6 courses of at least 3 credit hours each, 3 of which must be an approved cluster of 3 related courses	Choose one of the following clusters: ANTH102, 103 plus any one of ANTH207, 208, or 209; EC201, 202, 203; GEOG106, 107 and 201 or 202; ; HST110, 111, 112; HST157, 158, 159; HST201, 202, 203; HST257, 258, 259; PS201, 202, 203; PSY201, 202, plus any one of PSY203, 237, or 239; R201, 202, 203; SOC204, 205, 206; WS101, 102, 103 Choose an additional three courses from the courses listed above or from the following: J224; PS205; PSY206, 219, 246; SOC210, 221, 227; SP112, 113; SSC150
<b>Science</b> No more than three courses from any one department may be used to satisfy group requirements. Courses in the major may not be used to satisfy cluster requirements but may be used for the required group courses.	6 courses of at least 3 credit hours each, 3 of which must be an approved cluster of 3 related courses	Choose one of the following clusters: BI101, 102, 103; BI231, 232, 233; BOT201, 202, 203; CH104, 105, 106; CH115, 116, 117; CH121, 122, 123; CH201, 202, 203; CH221, 222, 223; CH241, 242, 243; CIS120, 121, 122; G201, 202, 203; GS104, 105, 106; GS120, 141, 142, 143 (any three); MTH211, 212, 213; MTH241, 243 and U of O course MTH242; MTH251, 252, 253; MTH251, 252, 254; PH201, 202, 203; PH207, 208, 209; PH211, 212, 213; ZOO201, 202, 203 Choose an additional three courses from the courses listed above or from the following: ANTH101; BI200, 234; CS133F, 161, 162, 244, 246; G142, 143, 144; GEOG105; MTH105; OC133; PH121; PSY211
<b>Race, Gender, and Non-Euro-American Studies</b> (Same course may be chosen to meet this requirement and one of the requirements listed above.)	1 course	ANTH103, 207, 208, 209; ENG260; GEOG202; HST110, 111, 112, 157, 159, 257, 258, 259; HUM199A; R201; SP115; SSC150; WS101, 102, 103, 199A, B, C

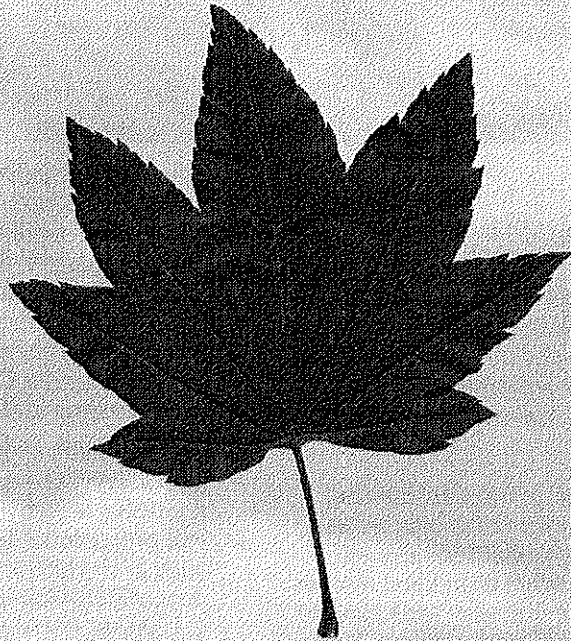
- Notes:**
1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
  2. Only courses with letter prefixes and numbers above 100 are accepted at the University of Oregon (with the exception of the following: CPL120; ENG116; ENL110, 111, 112; WR115).
  3. A maximum of 12 credit hours of vocational/technical courses are accepted.
  4. B.A. degree requires equivalent of two years of college foreign language.
  5. B.S. degree requires MTH111, 241, and 243 or higher mathematics.
  6. Courses in which "D" grades have been earned will transfer to UO, but will not satisfy degree requirements in writing, mathematics, or foreign language and may not be acceptable for major requirements.
  7. Students not meeting freshman admissions criteria must complete WR121 and 122 and MTH105 or 111 before transferring.
  8. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the general education requirements at UO. The Race, Gender, and Non-Euro-American studies requirement is not satisfied by completing the A.A. degree unless one of the acceptable courses is taken as part of the A.A. degree.
  9. This guide is subject to change without notice and should not be regarded as a contract between UO and students attending Chemeketa Community College.



Requirements	Credit hours	Chemeketa courses which satisfy requirements
<b>Skills</b>		
English Composition	9	WR121, 122, 123, 227, 241, 242, 243, 248 (three credits only) (WR121, 122, 123 preferred)
Speech	3	SP111, 112, 113, 114, 115, 126, 130 (SP111 preferred)
Physical Education	5	Any activity courses selected from PE180, 185, 190, 194, 294 and HPE295. (HPE295 and two hours of activity classes from different activities preferred)
Mathematics	4	MTH105 or higher math. MTH211, 212, 213 (Foundation of Elementary Mathematics) required for elementary education majors.
Computer Science	3 or 4	Any course with CS prefix numbered 101 or higher.
Creative Arts (Art, Dance, Music, Theater Arts)	9	Any courses with prefix of ART, MUP*, MUS, TA, and numbered 100 or above. In addition, dance courses at WOSC meet requirement. Nine hours in combination of three different areas preferred. *A maximum of three hours of music performance courses is allowed.
Humanities (Literature, Philosophy, and Religion)	12	A sequence of at least nine hours in the same discipline is required. All courses with ENG, PHL, R prefix and numbered 100 or above. A nine-hour literature sequence preferred: ENG101, 102, 103; ENG104, 105, 106; ENG107, 108, 109; ENG201, 202, 203; ENG253, 254, 255, and one philosophy or religion course: PHL201, 202, 203, or 204, or R201, 202, or 203
Natural Sciences and Mathematics	12	A sequence of at least eight hours in the same discipline is required. All courses numbered 100 or higher and with a prefix of BI, BOT, CH, G, GS, MTH, PH, ZOO (Prefer a 12-hour sequence in the same discipline.)
Social Science	15	A sequence of at least nine hours in the same discipline is required. All courses numbered 100 or higher with a prefix of ANTH, EC, GEOG, HST, PS, SOC A three-hour course in psychology is also required. The remaining three hours may be in any social science area including psychology and criminal justice. (PSY237 is required for elementary education majors.)
Foreign Language Alternative (optional)	12	A one-year sequence in a foreign language may replace three hours of writing, six hours of social science, and two hours of PE activity classes. Choose one sequence from CHN101, 102, 103; FR101, 102, 103; GER101, 102, 103; JPN101, 102, 103; RUS101, 102, 103; SPAN101, 102, 103; or a second-year foreign language sequence

- Notes:**
1. A maximum of 108 hours earned at a community college may be applied toward a baccalaureate degree.
  2. In general, only courses with a letter prefixes and numbers above 100 are accepted at WOSC.
  3. Up to 24 hours of professional-technical credits can be transferred as free electives.
  4. Courses in which "D" grades have been earned are accepted at WOSC.
  5. Students who have not completed all of the Liberal Arts Core Curriculum (LACC) requirements listed above at the time they transfer will be expected to complete them with courses among those specifically required of freshmen beginning their work at WOSC.
  6. Courses numbered 199 and 299 and Cooperative Work Experience (CWE) credits transfer to WOSC as general elective credit and are not applied to the major or LACC requirements. Up to 12 hours of CWE can be accepted.
  7. Students are encouraged to seek exemption from the Skills requirements by demonstrating proficiency through the appropriate departments at WOSC.
  8. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the LACC requirements at WOSC.
  9. Courses used to fulfill major requirements may be used to meet LACC requirements if the student earns an Oregon Associate of Arts (A.A.) transfer degree. In the absence of an A.A. degree, students must check with their major department to determine if courses required in the major may also be used to fulfill LACC requirements.
  10. This guide is subject to change without notice and should not be regarded as a contract between Western Oregon State College and students attending Chemeketa Community College.

PROGRAMS OF STUDY





## Accounting

Are you interested in becoming a bookkeeper, accounting clerk, or junior accountant? The Accounting program offers you the training to qualify for entry-level positions requiring accounting in business, industry, and government agencies.

The program includes a core of accounting, business, and general education courses and emphasizes acquiring specialized business knowledge. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree. You may take some or most of your classes at night.

We strongly suggest that you consult with your assigned advisor to plan your course of study before you begin the first term. The college requires you to take English and mathematics placement tests before you apply for admission. If the tests show that your skills are above the levels of the required first term courses, you may request to substitute general education courses.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in BA280 Cooperative Work Experience and earn up to six credit hours as a business elective. For more information, look under Cooperative Work Experience in the catalog index.

The Accounting program provides you with an opportunity to participate in a number of accounting-related extracurricular activities. Several professional accounting organizations, such as the National Association of Accountants and the American Society of Women Accountants, encourage you to become active in Salem area chapters.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,177; class fees, \$52; equipment and supplies, \$65. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 98 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA211	Financial Accounting I*	4
CS101	Intro. to Microcomputer App. (or higher)	3
MTH062	Applied Business Math	3
	or	
MTH095	Intermediate Algebra (or higher)	4
OA085	Business English II	3
	or	
WR122	English Composition-Logic and Style	3
OA121	Keyboarding	3
	or	

OA122	Keyboard Skillbuilding.....	3
	or	
OA123	Formatting.....	3
<b>Term 2</b>		
BA101	Business Environment .....	4
BA212	Financial Accounting II .....	4
BA214	Business Communications .....	3
	or	
WR123	English Composition-Research Writing .....	3
CS125SS	LOTUS I-Worksheets .....	4
OA061A	Electronic Calculators A.....	1
<b>Term 3</b>		
BA213	Managerial Accounting.....	4
BA256	Income Tax Accounting I .....	4
EC200	Introduction to Economics (or higher).....	3
WR227	Technical Writing.....	3
	Approved Computer Science elective*** .....	3
<b>Term 4</b>		
BA054	Governmental/NonProfit Accounting I**.....	3
	or	
BA059	Auditing.....	3
	or	
BA257	Income Tax Accounting II .....	4
BA056	Intermediate Financial Accounting I .....	4
BA215	Cost Accounting .....	3
BA226	Business Law I .....	3
FE205	Job Search Techniques .....	1
	Psychology or sociology elective .....	3
<b>Term 5</b>		
BA057	Intermediate Financial Accounting II .....	4
BA205	Human Relations in Business .....	3
BA206	Business Management Principles .....	3
BA222	Financial Management .....	3
BA280	Cooperative Work Experience .....	3
	or	
	Business elective**** .....	3
<b>Term 6</b>		
BA058	Intermediate Financial Accounting III .....	4
BA228	Computer Accounting Applications .....	3
SP111	Fundamentals of Speech (or higher) .....	3
	Business elective**** .....	3
	or	
	Cooperative Work Experience .....	3
	Humanities elective .....	3

\*You must have completed the requirements for, or be concurrently enrolled in MTH070 or MTH061.

\*\*If you are interested in working for a government agency, you are strongly encouraged to consider BA054.

\*\*\*Choose from CS125DB, CS135SS, OA201P, or a programming class.

\*\*\*\*Business elective: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE except OA084, BA051, BA052, and BA053.

## Agriculture

(college transfer)

Oregon State University offers Bachelor of Science degrees in Agricultural Business Management, Agricultural and Resource Economics, Agriculture Chemistry, Bioresource Research, General Agriculture, Animal Science, Crop and Soil Science, Fisheries Science, Horticulture, Rangeland Resources, Food Science and Technology, and Wildlife Science.

The two-year program outlined below is designed to meet requirements at OSU. However, it is important to check the OSU catalog for the requirements of specific majors. The program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to com-

plete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121 English Composition and Writing or Speech courses* (WR227 Technical Writing required for some options)			
Mathematics (per placement test through MTH111 College Algebra for most majors; check OSU catalog for additional math required in some majors)			
BI101, 102, 103 General Biology or ZOO201, 202, 203 Zoology or CH121, 122, 123 General Chemistry (depending upon major and option)	(4)	5	(4)
HE231 Human Performance	4-5	4-5	4-5
CS101 Introduction to Microcomputer Applications	3		
Arts and Letters or Social Science* (EC201, 202 Introduction to Microeconomics and Macroeconomics required in some options.)	3	3	3
Electives			3
<b>Second Year</b>			
BA211, 212 Financial Accounting (not required for all majors)	4	4	
BI101, 102, 103 or CH121, 122, 123 (both sequences recommended but may not be required)	4		
Arts and Letters or Social Science elective*	6	6	6
Electives (BA226 Business Law required in some majors; check OSU for additional courses required in specific options)	3	6	6

\*To meet OSU general education requirements.

## Anthropology

(college transfer)

Oregon State University, Portland State University, and University of Oregon offer Bachelor of Arts and/or Bachelor of Science degrees in Anthropology. Eastern Oregon State College offers a combined major in anthropology and sociology.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counsel-



ing Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition*	3	3	(3)
HPE295 Health and Fitness for Life* or elective			3
ANTH101, 102, 103 Human Evolution, Archeology and Introduction to Cultural Anthropology	3	3	3
Arts and Letters/Humanities courses*	3	3	0-3
Electives or Foreign Language* (two years of college-level foreign language required at PSU and may be required for graduate work; CS101 Introduction to Microcomputer Applications required at EOSC)	3-4	3-4	3-4
Math or Science electives*	4	4	4
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
Social sciences electives* (SOC204, 205, 206 for EOSC and SOSC)	3	3	3
Arts and Letters/Humanities electives*	3	3	3
Second-year Foreign Language or electives* (required for graduate studies)	3-4	3-4	3-4
Math or Science electives**	4	4	4
Electives*	3	3	3

\*To meet four-year college general education requirements.

\*\*MTH243 Probability and Statistics and CS101 Introduction to Microcomputer Applications recommended for students planning to do graduate studies.

## Art

### (college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Art are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. UO also offers a B.A. or B.S. in art education.

A five-year program in Art leading to the Bachelor of Fine Arts (B.F.A.) degree is offered at OSU, SOSC, and UO.

The program outlined below is designed so that you may meet requirements of these institutions in two years, if you attend full time. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counsel-

ing Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition*	3	3	(3)
ART115, 116, 117 Basic Design (only 6 credits required at UO; not required for Art History majors at UO)	3	3	(3)
ART231, 232, 233 Drawing (EOSC requires ART231; SOSC, UO and WOSC require ART231, 232)	3	3	(3)
Science or Mathematics courses*	4	4	4
Social Science courses*			3-6
Arts and Letters/Humanities (non-art: UO requires two years of French or German for Art History majors)*	3-4	3-4	3-4
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
ART204, 205, 206 Art History (not required at WOSC)	3	3	3
Social Science courses*	3	3	3
Arts and Letters/Humanities electives* (Literature or a second Foreign Language for UO Art History majors)	3-4	3-4	3-4
Science or Mathematics*	4	(4)	(4)
HPE295 Health and Fitness for Life* or elective			3
Studio Art courses (EOSC choose from ART154, 155, 281, 284, 292; OSU choose 9 hours of studio courses; OSU Art Studio majors need 9 hours of 200 level classes; PSU choose 9 credits from study concentration and 9 additional art credits outside of concentration; SOSC choose 18 credits from 2 groups listed in SOSC catalog; UO Art History majors take 6 hours of studio courses).	3	3	3
Electives (CS course required at EOSC, SOSC, and WOSC)			0-3

\*To meet four-year college general education requirements.

## Automotive Technology

Do you want to become an automotive maintenance and repair technician or an auto parts salesperson? The Automotive Technology program emphasizes technical training and development of skills through the study of the various systems of the automobile. You may select individual courses to meet your needs, or you may work toward a degree in the automotive technician option or a certificate in automotive parts sales.

To help you work effectively with people, the program also includes written and oral communications classes and general education electives. The curriculum emphasizes related scien-

tific, mathematical, and general mechanical principles.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

### Automotive Technician Option

Automotive training may lead to employment in the automotive service and repair field. With an increasing number of makes and models of autos, the demand for auto technicians with a broad background and diversified training is growing.

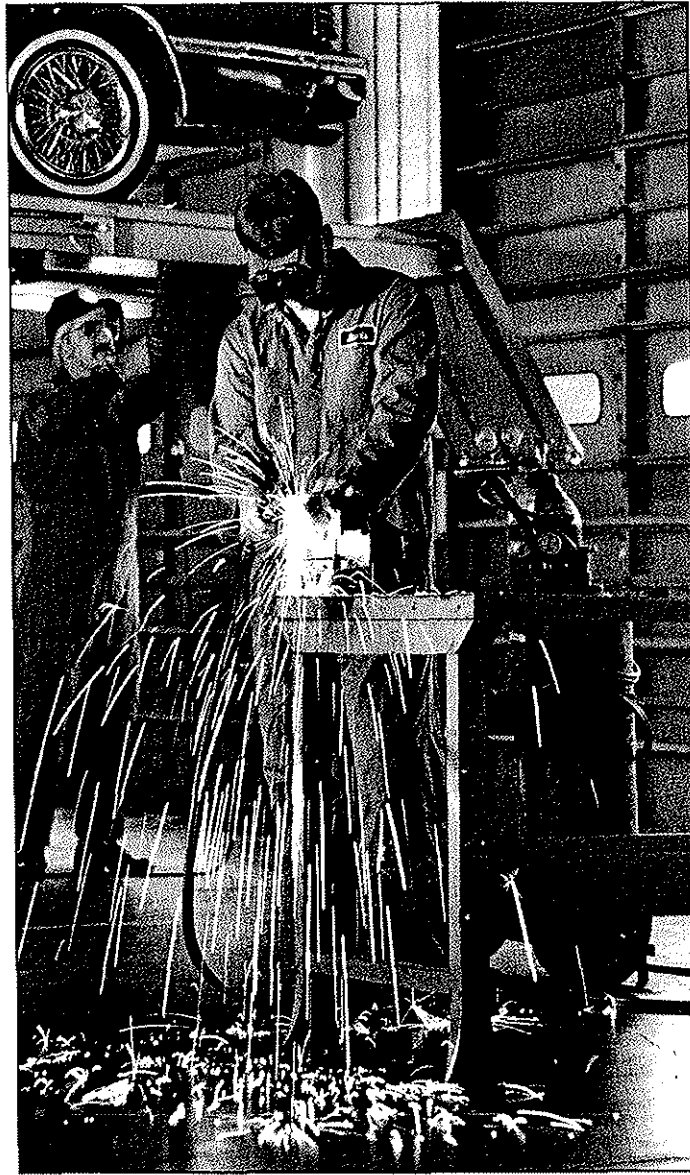
Upon graduating, you may choose to transfer to a school such as Oregon Institute of Technology to complete the course work for a bachelor's degree in industrial management.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in AUM280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$585; class fees, \$170; equipment and supplies, \$500. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these 96 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
AUM051	Basic Automotive Engines .....	5
AUM056	Automotive Shop Safety .....	1
AUM057	Automotive Brakes Systems.....	4
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition .....	3
MTH051	Basic Mathematics (or higher) .....	3
	or	
	General education elective .....	3
<b>Term 2</b>		
AUM052	Automotive Machine Shop.....	4
AUM058	Automotive Steering and Suspension .....	5
COM052	Communication Skills II.....	3
	or	
WR122	English Composition-Logic and Style.....	3
DRF072	Introduction to AutoCAD .....	3
MTH052	Intro. to Algebra and Geometry (or higher) .....	3
<b>Term 3</b>		
AUM061	Manual Drive Trains and Axles I .....	5
AUM068	Automotive Electrical Systems I .....	4
AUM078	Automotive Workplace Proc. and Ethics.....	1
AUM092	Automotive Diesel Engines.....	3
<b>Term 4</b>		
AUM062	Manual Drive Trains and Axles II.....	3
AUM063	Automatic Transmissions and Transaxle.....	5



AUM066	Basic Fuel Systems .....	4
AUM076	Automotive Electrical Systems II .....	4
<b>Term 5</b>		
AUM067	Advanced Carburetion and Fuel Injection.....	5
AUM077	Automotive Electrical Systems III .....	5
AUM082	New Automotive Developments.....	4
AUM086	Automotive Heating and Air Conditioning .....	5
<b>Term 6</b>		
AUM073	Automotive Repair .....	3
	or	
AUM280	Cooperative Work Experience.....	3
AUM081	Tune-Up and Diagnosis .....	6
PSY100	Introduction to Psychology (or higher) .....	3
WLD097	Welding.....	2

### Automotive Parts Sales Option

In Automotive Parts Sales you may learn aspects of jobber store management in addition to the sale of automotive parts.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work relating to your program. With the approval of the program chair, you may enroll in AUP280 Cooperative Work Experience and earn college credit hours.

For more information, look under Cooperative Work Experience in the catalog index.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$286; class fees, \$14. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 49 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
AUP081	Engine Theory.....	3
AUP082	Chassis Theory.....	3
AUP083	Auto Parts I.....	4
COM051	Communication Skills I.....	3
MTH051	Basic Mathematics (or higher).....	3
<b>Term 2</b>		
AUP086	Power Train Theory.....	3
AUP087	Auto Electrical Theory.....	3
AUP088	Auto Parts II.....	4
COM052	Communication Skills II.....	3
MTH061	Business Math.....	3
<b>Term 3</b>		
AUP091	Auxiliary Systems.....	3
AUP093	Fuel Systems.....	3
AUP096	Auto Parts III.....	4
BA051	Accounting Procedures I.....	4
	General education elective.....	3
	or	
AUP208	Cooperative Work Experience.....	3

## Banking and Finance

Consider the Banking and Finance program if you want training to enter the banking field or if you are a bank clerk or teller who wants to become eligible for advancement or promotion to officer trainee or officer positions. The one-year program offers training for entry level positions such as teller, proof operator, new accounts teller, accounting clerk, and data entry clerk. The two-year program offers further training for those choosing a career in banking. There are banking career opportunities in auditing, personnel, public relations, management and operations.

The basic core of the curriculum includes general education and general business courses as well as required and elective courses specifically related to the financial field. You may select individual courses to meet your needs, or you may work toward a Certificate of Completion or Associate of Applied Science degree. The banking classes are offered only at night; other required classes are offered both days and evenings.

Chemeketa and the Oregon Financial Institutions Education Association/American Institute of Banking 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 placement tests you take when you apply for admission.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in BAN280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

### Certificate of Completion

*In addition to tuition, estimated costs for students who complete the entire program are books, \$595; class fees, \$22; equipment and supplies, \$30. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these required 50 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BAN067	Teller Training.....	1
BA269	Principles of Banking.....	3
MTH061	Business Math.....	3
OA084	Business English I.....	3
OA121	Keyboarding.....	3
SP114	Interpersonal Communications.....	3
<b>Term 2</b>		
BAN064A	Understanding and Selling Bank Services.....	3
BAN078	Customer Service for Bank Personnel.....	1
BA051	Accounting Procedures I.....	4
	or	
BA211	Financial Accounting I.....	4
MTH062	Applied Business Math.....	3
OA061A	Electronic Calculators.....	1
OA085	Business English II.....	3
OA089	Filing.....	2
<b>Term 3</b>		
BAN280	Cooperative Work Experience.....	6
	or	
	Business elective*.....	6
BA214	Business Communication.....	3
BA238	Sales and Persuasion.....	3
OA086	Personal and Professional Development.....	3
OA091A	Computerized Bookkeeping.....	2

\*Business elective: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, RE except BA051, BA052, and BA053.

### Associate of Applied Science degree

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,193; class fees, \$28; equipment and supplies, \$60. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 98 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA101	Business Environment .....	4
BA269	Principles of Banking .....	3
OA084	Business English I .....	3
	or	
WR121	English Composition-Exposition .....	3
OA121	Keyboarding .....	3
	Psychology elective .....	3
<b>Term 2</b>		
BA206	Business Management Principles .....	3
BA211	Financial Accounting I .....	4
BA270	Money and Banking .....	3
MTH065	Introductory Algebra .....	4
	or	
MTH111	College Algebra* .....	5
OA085	Business English II .....	3
	or	
WR122	English Composition-Logic and Style .....	3
<b>Term 3</b>		
BA212	Financial Accounting II .....	4
BA214	Business Communications .....	3
BA284	Law and Banking Applications .....	3
MTH062	Applied Business Math .....	3
	or	
MTH243	Probability and Statistics .....	4
	Banking elective*** .....	3
<b>Term 4</b>		
BA238	Sales and Persuasion .....	3
BA281	Consumer Lending .....	3
CS101	Introduction to Microcomputer Applications .....	3
EC200	Introduction to Economics .....	3
	or	
EC201	Introduction to Microeconomics .....	3
OA061A	Electronic Calculators A .....	1
	Psychology elective .....	3
<b>Term 5</b>		
BA222	Financial Management .....	3
BA223	Principles of Marketing .....	3
	or	
BA273	Marketing for Bankers .....	3
BA278	Law and Banking Principles .....	3
	Business elective* .....	3
	or	
	Banking elective** .....	3
	or	
BAN280	Cooperative Work Experience .....	3
EC202	Introduction to Macroeconomics .....	3
	or	
SP114	Interpersonal Communications .....	3
	Speech elective*** .....	3
<b>Term 6</b>		
BA205	Human Relations in Business .....	3
BAN280	Cooperative Work Experience .....	6
	or	
	Business elective* .....	6
	or	
	Banking elective** .....	6
	Banking elective** .....	3
	Humanities/fine arts elective .....	3

\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE except BA051, BA052, and BA053. College transfer students should take BA213 or EC203.

\*\*Banking electives: Choose courses with BAN prefixes.

\*\*\*Speech electives: Choose from SP105, SP111, and SP114.

## Biology, Botany, General Science, Entomology, Zoology

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Biology are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College,

University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements for a degree in biology at these institutions, as well as for a major in general science at EOSC, OSU, or UO. See college catalogs for other class options and additional requirements. It may be advisable to transfer after one year of community college course work. With minor adjustments as noted below, this outline of classes may also be followed for majors in Botany, Entomology, Microbiology, or Zoology at Oregon State University.

However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123 English Composition*			(3)
HPE295 Health and Fitness for Life* or elective			3
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry is also accepted for OSU [Environmental Health and Entomology and General Science majors], and UO)		5	5
Mathematics sequence (consult an advisor or four-year college catalog to determine appropriate math; most require some calculus. MTH111 College Algebra, 112 Trigonometry, 243 Differential Calculus, or 251 Probability and Statistics for SOSC; MTH251, 252 Integral for OSU and PSU)	4-5	4-5	4
Arts and Letters/Humanities courses**	3	3	3
<b>Second Year</b>	4	5	6
PH201, 202, 203 General Physics (not required at WOSC or for Entomology and General Science majors at OSU; SOSC also accepts G201, 202, 203 Geology; UO requires PH211, 212, 213 General Physics for Engineers and Scientists)***	4	4	4
CH241, 242, 243 Organic Chemistry (may not replace 300-level Organic Chemistry at all colleges; not required at WOSC or for General Science at OSU or BOT201, 202 General Botany for EOSC)***	5	5	5
Social Science courses*	3	3	3

Arts and Letters/Humanities electives*	3	3	3
Social Science electives or other electives* (EOSC requires CS101 Introduction to Microcomputers and CS125SS LOTUS Worksheets or computer studies courses at or above the 200 level; UO recommends CS161 Computer Science I-C Language; WOSC requires CS162 Computer Science II-C Language and MTH232 Discrete Mathematics and MTH243 or MTH251 and MTH252)	3	3	3

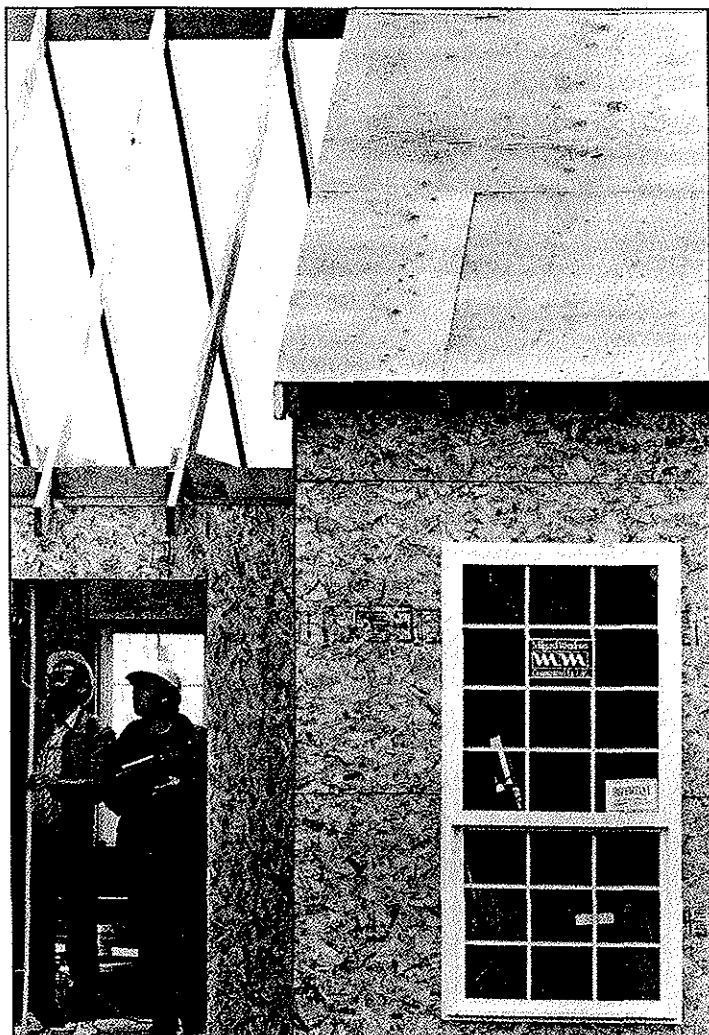
\*To meet four-year college general education requirements.

\*\*Botany majors should take ZOO201, 202 General Zoology and BOT201, 202 General Botany. Zoology majors should take ZOO201, 202 and BOT201 or 202. Environmental Health majors should take B1101, 102, 103 General Biology.

\*\*\*PSU General Science degree allows other science choices.

## Building Inspection Technology

The Building Inspection Technology program has two options. There is a four-term plan for students with experience in the building trades and a two-year (six-term) option for those new to the field. As a graduate of either program, you may qualify for State of Oregon certification as a building inspector at the C level or higher, depending upon your experience.



There is a need for certified building inspectors working for public agencies. If you have some experience in the field, after you graduate you may qualify as a construction manager or clerk-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. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in BLD280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 399-5006.

### Certificate of Completion

*In addition to tuition, estimated costs for students who complete the entire program are books, \$651; class fees, \$69; equipment and supplies, \$291. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 66 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BLD051	Building Codes I.....	3
BLD063	Structural Inspection-Concrete.....	3
BLD071	Plumbing Codes I.....	3
BLD093A	Building Inspection-Lab.....	1
COM051	Communication Skills I.....	3
or		
WR121	English Composition-Exposition.....	3
MTH052	Intro. to Algebra and Geometry (or higher).....	3
<b>Term 2</b>		
BLD052	Building Codes II.....	3
BLD061	Structural Inspection-Wood.....	3
BLD072	Plumbing Codes II.....	3
BLD081	Mechanical Codes I.....	3
BLD093B	Building Inspection-Lab.....	1
COM052	Communication Skills II.....	3
or		



WR122	English Composition-Logic and Style.....	3
MTH052	Intro. to Algebra and Geometry (or higher) .....	3

**Term 3**

BLD053	Building Codes III .....	3
BLD054	Dwelling Construction under UBC.....	3
BLD055	Building Department Administration.....	3
BLD062	Structural Inspection-Masonry .....	3
BLD082	Mechanical Codes II .....	3
BLD093C	Building Inspection-Lab .....	1
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	3

**Term 4**

BLD280	Cooperative Work Experience*.....	12
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\*Cooperative Work Experience may be used as a deviation in the A.A.S. degree program.

## Associate of Applied Science Degree

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,274; class fees, \$136; equipment and supplies, \$811. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing the 97 required credit hours plus 12 credit hours of Cooperative Work Experience.

Course	Title	Credit Hours
<b>Term 1</b>		
BLD050	Introduction to Building Inspection.....	3
BLD051	Building Codes I.....	3
BLD093A	Building Inspection Lab.....	1
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition .....	3
CS101	Intro. to Microcomputer App. (or higher) .....	3
DRF059	Print Reading.....	2
MTH052	Intro. to Algebra and Geometry (or higher) .....	3
<b>Term 2</b>		
BLD052	Building Codes II.....	3
BLD059	Materials of Construction .....	2
BLD061	Structural Inspection-Wood .....	3
BLD093B	Building Inspection Lab.....	1
COM052	Communication Skills II.....	3
	or	
WR122	English Composition-Logic and Style.....	3
DRF060	Advanced Print Reading .....	2
FE205	Job Search Techniques .....	1
MTH053	Intro. to Trig. with Geometry (or higher) .....	3
<b>Term 3</b>		
BLD053	Building Codes III .....	3
BLD054	Dwelling Construction Under UBC .....	3
BLD055	Building Department Administration.....	3
BLD062	Structural Inspection-Masonry .....	3
BLD093C	Building Inspection Lab .....	1
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	3
<b>Term 4</b>		
BLD063	Structural Inspection-Concrete .....	3
BLD071	Plumbing Codes I.....	3
BLD093D	Building Inspection Lab.....	1
CVL054	Engineering Fundamentals.....	3
CVL059	Soil Mechanics Fundamentals.....	3
PSY101	Psychology of Human Relations (or higher).....	3
<b>Term 5</b>		
ART260	General Photography.....	3
	or	
	Social science elective .....	3
	or	
	Humanities/fine arts elective.....	3
BLD064	Structural Inspection-Steel.....	3
BLD066	Structural Plan Review .....	3
BLD072	Plumbing Codes II .....	3
BLD081	Mechanical Codes I.....	3
BLD093E	Building Inspection Lab.....	1
<b>Term 6</b>		
BLD060	Fire Protection for Buildings.....	3
BLD067	Nonstructural Plan Review .....	3

BLD082	Mechanical Codes .....	3
BLD091	One and Two Family Electrical Code.....	3
BLD093F	Building Inspection Lab .....	1

## Business Administration

(Includes Accounting, Marketing, and Management)

(college transfer)

Oregon state colleges and universities offering a Bachelor of Arts and/or Bachelor of Science degrees in Business Administration are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. Eastern Oregon State College offers a combined degree in Business and Economics.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121 English Composition	3		
WR122 and 123 English Composition for SOSC; WR122 or 123 English Composition for UO; WR122 and WR123 or WR227 for WOSC; approved writing elective for OSU*		(3)	
BA214 Business Communications for PSU and SOSC			(3)
Mathematics per placement test (MTH111 College Algebra, MTH243 Probability and Statistics, MTH241 Elementary Calculus for OSU, UO and WOSC. MTH241 for EOSC; MTH241 and 243 for PSU; MTH111 and 243 for SOSC.	5	4	4
CS131 Introduction to Data Processing for EOSC and SOSC		(3)	
CS101 Introduction to Microcomputer Applications			3
Arts and Letters/Humanities courses* (PHL203 Ethics required for PSU accounting majors)	3	3	3
Social Science courses* (UO requires one each from Anthropology, Sociology, and Psychology)	3	3	3
HPE295 Health and Fitness for Life* or elective	3		
Electives*		(3)	(3)

<b>Second Year</b>	4	5	6
BA211, 212 Financial Accounting	4	4	
BA213 Managerial Accounting			4
EC201, 202, 203 Economics (EC203 not required at EOSC or UO)	3	3	3
SP111 Fundamentals of Speech for EOSC, and WOSC; SP112 Fundamentals of Persuasion for OSU and PSU; choose one from SP111, 112, 113 Fundamentals of Small Group Communication or SP114 Interpersonal Communication for SOSC	3		
BA226 Business Law for EOSC, OSU, UO, and WOSC		3	
Business courses to meet major requirements: BA101 Business Environment for EOSC; BA206 Business Management Principles for UO		(3) or (3)	
Arts and Letters/Humanities electives* Science courses*	3 4	4	3 4
Social Science courses* (accounting majors at PSU need PS201, 202 American Government and one course in ANTH, PSY or SOC)	(3)	(3)	(3)

\*To meet four-year college general education requirements.

## Chemistry

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Chemistry are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. SOSC also offers a Business-Chemistry co-major.

The one or two year program outlined below is designed to meet some of the requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
<b>First Year</b>	1	2	3
WR121, 122, and/or 123 or 227 English Composition and writing/communication electives*	3	3	3
CH221, 222, 223 General Chemistry Mathematics per placement test through MTH254 (OSU also requires MTH256 Applied Differential Equations; EOSC requires through	5	5	5

MTH253 Series Calculus; WOSC requires through MTH252 Integral Calculus)	4-5	4-5	4-5
Arts and Letters/Humanities electives* (FR101, 102, 103 First-year French, GER101, 102, 103 First-year German or RUS101, 102, 103 First-year Russian for UO; SOSC recommends second-year German for graduate work; PSU recommends a foreign language)	3-4	3-4	3-4

Students are encouraged to transfer to a four-year college after one year at Chemeketa.

Those students who have not completed the mathematics requirements may choose to stay at Chemeketa a second year and take courses from the following:

PH211, 212, 213 General Physics for Engineers and Scientists (EOSC and SOSC students may substitute PH201, 202, 203)	4-5	4-5	4-5
Social Science courses*	3	3	3
MTH252, 255, 254 Calculus (UO also recommends CS133F FORTRAN; EOSC requires CS133F FORTRAN; OSU requires BI101 General Biology, WOSC does not require MTH254 and 255 but requires 6 hours of approved electives in Natural Science or Math)	5	4	4
HPE295 Health and Fitness for Life* or elective	3		
Arts and Letters/Humanities electives or Social Science electives* (OSU students need BI101 General Biology)	3-4	3-4	3-4

\*To meet four-year college general education requirements.

## Chiropractic

(college transfer)

Western States Chiropractic College in Portland offers a degree in Chiropractic Medicine. Students must complete two years of prechiropractic credits (90 quarter credits) with at least a 2.25 grade point average as well as a 2.25 grade point average in chemistry, zoology and/or biology courses.

The two-year program outlined below is designed to meet the prerequisite requirements for Western Oregon States Chiropractic College. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
<b>First Year</b>	1	2	3
CH221, 222, 223 General Chemistry	5	5	5
Mathematics per placement test through MTH111 College Algebra	5		
WR121 and 122 or 123 English Composition	3	3	
Other approved writing or speech course			3
PSY201 and 202 or 203 General Psychology (counts towards 15 credits of required Social Science)		3	3
Approved Humanities or Social Science electives*	3	6	4
<b>Second Year</b>	4	5	6
ZOO201, 202, 203 Zoology or BI231, 232 and one course in Zoology	4	4	4
PH201, 202, 203 General Physics	4	4	4
CH241, 242, 243 Organic Chemistry	5	5	5
Approved Humanities or Social Science electives*	3-4	3-4	3

\*It is recommended that students who do not already have a bachelor's degree meet the following requirements for the Bachelor of Science degree in Human Biology at WSCC: 15 hours of social science from courses in economics, geography, history, political science, sociology, and psychology and 12 hours of arts and humanities chosen from art history, English, music history, philosophy and religion. (Three of these 12 hours may be in foreign language; an additional 3 hours may be in the theater or music performance).

## Civil-Structural Engineering Technology

The Civil-Structural Engineering Technology program offers both a one-year Certificate of Completion and a two-year Associate of Applied Science Degree. The one-year certificate program prepares the student for entry-level surveying, drafting, and materials testing positions. The two-year program prepares the student to provide preliminary designs of public works and structural engineering projects. Both curricula include courses and field experiences in drafting, surveying, and materials testing. The two-year program also includes basic engineering science; timber, steel, and reinforced concrete design; communication skills; psychology; water flow; and environmental and sanitary engineering.

Job opportunities vary. As a graduate of the two-year program, you may assist in the planning, design, and construction of bridges, tunnels, airports, pipelines, roads, dams, towers, and buildings. You may go into public safety and services dealing with water supply and waste water treatment systems. As a technician on construction projects, you may assist in estimating costs, writing specifications, inspecting or testing materials, surveying, drafting, or designing.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these

areas. To assess the time you will need to complete the program, please meet with the program chair.

### Survey Technology Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program are books, \$400; class fees, \$70; equipment and supplies, \$127. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 47 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CVL053	Calculator Proficiency	2
CVL060A	Plane Surveying I-Lecture	3
CVL060B	Plane Surveying I-Lab	2
DRF054	Drafting I	2
DRF072	Introduction to AutoCAD	3
MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
<b>Term 2</b>		
CVL061A	Plane Surveying II-Lecture	3
CVL061B	Plane Surveying II-Lab	2
CVL074	Construction Estimating, Contracts and Specifications	4
DRF073	Advanced AutoCAD	3
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry (or higher)	5
<b>Term 3</b>		
CVL064A	Construction and Route Surveying-Lecture	3
CVL064B	Construction and Route Surveying-Lab	2
CVL076	Soils Testing Lab	1
CVL078	Concrete and Concrete Testing	3
DRF081	Mapping and Platting	3
	or	
DRF082	Civil Drafting-Softdesk	3
DRF093	Technical Software Applications	3

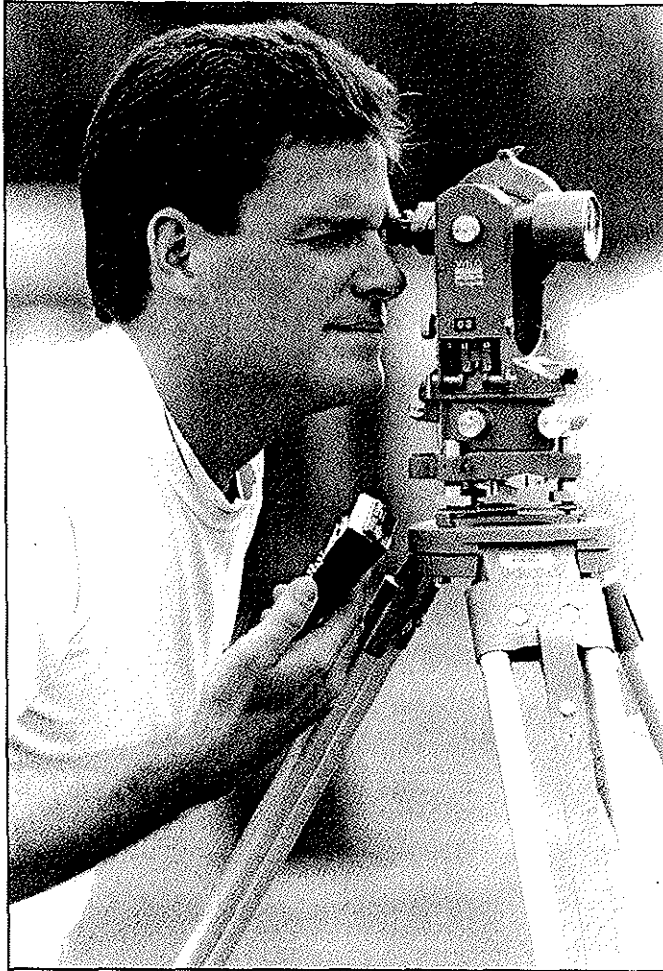
### Associate of Applied Science degree

In addition to tuition, estimated costs for students who complete the entire program are books, \$1,114; class fees, \$87; equipment and supplies, \$205. Contact the Financial Aid Office to find out if you qualify for help with these costs.

An Associate of Applied Science degree is awarded upon the successful completion of the required 97 credit hours. As a graduate of the program, you may transfer to Oregon Institute of Technology to complete course work for a Bachelor of Science degree in engineering technology.

Chemeketa also offers a pre-engineering transfer program for students who want to transfer to an accredited four-year college or university to earn a Bachelor of Science degree. For details, look under Engineering (college transfer).

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition	3
CVL053	Calculator Proficiency	2
CVL060A	Plane Surveying I-Lecture	3
CVL060B	Plane Surveying I-Lab	2
DRF054	Drafting I	2
MTH081	Technical Mathematics I	4



	or		
WR227	Technical Writing .....	3	
CVL084	Soil Mechanics and Foundations .....	3	
CVL092	Concrete Construction and Design .....	3	
DRF083	Project Development .....	3	
DRF093	Technical Software Applications .....	3	
	or		
CS1255S	LOTUS I-Worksheets .....	4	

## Computer Electronics Technology

see Electronics Technologies

## Computer Programming

Chemeketa's Computer Programming curriculum is for students who wish to become professional business-application main-frame programmers. As a graduate of this program, you will meet the minimum educational and experience requirements to qualify for the State of Oregon employment classification as a computer programmer trainee. After six months of experience, you may qualify as a computer programmer.

The Microcomputer Support Specialist option is for those who wish to become professionals in the microcomputer local area network (LAN) integrated application environment. The two-year program includes theory and technical information as well as experience in performing actual microcomputer systems maintenance tasks. The curriculum emphasizes problem solving and working effectively with people.

In either program you may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in CS280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,098; class fees, \$180; equipment and*

	or		
MTH111	College Algebra (or higher) .....	5	
<b>Term 2</b>			
CVL061A	Plane Surveying II-Lecture .....	3	
CVL061B	Plane Surveying II-Lab .....	2	
CVL074	Contracts, Specifications and Construction .....	4	
CVL076	Soils Testing Laboratory .....	1	
DRF072	Introduction to AutoCAD .....	3	
MTH082	Technical Mathematics II .....	4	
	or		
MTH112	Trigonometry (or higher) .....	5	
<b>Term 3</b>			
CVL064A	Construction and Route Surveying-Lecture .....	3	
CVL064B	Construction and Route Surveying-Lab .....	2	
CVL078	Concrete Testing .....	3	
CVL080	Applied Mechanics .....	3	
DRF073	Advanced AutoCAD .....	3	
MTH083	Technical Mathematics III .....	4	
	or		
MTH251	Differential Calculus (or higher) .....	5	
<b>Term 4</b>			
CVL082	Strength of Materials I .....	4	
CVL087	Hydraulics .....	4	
DRF082	Civil Drafting-Softdesk .....	3	
DRF084	GIS Applications Lab .....	1	
GEOG105	Introductory Geography .....	3	
<b>Term 5</b>			
CVL088	Sanitary Design and Construction .....	3	
CVL090	Timber Design and Construction .....	3	
CVL091	Steel Design and Construction .....	3	
DRF085	Geographic Information System (GIS) .....	3	
PH081	Applied Physics .....	4	
	or		
CH121	College Chemistry .....	5	
	or		
PH201	General Physics .....	4	
	or		
G201	Geology .....	4	
<b>Term 6</b>			
COM053	Technical Report Writing .....	3	

supplies, \$75. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 94 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CIS120	Computer Information Science I.....	4
CIS121	Computer Information Science II.....	4
MTH105	Intro. to Contemporary Math (or higher).....	4
WR121	English Composition-Exposition (or higher).....	3
<b>Term 2</b>		
BA211	Financial Accounting I.....	4
CS133C	COBOL I.....	4
CS140B	Microcomputer Operating Systems.....	3
CS285	Fourth-Generation Language-SQL.....	3
<b>Term 3</b>		
BA212	Financial Accounting I.....	4
CS140A	OS Concepts and Facilities.....	3
CS233C	COBOL II.....	4
FE205	Job Search Techniques.....	1
SP111	Fundamentals of Speech (or higher).....	3
<b>Term 4</b>		
CS234L	On-Line Programming Techniques.....	4
CS244	Systems Analysis I.....	3
CS133E	Easytrieve Plus.....	3
CS280	Cooperative Work Experience.....	4
	or	
	Business elective*.....	4
WR227	Technical Report Writing.....	3
<b>Term 5</b>		
CS246	Systems Analysis II.....	3
CS275	Data Base Management.....	3
CS278	Data Communications.....	3
CS280	Cooperative Work Experience.....	4
	or Business elective*.....	4
	Humanities/fine arts elective.....	3
	or	
	Science/applied science elective.....	3
<b>Term 6</b>		
CS234C	COBOL/CISC Programming Techniques.....	4
CS280	Cooperative Work Experience.....	4
	or	
	Business elective*.....	4
	Social science elective.....	3
	Computer science electives.....	6

\*Business elective: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE except OA084, BA051, BA052, and BA053.

## Microcomputer Support Specialist Option

This option emphasizes the horizontal integration of application packages and provides an introduction to microcomputer programming. It includes training in installing and integrating many of the software packages used by businesses.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,012; class fees, \$212; equipment and supplies, \$80. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 98 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CIS120	Computer Information Science I.....	4
CIS121	Computer Information Science II.....	4
MTH105	Intro. to Contemporary Math (or higher).....	4

WR121 English Composition-Exposition..... 3

### Term 2

BA211	Financial Accounting I.....	4
CS125SS	LOTUS I-Worksheets.....	4
CS133U	C Language.....	4
CS140B	Microcomputer Operating Systems.....	3
	Humanities/fine arts electives.....	3
	or	
	Science/applied science electives.....	3

### Term 3

BA212	Financial Accounting II.....	4
CIS122	Computer Information Science III.....	4
CS135SS	LOTUS II-Macros.....	3
CS233U	Advanced C.....	4
FE205	Job Search Techniques.....	1

### Term 4

CS125DB	DBASE.....	3
CS240	Advanced MS/DOS Utilities.....	3
CS244	Systems Analysis I.....	3
CS280	Cooperative Work Experience.....	3
	or	
	Computer science elective*.....	3
WR227	Technical Report Writing.....	3

### Term 5

CS145	Microcomputer Hardware/Software Eval.....	4
CS171	Computer Organizations.....	4
CS275	Data Base Management.....	3
CS278	Data Communications.....	3
CS280	Cooperative Work Experience.....	3
	or	
	Computer science elective*.....	3

### Term 6

CS050	Data Communications Lab.....	2
CS060	Techniques of User Training.....	2
CS135DB	Advanced DBASE.....	4
CS279	Network Management.....	3
SP111	Fundamentals of Speech (or higher).....	3
	Social science elective.....	3

\*Computer science elective: Choose courses with CS, or CIS prefixes.

## Computer Science

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Computer Science are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. Southern Oregon also has an option in software and computer information science.

The one- or two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.



Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
CS161, 162, 260 Computer Science I, II and III (required by all except UO; recommended for UO)	4	4	4
Mathematics per placement test*	4	4	4
Science courses to meet college and Computer Science major requirement* (PH211, 212, 213 General Physics for Engineers and Scientists and 4 hours Biological Science for OSU; CH221, 222, 223 General Chemistry or PH211, 212, 213 Physics for UO; Chemistry, Physics, Biology or Geology for PSU)	4-5	4-5	4-5
WR121, 122 and/or 123 English Composition and/or WR227 Technical Writing* (WR121, 122, 227 for OSU and SOSC; WR121 and WR227 and SP111 Fundamentals of Speech for PSU; WR121 and WR122 or 123 for UO; WR121 and two courses from WR122, 123, 227 for WOSC)	3	3	(3)

It is recommended that students planning to attend PSU and UO transfer after completing one year.

Second Year	4	5	6
Computer Science course to meet major requirements (CS133A Assembler I and CS171 Principles of Computer Organization for OSU; CS133A or CS171 and CS133U C Language for PSU; CS133A, CS133U, CS171, and CS271 for SOSC; CS171 and CS271 for WOSC)	3-4	3-4	3-4
CS171 Principles of Computer Organization for WOSC			4
CS271 Computer Organization and Assembler Language			4
Mathematics to meet major requirements through MTH253 and MTH231, 232 Discrete Mathematics for OSU; through MTH254 Vector Calculus I for PSU and WOSC; through MTH253 and MTH231 for SOSC; through MTH251, MTH252, MTH253 and MTH231, MTH232 for UO;	4	4	4
Social Science courses* (UO requires PSY201, 202 General Psychology)	3	3	3
Arts and Letters/Humanities sequence* HPE295 Health and Fitness for Life* or elective	3	3	3
Electives*		3-4	3-4

\*To meet four-year college general education requirements.

## Construction Skills Training

Chemeketa offers the Construction Skills Training program for those whose interests lie in working with their hands and being outdoors. This two-term (22-week) program can prepare you for a career in the construction trades. Instruction will be given in basic safety and first aid, plan reading and site layout, carpentry, and bricklaying. Students will use Associated General Contractor curriculum and workbooks during these training activities.

*Estimated costs for students who complete the two-term program are tuition, \$1,600; books, \$50; first aid and CPR certification fee, \$25.*

*Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 33 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CTX050	Fundamentals of Construction.....	18
<b>Term 2</b>		
CTX060	Applied Construction Principles.....	15

## Criminal Justice

Graduates of Chemeketa's Criminal Justice program may become law enforcement officers or correctional officers. Although there is much competition for such positions, they offer good benefits. Graduates may also find other jobs in intake and release work in correctional institutions and in private and public security work. Or, as a graduate, you may work as an insurance adjuster or a hearings officer or licensing inspector for the state Department of Motor Vehicles.

However, many employers require employees to earn a bachelor's degree before entering or advancing in this field. Chemeketa's program is planned so that you may transfer to a four-year institution. The courses also may meet social science requirements at some four-year institutions. Before you enroll at Chemeketa, consult with Chemeketa's Advising and Counseling Center and an advisor at the institution to which you plan to transfer.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in CJ280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$900. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

An Associate of Applied Science degree is awarded upon successful completion of the 91 required credit hours listed below. These in-

clude the 58 credit hours listed under general education requirements, 18 credit hours of Criminal Justice core requirements, and 15 credit hours of Criminal Justice electives.

**General education requirements (58 credit hours)** (All courses must be numbered 100 or above.)

Course	Title	Credit Hours
WR121	English Composition-Exposition .....	3
WR122	English Composition Logic and Style .....	3
WR227	Technical Writing.....	3
	or	
WR123	English Composition-Research Writing.....	3
CS101	Intro. to Microcomputer App. (or higher) .....	3
	Speech elective .....	3
MTH105	Intro. to Contemporary Math (or higher) .....	4
	Physical education electives (three different activities).....	3
	Social science sequence.....	9
	Humanities sequence.....	9
	General education electives.....	18

**Criminal Justice core requirements (18 credit hours)**

CJ100	Survey of the Criminal Justice System .....	3
CJ101	Criminology .....	3
CJ132	Introduction to Parole and Probation.....	3
CJ206	Crime and Delinquency .....	3
CJ215	Criminal Justice Administration .....	3
CJ226	Introduction to Constitutional Law.....	3

**Criminal Justice electives (Select 15 credit hours)**

CJ110	Introduction to Law Enforcement .....	3
CJ131	Introduction to Penology .....	3
CJ200	Police and Public Policy.....	3
CJ207	Seminar in Criminal Justice.....	3
CJ210	Introduction to Criminal Investigation .....	3
CJ220	Introduction to Substantive Law and Oregon Criminal Code .....	3
CJ230	Introduction to Juvenile Corrections.....	3
CJ231	Introduction to Corrections Process .....	3
CJ232	Introduction to Corrections Casework .....	3
CJ280	Cooperative Work Experience .....	3

## Dental Assisting

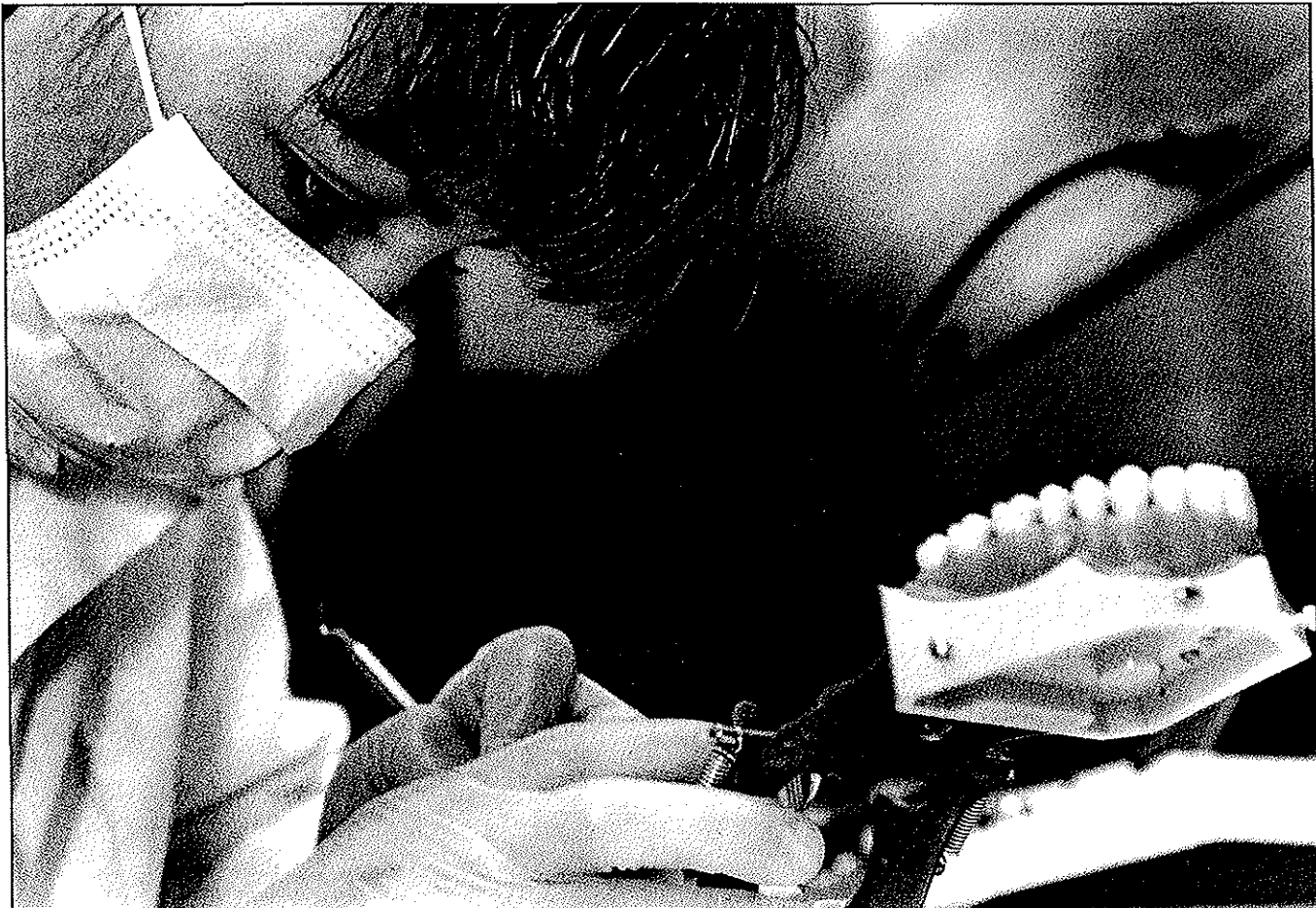
The Dental Assisting program offers technical training to persons who want to work in dental offices and clinics. The program is accredited by the American Dental Association.

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

Typical duties of dental assistants include preparing patients for treatment, mixing dental materials, taking impressions, sterilization and infection control, exposing and developing radiographs, and inventory control. Laboratory duties include pouring study models of teeth and fabrication of custom trays, temporary crowns, and small appliances. As office manager, a dental assistant acts as a receptionist, schedules appointments, keeps accounts and records, prepares statements, and is responsible for the general appearance of an office.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 399-5006.

To enroll, you must have a high school diploma or GED certificate. You also must be at least 18 years of age or older by January 1 of



the academic year in which you are enrolling. This requirement coincides with the Oregon Board of Dentistry and OAR Chapter 818-41-050 of the Oregon Dental Practice Act.

The program has been designed to be completed in one year, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

In order to graduate, you must score at MTH051 or higher on the ASSET placement examination or show mathematics proficiency through a college-level course. Students must possess a level C CPR card prior to enrollment in winter term classes. You are required to earn a grade of C or better in all courses. As a graduate you are eligible to take the National Certification Examination for Dental Assisting.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$375; class fees, \$145; equipment and supplies, \$465; test fees, \$145; physical examination, \$80; measles vaccination, \$10; Hepatitis B series, \$150. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 62 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BI060	Basic Science Principles.....	3
DEN050	Dental Sciences I.....	3
DEN051	Introductory Concepts in Dental Assisting.....	3
DEN052	Dental Anatomy and Physiology.....	4
DEN053	Dental Materials I.....	4
SP118A	Interpersonal Communication in the Health Profession*.....	1
<b>Term 2</b>		
DEN060	Dental Sciences II.....	4
DEN061	Dental Assisting Practicum I.....	3
DEN062	Expanded Functions I.....	3
DEN063	Dental Materials II.....	4
DEN064	Dental Radiology I.....	4
SP118B	Interpersonal Communication in the Health Professions*.....	1
<b>Term 3</b>		
CS101	Intro. to Microcomputer App. (or higher).....	3
DEN070	Dental Office Management.....	3
DEN071	Dental Office Practicum II.....	6
DEN072	Expanded Functions II.....	3
DEN074	Dental Radiology II.....	2
SP118C	Interpersonal Communication in the Health Professions*.....	1
<b>Term 4</b>		
DEN080	Dental Assisting Seminar.....	2
DEN081	Dental Office Practicum III.....	5

\*SP111, SP112, SP113 may be substituted.

## Dental Hygiene

(college transfer)

Oregon state colleges and universities offering a Bachelor of Science degree in Dental Hygiene are Oregon Health Sciences University and Oregon Institute of Technology.

Admission to the Dental Hygiene programs is competitive; only a limited number of applicants is accepted each year. It is important to check with the college of your choice for admission requirements and deadlines, and to obtain admission materials early, as requirements change.

The two-year program outlined below is designed to meet requirements at OHSU and OIT. Since OIT begins dental hygiene courses in the second year, it will be to the student's advantage to transfer after completing first-year classes at Chemeketa. Application must be made by April 1.

This program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institute to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
BI231, 232, 233 Anatomy and Physiology for OIT or ZOO201, 202, 203 General Zoology for OHSU	4	4	4
CH121, 122, 123 College Chemistry or CH104, 105, 106 Chemistry for Allied Health	4-5	4-5	4-5
PSY201 General Psychology for OHSU (6 credit hours from PSY100, 101, 201, 202, 203, 206, 237, 246 for OIT)	3	3	
ANTH103 Cultural Anthropology for OHSU			3
WR121,122 English Composition	3	3	
SP111 Fundamentals of Speech (or other speech classes for OHSU)			3
CS103 Introduction to Microcomputer Applications for OIT	3		
BI234 Microbiology for OIT			4
MTH095 Intermediate Algebra for OIT		4	
PE185 Any Physical Education elective for OIT			1

Elective (3 hours for OIT; enough to bring total credit to 45 during first year for OHSU)	(3)	(3)	3
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
FN225 Nutrition		(4)	
SP111 Fundamentals of Speech (or other speech classes for OHSU)		(3)	
SOC204 General Sociology	3		
WR227 Technical Writing for OIT Humanities electives* (9 hours for OIT; 6 hours from Art History, Literature, Philosophy, Speech, Theater Arts, or second year foreign language for OHSU)			(3)
PE185 Physical activity (1 credit for OIT)	3	3	3
MTH111 College Algebra for OIT	(5)		
SP113 Fundamentals of Small Group Communications for OIT		3	
Social Science electives: 3 hours from Anthropology, History, Economics, Geography, Psychology, Social Science, Political Science for OIT			3
ANTH103 Cultural Anthropology for OHSU			3
Electives (additional electives to bring total transferable credits to 91 for OHSU)	0.9	0.9	0.9

\*To meet four-year college general education requirements.

\*\*OHSU requires science courses be completed within the past 10 years.

## Drafting Technology-CAD

Drafting Technology offers three paths of entry into careers in drafting and design: Drafting, Mechanical Design, and Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM). During the first year students in all three areas share many courses so that they may explore, gain insight, and consult with advisors to make knowledgeable decisions about their careers. Choose individual courses to meet your needs, or work toward an Associate of Applied Science degree. You should choose Drafting, Mechanical Design, or CAD/CAM as soon as possible during your first year.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. In your third term, as a full-time student, with the approval of the program chair you may enroll in DRF280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

After graduating, you may transfer to an institution such as Oregon Institute of Technology to complete the course work for a bachelor's degree in industrial management.

## Drafting Option

This curriculum offers training and knowledge in skills which apply to technical drafting but which normally you cannot gain through experience alone, such as principles of design, materials and processes, mathematics, and physical science concepts.

Drafting courses are planned to train you in conventional drafting methods such as free-hand lettering, preliminary sketching, pencil and ink drafting and Computer-Aided Drafting (CAD), and in design.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$940; class fees, \$121; equipment and supplies, \$227. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 95 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
DRF050	Sketching .....	1
DRF051	Machine Drafting I.....	3
DRF065	Introduction to HP48 Calculators .....	2
DRF072	Introduction to AutoCAD.....	3
MFG053	Manufacturing Processes.....	3
MTH081	Technical Mathematics I.....	4
	or	
MTH111	College Algebra (or higher).....	5
<b>Term 2</b>		
COM051	Communication Skills I .....	3
	or	
WR121	English Composition-Exposition.....	3
DRF053	Machine Drafting II.....	1
DRF056	Architectural Drafting .....	3
DRF073	Advanced AutoCAD .....	3
MTH082	Technical Mathematics II.....	4
	or	
MTH112	Trigonometry (or higher).....	5
<b>Term 3</b>		
CVL066A	Surveying for Drafters .....	2
CVL066B	Surveying for Drafters-Lab .....	2
DRF074	Descriptive Geometry.....	3
DRF075	AutoCAD 3-D.....	2
DRF081	Mapping and Platting .....	3
DRF093	Technical Software Applications.....	3
	or	
CSI04Q	Worksheets-Quattro .....	4
	General elective .....	3
	or	
	Cooperative Work Experience.....	3
<b>Term 4</b>		
CVL054	Engineering Fundamentals .....	3
DRF078	AutoLISP Programming.....	3
DRF082	Civil Drafting-Softdesk.....	3
DRF084	GIS Applications Lab .....	1
ELF060	Electronic Fundamentals .....	4
GEOG105	Introductory Geography .....	3
<b>Term 5</b>		
DRF077	Introduction to MicroStation PC.....	3
DRF085	Geographic Information System (GIS).....	3
DRF089	Structural Drafting.....	3
DRF090	Electronic Drafting .....	3
PH081	Applied Physics (or higher).....	4
<b>Term 6</b>		
COM053	Technical Report Writing .....	3
	or	
WR227	Technical Writing.....	3
DRF055	Architectural Design.....	3
DRF061	Technical Illustration .....	3
DRF070	CAD Pipe Systems.....	2
DRF079	CAD Electronics.....	3

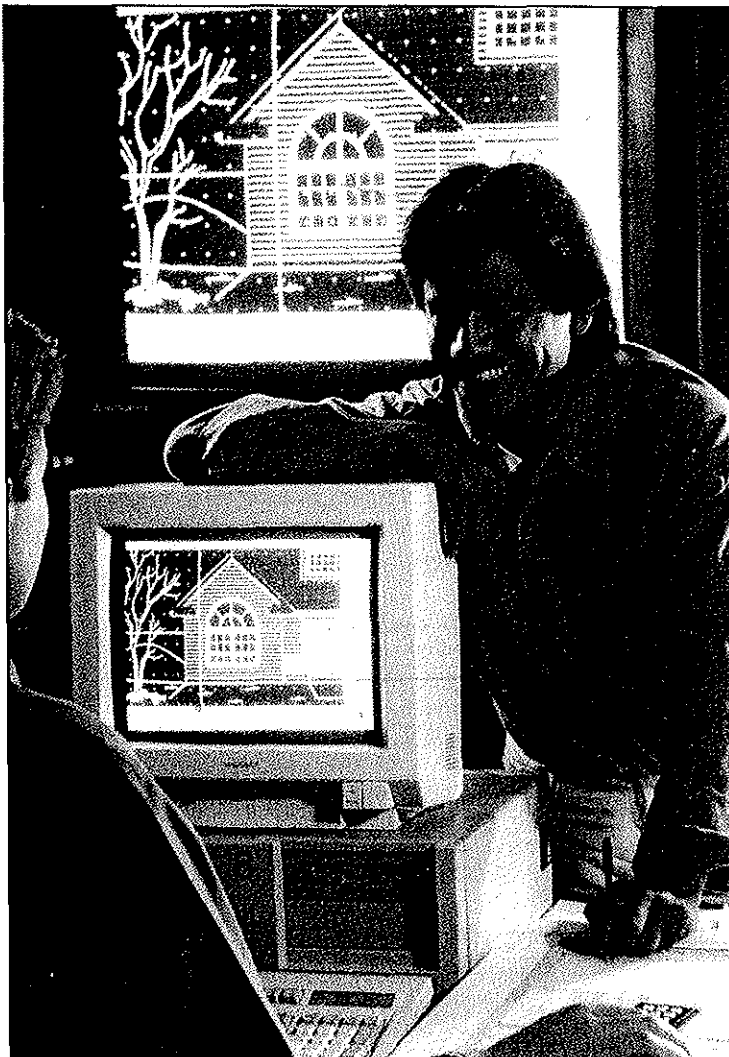
## Mechanical Design Option

Mechanical Design is a comprehensive drafting program with practical approaches to engineering and design concepts using both conventional and Computer-Aided Drafting (CAD) methods.

You may train to become a technician in machine, electronic, control system, and tool-design drafting. The program emphasizes the use of the computer as a problem-solving tool in these job areas. Instruction in design also stresses the use of manufacturers' technical catalogs, technical handbooks, and practical applications of theoretical and mathematical concepts studied in courses taken concurrently.

With specific course substitutions you may transfer credits to the Mechanical Engineering Technology Program at Oregon Institute of Technology. See your advisor for details.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,152; class fees, \$103; equipment and supplies, \$289. Contact the Financial Aid Office to find out if you qualify for help with these costs.*



You may earn an Associate of Applied Science degree by successfully completing these required 97 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
DRF050	Sketching .....	1
DRF051	Machine Drafting I.....	3
DRF065	Introduction to HP48 Calculators .....	2
DRF072	Introduction to AutoCAD.....	3
MFG053	Manufacturing Processes.....	3
MTH081	Technical Mathematics I.....	4
	or	
MTH111	College Algebra (or higher).....	5
<b>Term 2</b>		
DRF053	Machine Drafting II.....	1
DRF068	Geometric Tolerancing.....	1
DRF073	Advanced AutoCAD .....	3
DRF076	CAD Mechanical.....	2
MFG054	Geometric Tolerancing Lab.....	1
MTH082	Technical Mathematics II.....	4
	or	
MTH112	Trigonometry (or higher).....	5
PH081	Applied Physics.....	4
	or	
PH201	General Physics (or higher).....	4
<b>Term 3</b>		
CVL080	Applied Mechanics.....	3
DRF074	Descriptive Geometry.....	3
DRF075	AutoCAD 3-D .....	2
DRF093	Technical Software Applications* .....	3
	or	
CS104Q	Worksheets-Quattro .....	4
MTH083	Technical Mathematics III .....	4
	or	
MTH251	Differential Calculus (or higher).....	5
PSY246	Introduction to Industrial Psychology.....	3
	or	
	Humanities/fine arts elective .....	3
	or	
	Social science elective.....	3
<b>Term 4</b>		
CVL082	Strength of Materials I.....	4
DRF071	Machine Design Lab I.....	3
DRF078	AutoLISP Programming* .....	3
DRF086	Power Transmission Design .....	3
ELE060	Electronic Fundamentals .....	4
<b>Term 5</b>		
COM051	Communications Skills I.....	3
	or	
WR121	English Composition-Exposition.....	3
DRF066	Tool Design .....	3
DRF089	Structural Drafting* .....	3
DRF090	Electronic Drafting*.....	3
CVL091	Steel Construction and Design .....	3
	or	
MFG069	QC Applications/CMM Operation.....	4
	or	
CS145	Microcomputer Software/Hardware Eval.....	4
<b>Term 6</b>		
COM053	Technical Report Writing .....	3
	or	
WR227	Technical Writing .....	3
DRF061	Technical Illustration*.....	3
DRF079	CAD Electronics* .....	3
DRF087	Flexible Manufacturing Systems .....	3
PSY246	Introduction to Industrial Psychology .....	3
	or	
	Humanities/fine arts elective .....	3
	or	
	Social science elective.....	3

\*Courses in math, physics, and engineering 200 and above and science-related chemistry courses may be substituted.

## Computer-Aided Design/ Computer-Aided Manufacturing (CAD/CAM) Option

The Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) option offers training in using computers as tools in engineering, drafting, machine tool control, robotics, electronics, and industrial mechanical design.

You may gain knowledge and skills in operating computer design terminals, programming, and evaluating software problems. Then apply your knowledge and skills to solving increasingly complex design and machining problems. After you successfully complete this option, you may begin employment or upgrade your qualifications as an engineer and/or a design technician. This may be in the fields of engineering and manufacturing operations and in using computers in drafting and in designing and controlling machine tools.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,197; class fee, \$176; and equipment and supplies, \$100. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
DRF051	Machine Drafting I.....	3
DRF072	Introduction to AutoCAD .....	3
MFG053	Manufacturing Processes .....	3
MTH081	Technical Mathematics I.....	4
	or	
MTH111	College Algebra (or higher).....	5
WR121	English Composition-Exposition .....	3
	or	
COM051	Communication Skills I.....	3
<b>Term 2</b>		
DRF053	Machine Drafting II .....	1
DRF068	Geometric Tolerancing .....	1
DRF073	Advanced AutoCAD.....	3
DRF076	CAD Mechanical .....	2
MFG054	Geometric Tolerancing Lab .....	1
MFG093	CNC Machine Tool Fundamentals.....	5
MTH082	Technical Mathematics II.....	4
	or	
MTH112	Trigonometry (or higher).....	5
<b>Term 3</b>		
CVL080	Applied Mechanics.....	3
DRF074	Descriptive Geometry .....	3
DRF075	AutoCAD 3-D .....	2
DRF093	Technical Software Applications .....	3
	or	
CS104Q	Worksheets-Quattro.....	4
MFG094	Manufacturing Programming.....	5
<b>Term 4</b>		
CVL082	Strength of Materials I .....	4
DRF071	Machine Design Lab I.....	3
DRF086	Power Transmission .....	3
ELE060	Electronic Fundamentals .....	4
<b>Term 5</b>		
DRF066	Tool Design Lab I .....	3
CS145	Microcomputer Software and Hardware Evaluation .....	4
	or	
MFG069	QC Fundamentals/CMM Operation .....	4
MFG095	CAM Applications.....	5
PH081	Applied Physics .....	4
	or	
PH201	General Physics .....	4
<b>Term 6</b>		
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	3
DRF087	Flexible Manufacturing Systems.....	3
MFG096	CAD-CAM Integrations.....	5
PSY246	Introduction to Industrial Psychology.....	3
	or	
	Humanities/fine arts elective.....	3
	or	
	Social science elective .....	3
	General elective.....	3

## Early Childhood Education

Early Childhood Education is a comprehensive program of both theory and practical experiences designed to prepare you to work with young children. Many of the courses may be helpful to parents of preschool-age children and to persons working with families, children, and individuals. Graduates may qualify to be child care aides, assistants, and teachers in pre-schools, day care centers, kindergartens, and Head Start programs.

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion. Students in the program must earn grades of C or better in all Early Childhood Education courses. A valid first-aid card is required for graduation from both the one-year and two-year programs.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in ECE280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

### One-Year Option

*In addition to tuition, estimated costs for students who complete the one-year program are books, \$380; class fees, \$25; equipment and supplies, \$30. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 49 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
ECE150	Introduction and Observation in Early Childhood Education .....	3
ECE161	Infant/Toddler Practicum .....	4
HDFS222	Family Relationships .....	3
HDFS225	Prenatal, Infant and Toddler Development.....	3
HDFS249	Introduction to Working with Infants and Toddlers .....	3



<b>Term 2</b>		
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition.....	2
	or	
FN225	Nutrition.....	4
ECE162	Early Childhood Educator Orientation.....	2
HDFS247	Preschool Child Development.....	3
WR121	English Composition- Exposition (or higher).....	3
<b>Term 3</b>		
ECE153	Music for Young Children.....	3
ECE154	Children's Literature and Literacy.....	3
ECE163	Preschool Practicum.....	4
HDFS229	Development in Middle Childhood.....	3
HDFS248	Learning Experiences.....	4

### Two-Year Option

*In addition to tuition, estimated costs for students who complete the entire program are books, \$768; class fees, \$38; equipment and supplies, \$60. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 92 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
ECE150	Introduction and Observation in Early Childhood Education.....	3
ECE161	Infant/Toddler Practicum.....	4
HDFS222	Family Relationships.....	3
HDFS225	Prenatal, Infant and Toddler Development.....	3
HDFS249	Introduction to Working with Infants and Toddlers.....	3
<b>Term 2</b>		
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition.....	2
	or	
FN225	Nutrition.....	4

ECE162	Early Childhood Education Orientation.....	2
HDFS247	Preschool Child Development.....	3
WR121	English Composition- Exposition (or higher).....	3

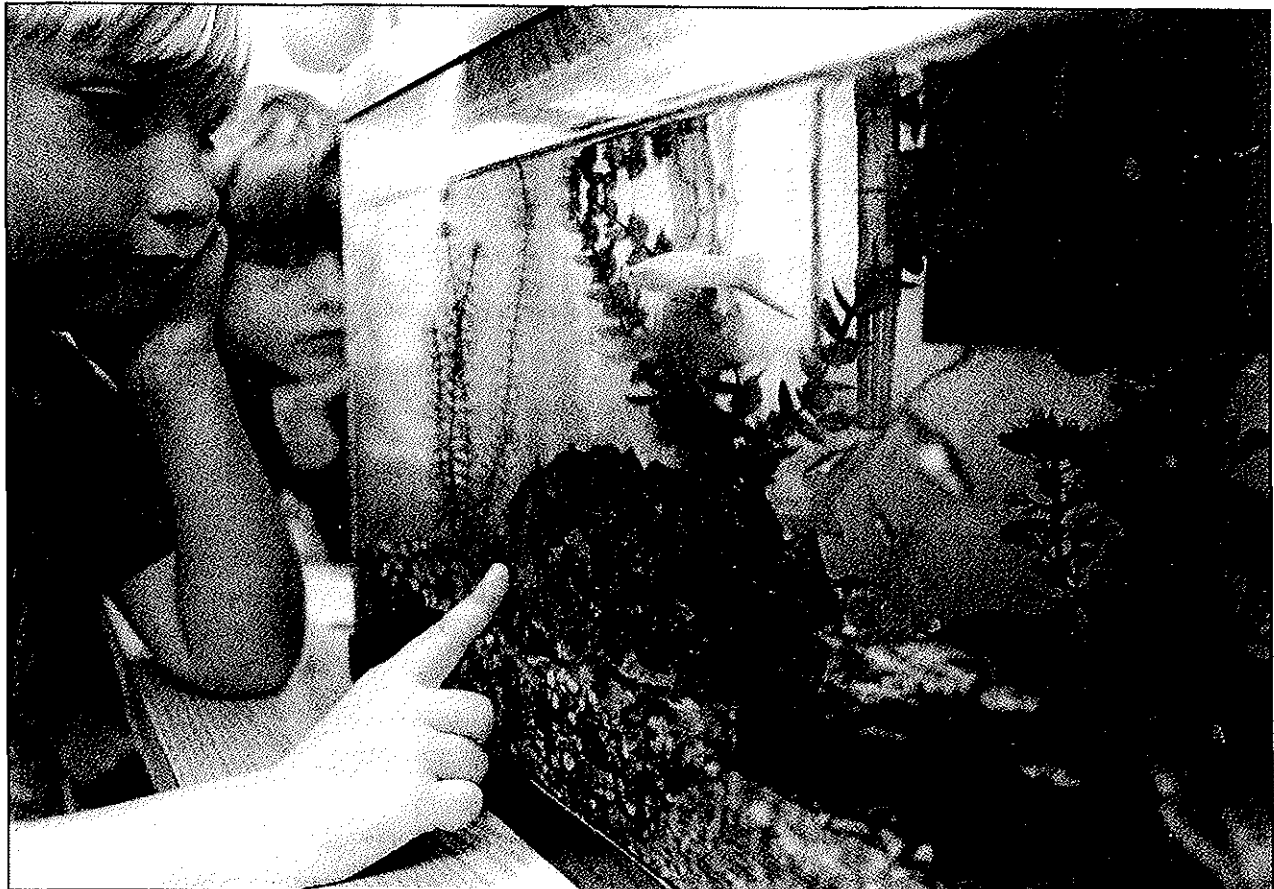
<b>Term 3</b>		
ECE153	Music for Young Children.....	3
ECE154	Childhood's Literature and Literacy.....	3
ECE163	Preschool Practicum.....	4
HDFS229	Development in Middle Childhood.....	3
HDFS248	Learning Experiences.....	4

<b>Term 4</b>		
ECE251	Environments for Young Children.....	3
ECE261	Student Teaching I, Early Childhood Education.....	6
HDFS285	Professional Issues in Early Childhood Education.....	3
MTH052	Introduction to Algebra and Geometry (or higher).....	3

<b>Term 5</b>		
ED258	Multicultural Education.....	3
	or	
ED268	Educating the Mildly and Severely Handicapped.....	3
ECE280D	Cooperative Work Experience.....	4
HDFS257	Home, School and Community.....	3
	Computer science elective.....	3
	Humanities/fine arts elective*.....	3
	or	
	Science/applied science elective*.....	3
	or	
	Communications elective*.....	3

<b>Term 6</b>		
ECE262	Student Teaching II, Early Childhood Education.....	6
ECE295	Administration of Early Childhood Education Programs.....	3
	Humanities/fine arts elective*.....	3
	or	
	Science/applied science elective*.....	3
	or	
	Communications elective*.....	3

\*Category may not be repeated.



## Economics

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Economics are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. UO also offers a five-year program combining an undergraduate economics major and a master of business administration.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, WR122 and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Social Science courses*	3	3	3
Arts and Letters/Humanities courses*	3	3	3
Math or Science courses (MTH111 College Algebra and MTH241 Elementary Calculus or MTH251 Differential Calculus for OSU; MTH111, MTH243 Probability and Statistics, and MTH241 for PSU; UO requires MTH111, 241, 242, 243 or MTH251, 252, 253 Calculus)*	5	4	4
HPE295 Health and Fitness for Life* or electives	3		
Electives*		3	3-6
Second Year	4	5	6
Economics sequence: EC201, 202, 203	3	3	3
Science Electives*	4	4	4
Arts and Letters/Humanities or Social Science electives*	3	3	3
Electives (BA211 Financial Accounting and CS133F Fortran IV for PSU)	6-7	6-7	6-7

\*To meet four-year college general education requirements.

## Education

see also **Early Childhood Education, Instructional Assistant, and Professional-Technical Teacher Preparation**

### Elementary Education

(college transfer)

Oregon state colleges and universities offering Elementary Education programs are Eastern Oregon State College and Western Oregon State College, which offer a Bachelor of Arts and/or Bachelor of Science degrees in Elementary Education, and Eastern Oregon State College, Oregon State University, Portland State University, and Southern Oregon State College which offer fifth-year programs.

Students planning on attending EOSC will earn their degree in Multidisciplinary Studies. Students should see a Chemeketa advisor or consult with the EOSC School of Education for requirements. Students planning on enrolling in a college offering a fifth-year Elementary Education program must obtain a baccalaureate degree in an academic major before being admitted to the fifth-year teacher education program. The major may be in general or liberal studies or in any subject taught in elementary schools. OSU recommends students major in Liberal Studies, General Science, Human Development, Family Studies, Exercises and Sport Science, or a single discipline that relates to the elementary school curriculum.

Admission to both four-year and fifth-year education programs requires a minimum grade point average (GPA), usually 2.75 to 3.00. Admission also requires passing the General Knowledge and Communications Skill sections of the National Teacher Exam (NTE). Students transferring to EOSC or WOSC are advised to take the NTE at the completion of their general education requirements or during their sophomore year, as NTE scores are included as data required for admission to the Elementary Education program.

Students planning to transfer to a college offering a fifth-year program should follow the program outlined in the catalog for the academic major which they plan to complete before entering a fifth-year program.

The program outlined below is designed to meet prerequisite requirements at EOSC and WOSC. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your

skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

Students planning to transfer to the four-year baccalaureate degree programs at EOSC and WOSC should follow the program below:

	Term		
<b>First Year</b>	<b>1</b>	<b>2</b>	<b>3</b>
WR121, 122, 123 English Composition (WR227 Technical Writing acceptable in place of WR122 or 123)*	3	3	3
Mathematics (per placement test through MTH211, 212, 213 Foundations of Elementary Mathematics; MTH095 prerequisite)	3-4	3-4	3-4
Literature sequence (ENG104, 105 106 Introduction to Literature or ENG107, 108, 109 World Literature recommended)*	3	3	3
Social Science courses (EOSC requires 23 credit hours to include: American History, World History, Geography and Psychology)*	3	3	3
HPE295 Health and Fitness for Life	3		
Computer Science elective (CS101 recommended)*		3	
Speech elective (SP111 recommended for WOSC, required at EOSC)*			3
A one-year sequence in a foreign language may be substituted for 3 hours of English Composition, 6 hours of Social Science and 2 hours of PE activity classes at WOSC			
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
MTH211, 212, 213 Foundations of Elementary Mathematics (if not taken first year)	(3)	(3)	(3)
Creative Arts Electives (courses in ART, MUS or TA)*	3	3	3
Science Sequence*	4-5	4-5	4-5
PE electives* (Health class for EOSC)	1	1	
Philosophy or Religion elective (Philosophy required at EOSC)	3		
Social Science elective (PSY237 Growth and Development for WOSC)*	3	3	
Electives in an academic specialty and/or support area. Academic specialty and support area requirements are outlined in WOSC catalog.	0-3	3-6	3-6

\*To meet four-year college general education requirements.

## Secondary Education

(college transfer)

Oregon state colleges and universities offering secondary education programs are Western Oregon State College, which offers Bachelor of Science and Bachelor of Arts degrees in secondary education, and Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, and University of Oregon which offer a fifth-year secondary education program. UO programs are limited to music, foreign language, and special education.

Admission to fifth-year education programs requires completion of a baccalaureate degree in the subject you plan to teach at a junior or senior high school. The secondary education program is at the graduate level. Admission to

these programs requires maintaining a specific grade point average (GPA), usually 2.75 to 3.00, and successfully passing the National Teacher Examination (NTE) in your major subject area and the General Knowledge and Communication Skills exams of the NTE.

Admission to the four-year education program at WOSC requires maintaining a 2.75 GPA and passing the NTE.

You should enroll in courses that meet the general education requirements for the school to which you plan to transfer, as well as courses that meet the requirements for the major subject in which you plan to teach.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

## Electronics Technologies

Career opportunities in the electronics field are diverse, exciting, and rewarding. Chemeketa's electronics department offers three programs of study to meet the present and future challenges of the electronics industry: Electronics Engineering Technician, Computer Electronics, and Industrial Electronics.

If you wish to enhance your academic skills, the electronics department also offers a wide range of preparatory courses every term including summer. For more information contact electronics pre-technical advisor Lucy MacDonald at 399-5242, the Advising and Counseling Center in Building 2 on the Salem campus at 399-5120, or the electronics program chair, Gary Boyington, at 399-5218.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do related to your program. You will need the program chair's approval before you may enroll in ELT280 Cooperative Work Experience. For more information, look under Cooperative Work Experience in the catalog index or contact Bruce Bothwell at 399-6506.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in

these areas. To assess the time you will need to complete the program, please meet with the program chair.

For information on evening electrical and electronic courses, contact Frank Knight at 399-5046. For tours of the electronics laboratory or career information, contact program chair Gary Boyington at 399-5218.

### Computer Electronics Option

Graduates of this option begin careers with companies that manufacture, install, or maintain computers or computer-like equipment. This equipment includes, but is not limited to, mainframe computers, mini and microcomputers, automated office equipment and systems (word processors, point-of-purchase terminals, local area and wide area networks), computer peripherals, engineering work stations, other automated factory products, and data communication networks.

The training includes both specific technical skills needed in the field and broader skills in communications and human relations which are necessary for career success. You'll have hands-on practice working with computer hardware and software. Classes emphasize both component- and system-level troubleshooting as well as installation and maintenance of equipment and networks.

As a graduate of this option, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the course work required for a bachelor's degree in industrial management. If you wish to transfer, declare your intent before the first term and work closely with the electronics advisor, Gary Boyington, at 399-5218, and the institution to which you plan to transfer.

Students entering this option must have an MS/DOS-compatible computer (386 or better) and be "computer literate." Computer literate means to have skills similar to those covered in CS101 Introduction to Microcomputer Applications, or equivalent high school or life experience.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,164; class fee, \$290; equipment and supplies, \$877; MS/DOS-compatible computer (386 or better), \$900. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 107 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition	3
ELE050	Electronic Concepts I	4
ELT058	Electronics Orientation	1

ELT061	Electronics Problems I	1
ELT094	Computer Operating Systems	3
	or	
CS140B	Microcomputer Operating Systems	3
	or	
CS240	Advanced MS/DOS and Utilities	3
ES071	Work Place Safety Skills	1
	or	
HE250	Personal Health	3
MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra	5

#### Term 2

ELE051	Electronics Concepts II	4
ELT054	Transistor Fundamentals	5
ELT062	Electronics Problems II	1
ELT066	Digital Fundamentals	4
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry	5

#### Term 3

COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
ELE052	Electronic Concepts III	4
ELT055	Semiconductor Devices	3
ELT064	Pulse Circuits Fundamentals	3
ELT071	Linear IC Fundamentals	4

#### Term 4

ELT065	Electronic Circuit Analysis	4
ELT067	Digital Circuit Applications	3
ELT091	Programming Concepts I (recommended)	4
	or	
CS133U	C Language	4
PH081	Applied Physics	4
	or	
PH201	General Physics	4
COM052	Communications Skills II	3
	or	
SP111	Fundamentals of Speech	3
	and	
FE205	Job Search Techniques	1
	or	
SP113	Fundamentals of Small Group Communications	3
	and	
FE205	Job Search Techniques	1

#### Term 5

CS278	Data Communications	3
ELT068	Microcomputer Systems	5
ELT090	Computer Peripherals	4
PH082	Applied Physics	4
	or	
PH202	General Physics	4
	or	
PH203	General Physics	4
PSY246	Introduction to Industrial Psychology	3
	or	
PSY201	General Psychology	3
	or	
PSY101	Psychology of Human Relations	3

#### Term 6

ELT070	Video Display Systems	5
ELT092	Programming Concepts II	4
ELT093	Advanced Data Communication	5
ELT097	Advanced Computer Architecture	4

### Electronic Engineering Technician Option

Upon graduation from the Electronic Engineering Technician option, you may begin a career assisting in the design, manufacturing, installation, and service of telecommunication equipment and systems, electronic test instruments, medical measuring and monitoring equipment, computers, video systems, automation products, security and safety systems, process control systems, and flexible automation systems (robots). Training includes specific technical skills needed in the field and broader skills

in communications, teamwork, and human relations which are necessary for career success.

As a graduate of this option, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the course work required for a bachelor's degree in electronic engineering technology or industrial management. If you wish to transfer, declare your intent before the first term and work closely with the electronic engineering advisor, Roger White, at 399-5068, and the institution to which you plan to transfer.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,205; class fees, \$283; equipment and supplies, \$77. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 105 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition .....	3
DRF091	Basic CAD for Electronics .....	2
	or	
DRF072	Introduction to AutoCAD .....	3
ELE050	Electronic Concepts I.....	4
ELT058	Electronics Orientation.....	1
ELT061	Electronic Problems I.....	1
ES071	Work Place Safety Skills.....	1
	or	
HE250	Personal Health.....	3
MTH081	Technical Mathematics I.....	4
	or	
MTH111	College Algebra .....	5
<b>Term 2</b>		
ELE051	Electronic Concepts II.....	4
ELT054	Transistor Fundamentals .....	5
ELT062	Electronic Problems II.....	1
ELT066	Digital Fundamentals.....	4
MTH082	Technical Mathematics II.....	4
	or	
MTH112	Trigonometry .....	5
<b>Term 3</b>		
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	3
ELE052	Electronic Concepts III .....	4
ELT055	Semiconductor Devices.....	3
ELT064	Pulse Circuit Fundamentals.....	3
ELT071	Linear IC Fundamentals .....	4
<b>Term 4</b>		
COM052	Communication Skills II.....	3
	or	
SP111	Fundamentals of Speech.....	3
FE205	Job Search Techniques .....	1
	or	
SP113	Fundamentals of Small Group Communication .....	3
	and	
FE205	Job Search Techniques .....	1
ELT067	Digital Circuit Applications .....	3
CS133U	C Language.....	4
	or	
ELT091	Programming Concepts I (recommended) .....	4
PH081	Applied Physics .....	4
	or	
PH201	General Physics .....	4
	or	
PH211	General Physics for Engineers and Scientists.....	5
ELT065	Electronic Circuit Analysis.....	4
<b>Term 5</b>		
ELT068	Microcomputer Systems .....	5
ELT072	Linear IC Applications .....	3
ELT076	Antennas and Transmission Lines.....	2

ELT077	Telecommunications.....	3
PH082	Applied Physics.....	4
	or	
PH202	General Physics.....	4
	or	
PH203	General Physics.....	4
	or	
PH212	General Physics for Engineers and Scientists ...	5

#### Term 6

ELT070	Video Display Systems.....	5
ELT075	Advanced Industrial Electronics .....	4
MTH083	Technical Mathematics III.....	4
	or	
MTH241	Elementary Calculus.....	4
	or	
MTH243	Probability and Statistics.....	4
	or	
MTH251	Differential Calculus.....	5
	or	
ELT092	Programming Concepts II.....	4
	or	
CS233U	Advanced C.....	4
PSY246	Introduction to Industrial Psychology .....	3
	or	
PSY201	General Psychology .....	3
	or	
PSY101	Psychology of Human Relations.....	3
	Approved electronics elective* .....	3

#### \*Approved electronic electives:

ELT074	FCC License Preparation .....	3
ELT081	Logical Troubleshooting.....	4
ELT090	Computer Peripherals .....	4
ELT093	Advanced Data Communication .....	5
ELT097	Advanced Computer Architecture .....	4
ELT280	Cooperative Work Experience (For second-year students with prior approval of the program chair.)	
MTH252	Integral Calculus.....	5
PH203	General Physics.....	4
PH213	General Physics for Engineers and Scientists ...	5

## Industrial Electronics Option

Graduates of this option may begin a career assisting in the development, manufacturing, installation, and service of computer-integrated manufacturing systems, process control equipment, data acquisition equipment, electro-mechanical equipment, robots, and measurement and monitoring systems.

This option stresses mechanical and electronic systems and theories. Training includes specific technical skills needed in the field and broader skills in communications, teamwork, and human relations which are necessary for career success. You are required to participate actively every term in a professional organization, such as the Instrument Society of America (ISA) or the Society of Manufacturing Engineers (SME). For additional information, contact the Industrial Electronics advisor, Frank Knight, at 399-5074.

As a graduate of this option, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the course work required for a bachelor's degree in industrial management. If you wish to transfer, declare your intent before the first term and work closely with the industrial electronics advisor, Roger White, at 399-5068, and the institution to which you plan to transfer.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,050; class fees, \$218; equipment and*

supplies, \$77. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 100 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition.....	3
DRF091	Basic CAD for Electronics.....	2
	or	
DRF072	Introduction to AutoCAD.....	3
ELE050	Electronic Concepts I.....	4
ELT058	Electronics Orientation.....	1
ELT061	Electronic Problems I.....	1
ES071	Work Place Safety Skills.....	1
	or	
HE250	Personal Health.....	3
MTH081	Technical Mathematics I.....	4
	or	
MTH111	College Algebra.....	5
<b>Term 2</b>		
ELE051	Electronic Concepts II.....	4
ELT054	Transistor Fundamentals.....	5
ELT062	Electronic Problems II.....	1
ELT066	Digital Fundamentals.....	4
MTH082	Technical Mathematics II.....	4
	or	
MTH112	Trigonometry.....	5
<b>Term 3</b>		
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	3
ELE052	Electronic Concepts III.....	4
ELT055	Semiconductor Devices.....	3
ELT064	Pulse Circuit Fundamentals.....	3
ELT071	Linear IC Fundamentals.....	4
<b>Term 4</b>		
COM052	Communication Skills II.....	3
	or	
SP111	Fundamentals of Speech.....	3
	and	
FE205	Job Search Techniques.....	1
	or	
SP113	Fundamentals of Small Group Communication.....	3
	and	
FE205	Job Search Techniques.....	1
DRF086	Power Transmissions Design.....	3
ELT067	Digital Circuit Applications.....	3
ELT091	Programming Concepts I.....	4
	or	
CS133U	C Language.....	4
PH081	Applied Physics.....	4
	or	
PH201	General Physics.....	4
<b>Term 5</b>		
ELT068	Microcomputer Systems.....	5
ELT072	Linear IC Applications.....	3
MFG088	Fluid Power Systems.....	4
	or	
MFG079	Industrial Systems.....	3
	or	
ELT079	Introduction to Hydraulics/Pneumatics.....	3
PH082	Applied Physics.....	4
	or	
PH202	General Physics.....	4
	or	
PH203	General Physics.....	4
<b>Term 6</b>		
DRF087	Flexible Manufacturing Systems.....	3
ELT075	Advanced Industrial Electronics.....	4
ELT280	Cooperative Work Experience*.....	6-9
PSY246	Introduction to Industrial Psychology.....	3
	or	
PSY201	General Psychology.....	3
	or	
PSY101	Psychology of Human Relations.....	3

\*You must notify the electronics Cooperative Work Experience coordinator three terms prior to taking CWE. This is necessary so that a CWE training site can be selected and reserved for you.

## Emergency Medical Technology

The Emergency Medical Technology (EMT) program offers career training for entry-level personnel as well as certification and continuing education courses. Chemeketa offers a diverse, experienced EMT faculty, excellent on-campus facilities, and outstanding clinical training sites. The program is fully accredited by the Oregon Department of Education and the Oregon State Health Division.

Students successfully completing a level of training (EMT Basic, Intermediate, or Paramedic) will be eligible to sit for the state certification exam at that level.

Emergency medical technicians may be employed by ambulance companies, fire departments, police departments, and industries. There is a great demand for EMTs and paramedics both locally and nationally.

Students working toward EMT Paramedic certification will complete approximately 300 hours of hospital clinical experience, 100 hours of EMT observation, and 300 hours of field internship. Clinical experiences focus on developing the skills, attitudes, and work habits necessary for graduates to be successful in their field.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$966; class fees, \$150; equipment and supplies, \$214. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BI231	Human Anatomy and Physiology (or higher) .	4
EMT051	Emergency Medical Technician Basic, Part 1 ...	4
EMT075	Introduction to Emergency Medical Service ...	4
MED051	Medical Terminology 1.....	3
WR121	English Composition-Exposition (or higher)...	3
<b>Term 2</b>		
BI232	Human Anatomy and Physiology (or higher) .	4
EMT052	Emergency Medical Technician Basic, Part 2 ...	4
EMT280A	Cooperative Work Experience.....	1
MTH095	Intermediate Algebra (or higher).....	4
SP111	Fundamentals of Speech (or higher).....	3



<b>Term 3</b>	
BI233	Human Anatomy and Physiology (or higher) ..4
CSI01	Intro. to Microcomputer App. (or higher) .....3
EMT070	Emergency Communication and Patient Transportation .....3
HPE295	Health and Fitness for Life .....3
	Social science/humanities/fine arts elective.....3
<b>Term 4</b>	
AH080	Crisis Intervention .....3
EMT069	EMT Rescue .....3
EMT090	Emergency Medical Technician Paramedic, Part 1 .....8
EMT091	Emergency Medical Technician Paramedic, Part 1 Clinical.....2
<b>Term 5</b>	
EMT092	Emergency Medical Technician Paramedic, Part 2 .....8
EMT093	Emergency Medical Technician Paramedic, Part 2 Clinical .....3
EMT280B	Cooperative Work Experience .....2
FRP059	Major Emergency Tactics and Strategy.....3
<b>Term 6</b>	
EMT094	Emergency Medical Technician Paramedic, Part 3 .....4
EMT095	Emergency Medical Technician Paramedic, Part 3 Clinical .....3
EMT280D	Cooperative Work Experience .....4
	Approved elective* .....3
<b>*Approved electives (6 hours required)</b>	
AH050	Health Care Delivery .....1
BA101	Business Environment .....4
BA173	Public Relations in Business .....3
BA206	Business Management Principles .....3
BA211	Financial Accounting I .....4
BA224	Personnel Management .....3
BA226	Business Law I .....3
ED201	American Sign Language-Beginning I .....3
EMT280C	Cooperative Work Experience .....3
FRP050	Introduction to Fire Protection .....3
FRP064	Hazardous Materials Operations .....3
HE250	Personal Health .....3
HE262	Cardiopulmonary Resuscitation Instruction .....2
HE268	Pharmacodynamics in Health Care.....3
HS101	Alcohol Use, Misuse, and Addiction .....3
HS150	Personal Effectiveness for Human Service Workers .....3
HS154	Community Resources .....3
MED052	Medical Terminology II .....3
MED053	Medical Terminology III .....3
MED055	Medical Law and Ethics .....3
MED064	Introduction to Medical Science .....3
MED066	Medical Reimbursement Management .....3
MS259	Death and Dying .....3
MTH243	Probability and Statistics .....4
PSY101	Psychology of Human Relations .....3
PSY201	General Psychology .....3

## Engineering

### (college transfer)

Oregon State University and Portland State University offer a Bachelor of Science or a Bachelor of Arts in Engineering. OSU offers degrees in Chemical, Civil, Electrical and Computer, Geological, Industrial and Manufacturing, Mechanical, Metallurgical, Mining, and Nuclear Engineering, as well as Construction Engineering Management and Engineering Physics. PSU offers degrees in Civil, Computer, Electrical, and Mechanical Engineering.

The program outlined below follows closely the pre-engineering program at Oregon State University, and is similar to requirements of other Bachelor of Arts and Bachelor of Science degree engineering programs. If you plan to apply for admission to the professional engineering program at Oregon State University,

you must meet pre-engineering course requirements. Requirements vary by engineering field.

Students planning to transfer to PSU should consult with a PSU engineering advisor for approval of Chemeketa engineering courses to transfer to Portland State University's program.

The two-year program outlined below is designed to meet prerequisite requirements for OSU. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
GE101 Engineering Orientation	2		
GE102 Engineering Computations		3	
GE103 Engineering Computations (not required for Electrical Engineering) or CS133F FORTRAN IV (not required for Mechanical or Civil Engineering)			3-4
GE115 Graphics (not required for Electrical Engineering)	(3)		
MTH251, 252 Calculus and Calculus with Analytic Geometry, MTH254 Vector Calculus I	5	5	4
CH201, 202, 203 Chemistry for Engineers (CH203 not required for Civil and Electrical Engineering)	4	4	(4)
Biological Science course*	4		
WR121 English Composition		3	
WR227 Technical Writing			3
HPE295 Health and Fitness for Life Arts and Letters/Humanities or Social Science electives*			3
		3	3
<b>Second Year</b>			
ENGR211 Statics	4	5	6
ENGR212 Dynamics		4	
ENGR213 Strength of Materials (not required for Electrical Engineers)			(4)
ENGR201, 202 Electrical Fundamentals I & II (ENGR202 not required for Civil Engineers)	4	(4)	
ENGR203 Electric Control Fundamentals (not required for Mechanical or Civil Engineering)			(4)
MTH256 Applied Differential Equations	4		
MTH253 Series Calculus and Linear Algebra		4	
MTH255 Vector Calculus II (only required for Electrical and Computer Science Engineering)			(4)
PH211, 212, 213 General Physics for Engineers and Scientists Arts and Letters/Humanities or Social Science electives or SP111 Fundamentals of Speech or SP112 Fundamentals of Persuasion (SP111 or	5	5	5

112 required for Chemical and Electrical Engineering)\*

0-6 0-6

\*To meet four-year college general education requirements.

## English

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in English are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	4	5	6
<b>Second Year</b>			
ENG201, 202, 203 Introduction to Shakespeare (required for EOSC and UO [may substitute 3 hours of additional literature from list in first year for 3 hours of the 9 Shakespeare at UO]; OSU requires any one course; PSU does not require any)	3	3	3
Second-year Foreign Language sequence (required at OSU and UO) or electives	4	4	4
Arts and Letters/Humanities electives* (See WOSC catalog for approved electives)	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Additional Social Science or Math/Science courses*	3-4	3-4	3-4
Additional Literature courses to meet major requirements or electives	3	3	

\*To meet four-year college general education requirements.

## Entomology

see Biology

## Farm Business Management

The Farm Business Management program assists farm operators with the financial aspects of farm management. You and your business partner may enroll in the program if you operate, lease, or manage a farm and have access to its financial records.

Instructors visit your farm and hold monthly class sessions on basic farm records and provide you with annual computer analyses and cost production summaries. They show you how to use analysis information for improving the management and organization of your farm.

*Tuition covers instruction, record book, farm visits, and a year-end computer farm business analysis. For information, call 399-5052 or the Chemeketa McMinnville Center, 472-9482.*

The program includes the following:

### 9801 Farm Management I

Includes a survey of business principles, farm management skills, family goals, and the use of farm records for the preparation of net worth statements, inventories and depreciation, farm income and expense budgeting, cash flow projections, credit planning, tax management, development of profit and loss statements, and closing of account books for analysis.

### 9802 Farm Management II

Covers monitoring business goals and cash flow, interpreting and analyzing farm records, measuring efficiency and business size, and determining crop, livestock, and labor costs and returns. Also discusses regulations affecting payroll, capital costs, and returns and the legal

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122, 123 English Composition (Chemeketa recommends taking all courses although some colleges do not require both WR122 and 123)	3	3	3
Literature sequence (courses in English and American Literature for EOSC; choose two sequences from ENG101, 102, 103 Introduction to English Literature, ENG107, 108, 109 World Literature, or ENG253, 254, 255 Introduction to American Literature for OSU; PSU recommends ENG101, 102, 103; SOSC requires two courses from ENG104, 105, 106 Introduction to literature, or ENG107, 108, 109, or ENG201, 202, 203; choose one sequence from ENG101, 102, 103, ENG107, 108, 109, ENG253, 254, 255 for UO)	3	3	3
First-year Foreign Language (required at EOSC, OSU, and UO; recommended at PSU; required for B.A. degree at SOSC and WOSC but not for B.S. degree)	4	4	4
Social Science courses (UO requires HST110, 111, 112 World History or HST201, 202, 203 History of the United States; EOSC recommends history)	3	3	3
Science or Math*	4	4	4

aspects of farm management contracts, rental agreements, and liabilities. Explores the use of computerized farm records for managing taxes, preparing profit and loss statements, and closing accounts for analysis, as well as the processes of decision making.

### 9803 Farm Management III

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

### 9804 Farm Management IV

Focuses on analyzing effects of farm reorganization, income tax laws, re-evaluating farm and family goals, treating farm real estate as an investment, calculating risks and uncertainties, and using programmed calculators in making decisions.

### 9805 Farm Management V

Emphasizes advanced estate planning, income tax management strategies, use of supplemental records, use of computers in farm management, advanced cash flow analysis, and the roles government agencies and programs play in farm management.

## Fire Protection Technology

The Fire Protection program offers career training in Fire Suppression and Fire Prevention-Insurance Risk Inspection. Both options include training and education for those wanting to enter the career field and for those already employed. Chemeketa has a well-equipped fire station and training center on the Salem campus. Course work is accredited by the Oregon Fire Standards and Accreditation Board.

The program has been designed to be completed in six terms, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

### Fire Suppression Option

Most firefighters work for public fire departments. Chemeketa's program includes a variety of courses in writing, mathematics, and

speech as well as technical fire protection. Each term, students take a Fire Incident Related Experience course which focuses on developing required skills, attitudes, and work habits. As a pre-service student, you will work a 24-hour duty shift weekly and respond to actual emergency incidents under the supervision of county fire district and city fire department officers.

This program has special admission requirements and enrollment limits. Applications are accepted every nine months. For additional information, contact the Admissions Office at 399-5006. The program operates on a continuous basis which includes summer term courses.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,011; class fees, \$133; equipment and supplies, \$400. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these 97 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
EMT051	Emergency Medical Technician Basic, Part 1 ...	4
FRP050	Introduction to Fire Protection.....	3
FRP051	Fire Incident Related Experience.....	3
FRP064	Hazardous Materials Operations.....	3
MTH095	Intermediate Algebra.....	4
	or	
MTH111	College Algebra (or higher).....	5
<b>Term 2</b>		
CS101	Intro. to Microcomputer App. (or higher).....	3
EMT052	Emergency Medical Technician Basic, Part 2 ...	4
FRP052	Fire Incident Related Experience.....	3
WR121	English Composition-Exposition (or higher)...	3
FRP055	Elementary Science for Firefighters.....	4
	or	
GS104	Physical Science.....	4
	or	
PH201	General Physics.....	4
	or	
CH121	College Chemistry.....	5
<b>Term 3</b>		
FRP053	Fire Incident Related Experience.....	3
FRP054	Water Supply Operations.....	3
FRP058	Fire Pump Construction and Operation.....	3
FRP069	Fire Department Leadership.....	3
FRP057	Fire Science.....	4
	or	
GS105	Physical Science.....	4
	or	
PH202	General Physics.....	4
	or	
CH122	College Chemistry.....	5
<b>Term 4</b>		
FRP060	Fundamentals of Fire Prevention.....	3
FRP061	Fire Incident Related Experience.....	3
HPE295	Health and Fitness for Life.....	3
	General education elective.....	3
	Approved electives*.....	4
<b>Term 5</b>		
FRP056	Fire Service Rescue Practices.....	4
FRP062	Fire Incident Related Experience.....	3
SP111	Fundamentals of Speech (or higher).....	3
	Approved electives*.....	6
<b>Term 6</b>		
FRP063	Fire Incident Related Experience.....	3
PSY101	Psychology of Human Relations (or higher)...	3
WR227	Technical Writing.....	3
	Approved electives*.....	6
<b>*Approved Electives (16 hours required):</b>		
BA255	Elements of Supervision.....	3
BLD050	Introduction to Uniform Building Code.....	3

BLD051	Building Code I.....	3
BLD052	Building Code II.....	3
EMT065	Emergency Medical Technician Intermediate, Part 1.....	5
EMT066	Emergency Medical Technician Intermediate, Part 2.....	5
EMT090	Emergency Medical Technician Paramedic, Part 1.....	8
EMT091	Emergency Medical Technician Paramedic, Part 1 Clinical.....	2
EMT092	Emergency Medical Technician Paramedic, Part 2.....	8
EMT093	Emergency Medical Technician Paramedic, Part 2 Clinical.....	3
EMT094	Emergency Medical Technician Paramedic, Part 3.....	4
EMT095	Emergency Medical Technician Paramedic, Part 3 Clinical.....	3
FRP059	Major Emergency Strategy and Tactics.....	3
FRP066	Building Construction for Fire Suppression.....	3
FRP070	Firefighting Tactics and Strategy.....	3
FRP071	Fire Protection Systems and Extinguishers.....	3
FRP072	Fire Codes and Ordinances.....	3
FRP073	Firefighters Law.....	2
FRP074	Fire Investigation.....	3
FRP075	Aircraft Crash/Fire Rescue.....	1
FRP077	Fire Service Instructor Training.....	2
FRP079	Wildland Urban Interface.....	2
FRP082	Evidence Photography for Fire and Arson Investigators.....	3
FRP085	Industrial Fire Protection.....	3
FRP086	Advanced Detection and Protection Systems.....	3
FRP087	Fire Insurance Fundamentals.....	3
HE262	Cardiopulmonary Resuscitation Instruction.....	2



### Fire Prevention-Insurance Risk Inspection Option

Graduates enrolled in this option may be hired by public fire departments, industrial businesses, and insurance companies as fire prevention specialists.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program such as working for a state or local fire prevention bureau. With the approval of the program chair, you may enroll in FRP280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$850; class fees, \$61. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 98 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CS101	Introduction to Microcomputer Applications.....	3
FRP050	Introduction to Fire Protection.....	3
FRP055	Elementary Science for Firefighters.....	4
	or	
GS104	Physical Science.....	4
	or	
PH201	General Physics.....	4
	or	
CH121	College Chemistry.....	5
FRP060	Fundamentals of Fire Prevention.....	3
	General education elective.....	3
<b>Term 2</b>		
FRP057	Fire Science.....	4
	or	
GS105	Physical Science.....	4
	or	
PH202	General Physics.....	4

	or	
CH122	College Chemistry.....	5
BLD060	Fire Protection for Buildings.....	3
FRP072	Fire Codes and Ordinances.....	3
MTH095	Intermediate Algebra.....	4
	or	
MTH111	College Algebra.....	5
WR121	English Composition-Exposition.....	3

<b>Term 3</b>		
FRP081	Fire Prevention Inspection.....	3
FRP071	Fire Protection Systems and Extinguishers.....	3
FRP280C	Cooperative Work Experience.....	3
PSY101	Psychology of Human Relations.....	3
SP111	Fundamentals of Speech.....	3
WR227	Technical Writing.....	3

<b>Term 4</b>		
BLD051	Building Codes I.....	3
FRP074	Fire Investigation.....	3
FRP080	Hazardous Materials for Inspectors.....	3
FRP085	Industrial Fire Protection.....	3
	Approved electives*.....	3

<b>Term 5</b>		
BLD052	Building Codes II.....	3
FRP067	Hazardous Materials Regulations.....	3
BLD081	Mechanical Codes I.....	3
FRP073	Firefighter's Law.....	2
FRP280C	Cooperative Work Experience.....	3

<b>Term 6</b>		
BLD067	Nonstructural Plan Review.....	3
FRP066	Advanced Detection and Protection Systems.....	3
FRP087	Fire Insurance Fundamentals.....	3
FRP054	Water Supply Operations.....	3
FRP280C	Cooperative Work Experience.....	3
	Approved electives*.....	3

<b>*Approved electives (six hours required):</b>		
FRP066	Building Construction for Fire Suppression.....	3
FRP069	Fire Department Leadership.....	3
FRP070	Fire Fighting Tactics and Strategy.....	3
FRP077	Fire Service Instructor Training.....	2
FRP079	Wildland Urban Interface.....	2
FRP082	Evidence Photography for Fire and Arson Investigators.....	3
FRP280C	Cooperative Work Experience.....	3
FRP064	Hazardous Materials Operations.....	3
DRF059	Print Reading.....	3

## Foreign Languages

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts degrees in foreign languages are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. OSU offers degrees in French, German, and Spanish; PSU offers degrees in French, German, Japanese, Russian, and Spanish; SOSC offers a Spanish degree; UO offers degrees in Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, and Spanish, and WOSC offers a degree in Spanish. Eastern Oregon State College offers a program to prepare students to be foreign language teachers.

If you complete your second year of course work in the language during your first year at Chemeketa, plan to transfer to a four-year institution for your sophomore year.

The program outlined below is designed so that you may meet requirements of these institutions in two years, if you attend full time. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121, WR122 and/or WR123 English Composition* (PSU recommends WR123)	3	3	(3)
Arts and Letters or Humanities courses*	3	3	3
Mathematics or Science courses*	4	4	4
Foreign Language sequence (French, German, Japanese, Russian, or Spanish)	4	4	4
Social Science*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
<b>Second Year</b>	4	5	6
Foreign language sequence (second year)	4	4	4
Social Science*	3	3	3
Arts and Letters or Humanities*	3	3	3

Science*	4	4	4
Electives (OSU requires a second-year foreign language sequence in addition to the one chosen for the major. SOSC requires computer literacy)	3	3	3

\*To meet four-year college general education requirements.

Note: Prior to graduation, OSU requires graduates to participate in an approved study program or work experience in the country where the language is spoken.

## Forest Resources Technology

The Forest Resources Technology curriculum includes instruction and field work in the basic knowledge and technical skills required of forest technicians. There are job opportunities in forest management, silviculture, fire prevention and control, and surveying. In addition, there is an increasing demand for technicians in the fields of fish and wildlife, forest recreation, and watershed management. Potential employers include government agencies such as the U. S. Forest Service, Bureau of Land Management, and the Oregon Department of Forestry.

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work relating to your program. With the approval of the program chair, you may enroll in FRT280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimate costs for students who complete the program are books, \$874; class fees, \$121; equipment and supplies, \$210. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 97 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I .....	3
	or	
WR121	English Composition-Exposition.....	3
DRF054	Drafting I .....	2
FRT051	Introduction to Natural Resources.....	3
FRT052	Leadership Seminar .....	1
FRT053	Computer Applications/Natural Resources .....	3
FRT055	Elementary Forest Surveying.....	3

MTH052 Intro. to Algebra and Geometry (or higher) .....3

**Term 2**

DRF072 Introduction to AutoCAD .....3  
 ES071 Work Place Safety Skills.....1  
 FRT052 Leadership Seminar.....1  
 FRT063 Photo Interpretation .....3  
 FRT065 Forest Resource Protection.....4  
 MTH053 Intro. to Trig. with Geometry (or higher) .....3

**Term 3**

AUM091 Power Systems .....4  
 FRT052 Leadership Seminar.....1  
 FRT061 Western Oregon Tree and Shrub ID .....3  
 FRT071A Forest Resources Inventory I-Lecture .....3  
 FRT071B Forest Resources Inventory I-Lab.....2  
 General education elective .....3

**Term 4**

CVL060A Plane Surveying I-Lecture .....3  
 CVL060B Plane Surveying I-Lab .....2  
 FRT052 Leadership Seminar .....1  
 FRT072A Forest Resources Inventory II-Lecture .....3  
 FRT072B Forest Resources Inventory II-Lab .....2  
 FRT081 Natural Resource Management I .....4  
 PH052 Practical Physics (or higher) .....4

**Term 5**

COM052 Communication Skills II.....3  
 or  
 SP111 Fundamentals of Speech.....3  
 FRT052 Leadership Seminar .....1  
 FRT075 Reports and Contracts .....3  
 FRT085 Electronic Surveying and Mapping.....5  
 General education electives .....3

**Term 6**

FRT052 Leadership Seminar .....1  
 FRT082 Natural Resource Management II .....4  
 FRT086 Methods of Supervision .....3  
 PSY101 Psychology of Human Relations (or higher).....3  
 General education electives .....3

**Forestry**

(college transfer)

Oregon State University offers degrees in Forest Engineering, Forest Management, Forest Products, and Forest Recreation Resources. Although these programs are designed as four-year programs of 192 credit hours, Forest Engineering is a 200 credit baccalaureate degree program. Students should plan to transfer after one year at Chemeketa.

The program suggested below is for students wishing to transfer to OSU for Forest Management or Forest Recreation Resources. Those students wishing to transfer into the Forest Products or Forest Engineering majors should check with a counselor or forestry advisor for appropriate courses.

This program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early con-

tact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
BI101, 102, 103 General Biology	4	4	4
CH121, 122, 123 College Chemistry (CH121 only for Forest Recreation Management)	5	5	5
EC201, 202 Introduction to Microeconomics and Macroeconomics (Forest Recreation Resources only)	3	3	
Mathematics (per placement test through MTH241 Elementary Calculus; Forest Management also requires MTH243, Probability and Statistics)	4-5	4-5	4-5
WR121 English Composition Writing and/or Speech*	3	3	3
HPE295 Health and Fitness for Life or elective		0-3	
Electives* (EC201, 202 for Forest Management; EC201 for Forest Resources)			0-3

\*To meet four-year college general education requirements.

**General Studies**

(college transfer)

Most Oregon state colleges and universities offer Bachelor of Arts and/or Bachelor of Science degrees in General Studies. The major is listed as General Studies at Portland State University, Liberal Studies at Eastern Oregon State College and Oregon State University, Arts and Letters (Humanities) at University of Oregon, and Interdisciplinary Studies at Southern Oregon State College and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.



	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Social Science courses* (HST110, 111, 112 World History for UO)	3	3	3
Mathematics per placement test* (through MTH111 for UO) or Science courses*	4-5	4-5	4-5
Arts and Letters/Humanities* (UO requires second year college level foreign language)	3-4	3-4	3-4
HPE295 Health and Fitness for Life* (3)	0-3	0-3	0-3
Electives (SOSC requires Computer Literacy)	4	5	6
<b>Second Year</b>			
Arts and Letters/Humanities* (ENG101, 102, 103 Introduction to English Literature recommended for UO)	3	3	3
Social Science courses*	3	3	3
Science sequence or electives*	4	4	4
Electives* or to meet Chemeketa's A.A. degree requirements. (CS101 Introduction to Microcomputer Applications and a speech course recommended, CS101 required for EOSC)	6	6	6

\*To meet four-year college general education requirements.

## Geography

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Geography are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. Eastern Oregon State College offers a degree in Geography and Regional Planning.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123 English Composition	3	3	(3)
GEOG105, 106, 107 (not all schools require all three courses)	3	3	3
Mathematics per placement test*, ** (MTH111 College Algebra or MTH211, 212, 213 Foundations of Elementary Mathematics required at EOSC; MTH111, and 112 Trigonometry for OSU and UO; MTH243 for PSU)	4-5	4-5	4-5
HPE295 Health and Fitness for Life* or elective		3	



Arts and Letters/Humanities electives* (Second-year foreign language required at UO)	3	3	3
Electives*	3		3-6
<b>Second Year</b>	4	5	6
Social Science electives* (EOSC requires EC201 Introduction to Microeconomics and PS201, 202 American Government)	3	3	3
Science electives* (EOSC requires G201, 202 Geology)	4	4	4
Arts and Letters/Humanities electives*	3	3	3
Electives (EOSC requires computer courses in computer systems including WordPerfect and dBase III; CS101 recommended for PSU; EOSC requires computer literacy. WOSC requires 3-4 credits in Computer Science and Social Science electives)	6	6	6

\*To meet four-year college general education requirements.

\*\*A three-term sequence in calculus is required for graduate work at UO.

## Geology

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Geology are Oregon State University, Portland State University, Southern Oregon State College, and University of Oregon.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, 122 and/or WR123 or 227	3	3	(3)
Arts and Letters/Humanities courses*	3	3	3
Mathematics per placement test (OSU requires Math through MTH252 Integral Calculus; PSU through MTH254 Vector Calculus I; SOSC through MTH252 Integral Calculus, MTH253 Series Calculus and Linear Algebra and MTH243 Probability and Statistics; UO through MTH253)	4-5	4-5	4-5
G201, 202, 203 Geology	4	4	4
Social Science*	3	3	3-6

<b>Second Year</b>	4	5	6
PH201, 202, 203 General Physics or PH211, 212, 213 General Physics for Engineers and Scientists (OSU recommends PH211, 212, 213)	4	4	4
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry also accepted at OSU and UO)	5	5	5
HPE295 Health and Fitness for Life* or elective		3	
Arts and Letters/Humanities or Social Science electives*	3		3
CS133F FORTRAN IV (recommended for UO; CS101 required for OSU)		(3)	
Electives (OSU requires four credits of a biological science)	3-4	3-4	3-4

\*To meet four-year college general education requirements.

Note: UO recommends that students obtain a graduate degree for most professional positions.

## Health, Health Education

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health and/or Health Education are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. EOSC's degree is in Physical Education and Health. Oregon State University offers options in Environmental Health and Safety, Health Promotion and Education, Health Care Administration, and Health Education; Portland State University offers options in Community Health Education and Health and Fitness Promotion. Southern Oregon State College offers a Health and Physical Science degree.

The program outlined below is designed so that you may meet requirements of these institutions in two years, if you attend full time. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Those students planning to teach health will need to complete a fifth year of post-baccalaureate work to meet teacher certification at all state-system colleges except WOSC. Please refer to the section on Elementary and Secondary Education in this catalog.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

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	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123 or 227 English Composition or WR227 Technical Writing* (WR227 for Environmental Health at OSU)	1	2	3
BI231, 232, 233 Anatomy and Physiology for EOSC, OSU and SOSC (BI101, 102, 103 General Biology prerequisite for several required courses at WOSC; approved science sequence for UO)	3	3	(3)
Mathematics per placement test* (MTH111 College Algebra or MTH211,212,213 Foundations for Elementary Mathematics for EOSC; Environmental Health and Health Care Administration at OSU require MTH241 Elementary Calculus and MTH243 Probability and Statistics; MTH111 for Health and Fitness at PSU)	4	4	4
HPE295 Health and Fitness for Life* (required for major at EOSC)	4	4	4
HE250 Personal Health (required at EOSC, SOSC, and WOSC)	3		
Arts and Letters/Humanities* Electives** (BI234 Microbiology for Community Health at PSU, for some options at OSU and for WOSC)	3	3	3
			3
<b>Second Year</b>	4	5	6
CH121, 122, 123 College Chemistry (not required at SOSC, UO and WOSC)	4	5	6
Social Science courses to meet four-year college general education or major requirements (Some OSU options require Economics sequence: EC201, 202, 203 and/or PSY201, 202 General Psychology and/or SOC204 General Sociology; PSY201 for Health and Fitness at OSU)	5	5	5
SP111 Fundamentals of Speech* (required for WOSC; SP112 and 114 for Health and Fitness at PSU)	6	6	6
Electives* to meet four-year college general education or major requirements (EOSC requires FN225 Nutrition; some OSU options require FN225 and CS101 Introduction to Microcomputer Applications; Environmental Health at OSU requires PH201 General Physics; PSU requires CS131 and HE209 or FN225 and recommend HE204 for some options; WOSC requires PSY201, 202)	6	3-6	6

\*To meet four-year college general education requirements.

\*\*See OSU catalog for Health Care Administration requirement.

## Health Care Support Services

The Health Care Support Services program offers short-term, one-year, and two-year training for students on a career ladder in health care delivery. You may enroll in a two-term program to become a claims analyst/medical biller or medical receptionist/clerk. One-year programs allow you to be trained as a medical office assistant or health information technician. The two-year programs include health

services management and medical transcription.

The short-term programs have been designed to be completed in two terms, the certificate programs in one year, and the degree programs in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

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### Short-Term Programs

#### Claims Analyst/Medical Biller

The Medical Claims Analyst program prepares people to work in a variety of insurance and health care organizations, including physicians' offices and hospital billing offices. This program provides training in claims examination and verification of ICD-9 and CPT coding, charges, procedures, diagnosis, and benefits; data entry of all required information; and claims interpretation and determination of appropriate action. The program also covers handling customer inquiries, researching and resolving problems, and explaining claims decisions to customers. Students must earn grades of C or better in all required courses to continue in the program.

*Estimated costs for students who complete the two-term program are tuition and fees, \$1,500 (\$750 per term), and books, \$300. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 33 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MED011	Health Care Skills .....	1
MED051	Medical Terminology I .....	3
MED054	Medical Office Procedures .....	4
MED061	Health Information Systems Procedures I .....	4
OAI21ABC	Keyboarding A,B,C .....	1 ea.
<b>Term 2</b>		
AH199D	Health Care Issues .....	3
FE205	Job Search Techniques .....	1
MED052	Medical Terminology II .....	3
MED065	Introduction to Medical Coding System .....	3
MED280E	Cooperative Work Experience .....	4
OA061A	Electronic Calculators A .....	1
OA210	Office Microcomputer Applications .....	3

#### Medical Receptionist/Clerk

The Medical Receptionist/Clerk program is designed for people who seek employment in a medical office, hospital, or other health-related facility. The program provides training in receiving patients, processing patient records, transcribing physician orders, scheduling appointments, and using the computer and related software in a variety of medical settings and functions. Students must earn grades of C

or better in all required courses to continue in the program.

*Estimated costs for students who complete the two-term program are tuition and fees, \$1,500 (\$750 per term), and books, \$300. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 31 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MED011	Health Care Skills .....	1
MED051	Medical Terminology I.....	3
MED054	Medical Office Procedures .....	4
MED061	Health Information Systems Procedures I.....	4
OA121ABC	Keyboarding A,B,C.....	1 ea.
<b>Term 2</b>		
FE205	Job Search Techniques .....	1
MED052	Medical Terminology II.....	3
MED062	Health Information Systems Procedures II .....	5
MED280D	Cooperative Work Experience .....	4
OA210	Office Microcomputer Applications.....	3

## One-Year Programs

In both of these options, you may earn a Certificate of Completion by successfully completing the required credit hours given below. You may then qualify for a job in these professions.

### Medical Office Assistant

The Medical Office Assistant program prepares you 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. Medical office assistants may be responsible for an office and for processing insurance matters, accounts, fees, and collections.

Your clinical duties may include assisting with examinations and treatments, taking medical histories, sterilizing instruments and equipment, and performing certain diagnostic tests and laboratory procedures in a physician's office.

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 required courses and complete all courses required in the first two terms to be eligible for practicum.

This curriculum is accredited by the Council on Allied Health Education of the American Medical Association in collaboration with the American Association of Medical Assistants, which certifies graduates by examination.

This program has special admission requirements and enrollment limits. For information, contact the Admissions Office at 399-5006.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$316; class fees, \$150; equipment and*

*supplies, \$150; physical examination, \$80; measles vaccination, \$10; Hepatitis B vaccination series, \$150. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 53 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
AH050	Health Care Delivery.....	1
BI071	Body Structure and Function I (or higher).....	3
ES071	Work Place Safety Skills .....	1
MED051	Medical Terminology I.....	3
MED055	Medical Law and Ethics.....	3
MED056	Medical Assisting Basic Procedures.....	4
OA121	Keyboarding.....	3
	or	
OA200	Introduction to Information Processing .....	3
	or	
OA201P	Word Processing Procedures I-WordPerfect .....	3
<b>Term 2</b>		
BI072	Body Structure and Function II (or higher).....	3
FE205	Job Search Techniques.....	1
MED052	Medical Terminology II.....	3
MED054	Medical Office Procedures.....	4
MED057	Medical Assisting, Advanced Procedures.....	5
MED060	Medical Transcription .....	3
<b>Term 3</b>		
MED064	Introduction to Medical Science.....	3
MED078	Medical Practice Seminar .....	1
MED079	Medical Office Practice.....	6
OA090	Bookkeeping .....	3
PSY101	Psychology of Human Relations.....	3
	or	
AH080	Crisis Intervention.....	3

### Health Information Technician

As a graduate of the Health Information Technician program, you may become a health information technician, or you may continue your education in medical record technology and administration programs at other schools.

As a health information technician, your duties may include maintaining and using a variety of health record indexes, special registries, storage, and retrieval systems; inputting and retrieving computerized health data; administering medical office duties; abstracting medical information for correspondence purposes; and assisting in compiling, analyzing, and preparing information needed by the health facility or external agencies. Graduates can also work in areas of coding and insurance billing in outpatient settings.

If you plan to transfer to Portland Community College to earn an associate degree as a medical records technician, you must meet college graduation requirements including general education, math, and English competencies as well as OA210 Office Microcomputer Applications or CS125SS Lotus I-Worksheets, or an equivalent. Consult a program advisor for help in planning general education classes.

Students in the program must earn grades of C or better in all required courses and complete all courses in the first two terms to be eligible for practicum.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 399-5006.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$350; class fees, \$70; equipment and supplies, \$50. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 53 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
AH050	Health Care Delivery.....	1
BI071	Body Structure and Functions I (or higher).....	3
MED011	Health Care Skills I.....	1
MED051	Medical Terminology I.....	3
MED055	Medical Law and Ethics.....	3
MED061	Health Information Systems Procedures I.....	4
OA121	Keyboarding*.....	3
	or	
OA200	Introduction to Information Processing.....	3
	or	
OA201P	Word Processing Procedures I-WordPerfect.....	3
<b>Term 2</b>		
BI072	Body Structure and Functions II (or higher).....	3
MED052	Medical Terminology II.....	3
MED060	Medical Transcription.....	3
MED062	Health Information Systems Procedures II.....	5
MED066	Medical Reimbursement Management.....	3
<b>Term 3</b>		
ES071	Work Place Safety Skills.....	1
FE205	Job Search Techniques.....	1
MED064	Introduction to Medical Science.....	3
MED065	Introduction to Medical Coding System.....	3
MED077	Health Information Systems Practice.....	6
MED078	Medical Practice Seminar.....	1
	General education elective.....	3

## Two-Year Programs

### Health Services Management

As a graduate of this two-year program, you will be prepared for a variety of middle-management jobs in the health care field. You may be employed by hospitals, state agencies, medical clinics, or other health care organizations.

The Health Services Management program curriculum focuses on four areas: applied science; the U.S. health care delivery system; accounting, business, and health management; and general education courses.

You may elect to continue your education in health care, public health care administration, health care education and promotion. The combination of technical/professional courses and lower division transfer courses give the student a wide variety of options.

You may earn an Associate of Applied Science degree by successfully completing the required 92 credit hours. If you have completed or are currently enrolled in a health occupations program and wish to apply credits toward the Health Services Management degree program, contact the advisor in this program.

*In addition to tuition, estimated costs for students who complete the entire second year are books, \$400; class fees, \$25; equipment and sup-*

*plies, \$75. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

Course	Title	Credit Hours
<b>Term 1</b>		
BI071	Body Structure and Function I (or higher).....	3
PSY101	Psychology of Human Relations (or higher)....	3
MED051	Medical Terminology I.....	3
MED055	Medical Law and Ethics.....	3
MED061	Health Information Systems I (recommended).....	4
	or	
MED056	Medical Assisting, Basic Procedures (recommended).....	4
	or	
CPL120	Credit for Prior Learning*.....	3
<b>Term 2</b>		
BI072	Body Structure and Functions II (or higher)....	3
MED052	Medical Terminology II.....	3
MED062	Health Information Systems Procedures II.....	5
MED066	Medical Reimbursement Management.....	3
SOC204	General Sociology (or higher).....	3
<b>Term 3</b>		
CS101	Intro. to Microcomputer App. (or higher).....	3
MED053	Medical Terminology III.....	3
MED064	Introduction to Medical Science.....	3
MTH105	Intro. to Contemporary Math (or higher).....	4
WR121	English Composition-Exposition.....	3
<b>Term 4</b>		
BA206	Business Management Principles (or higher)...	3
EC200	Introduction to Economics (or higher).....	3
MED221	Intro. to Health Services Organizations.....	3
MED222	Health Services Management I.....	3
WR227	Technical Writing.....	3
<b>Term 5</b>		
MED223	Health Services Management II.....	3
SP111	Fundamentals of Speech (or higher).....	3
OA200	Intro. to Information Processing (or higher)...	3
	Humanities electives.....	3
	Business elective**.....	3
<b>Term 6</b>		
MED083	Intro. to Health Care Monitoring Systems.....	3
MED085	Health Services Externship.....	6
MED086	Health Services Seminar.....	1
	Business elective**.....	3

\*See advisor.

\*\*Business electives:

BA221	Production and Operations Management.....	3
BA222*	Financial Management.....	3
BA223*	Principles of Marketing.....	3

\*Prerequisites must be met.

### Medical Transcriptionist

The two-year medical transcriptionist program prepares you for a career as a professional medical transcriptionist within an acute or non-acute health care environment. This program emphasizes the transcribing applications that will help you train for entry-level employment as a medical transcriptionist and provides the basic knowledge and skills required to transcribe medical dictation accurately and within timelines. Training stresses microcomputer word processing skills, as well as proofreading, transcription, and formatting.

Students must earn grades of C or better in all required courses and complete all other courses in the program in order to participate in the practicum.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 399-5006.

In addition to tuition, estimated costs for students who complete the entire program are books, \$850; class fee, \$140; equipment and supplies, \$150. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 95 credit hours.

Course	Title	Credit Hours
<b>Term 1</b>		
BI071	Body Structure and Function I .....	3
	or	
BI231	Human Anatomy and Physiology .....	4
MED051	Medical Terminology I .....	3
MED075A	Professional Development .....	1
OA084	Business English I .....	3
OA122	Keyboard Skillbuilding .....	3
OA200	Introduction to Information Processing .....	3
	or	
OA210	Office Microcomputer Applications .....	3
<b>Term 2</b>		
BI072	Body Structure and Function II .....	3
	or	
BI233	Human Anatomy and Physiology .....	4
MED052	Medical Terminology II .....	3
MED060	Medical Transcription .....	3
OA085	Business English II .....	3
OA201P	Word Processing Procedures I-WordPerfect .....	3
<b>Term 3</b>		
BA214	Business Communications .....	3
MED053	Medical Terminology III .....	3
MED064	Introduction to Medical Science .....	3
MED070	Advanced Transcription I .....	3
MED075B	Professional Development .....	1
OA099	Proofreading/Editing .....	3
<b>Term 4</b>		
MED055	Medical Law and Ethics .....	3
MED061	Health Information Systems Procedures I .....	4
MED071	Advanced Transcription II .....	3
OA116	Office Procedures .....	3
OA202P	Word Processing Procedures II-WordPerfect .....	3
<b>Term 5</b>		
FE205	Job Search Techniques .....	1
MED062	Health Information Systems Procedures II .....	5
MED072	Advanced Transcription III .....	3
MED075C	Professional Development .....	1
MTH061	Business Math (or higher) .....	3
SP114	Interpersonal Communication (or higher) .....	3
<b>Term 6</b>		
MED073	Medical Transcription Seminar .....	1
MED280	Cooperative Work Experience .....	12
	Humanities/fine arts elective .....	3
	or	
	Social science elective .....	3

## History

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in History are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will

need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123 English Composition	3	3	(3)
HST110, 111, 112 World History	3	3	3
Science courses*	4	4	4
Arts and Letters/Humanities courses* (EOSC recommends foreign language for those planning graduate work; UO requires foreign language for B.S. and B.A.)	3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective	3		
Electives (EOSC requires CS101 Introduction to Microcomputer Applications or OA201P WordPerfect; SOSOC requires CS101)		3	6
<b>Second Year</b>			
HST201, 202, 203 History of the United States	3	3	3
Mathematics per placement test*	4	4-5	
Arts and Letters/Humanities* (EOSC recommends second year foreign language for graduate work; UO requires second year foreign language)	3-4	3-4	3-4
Social Science courses other than history* (WOSC requires up to 8 additional Social Science credits)	3	3	3
Additional Arts and Letters/ Humanities or Social Sciences or electives*	3	3	6

\*To meet four-year college general education requirements.

## Home Economics

(college transfer)

Oregon State University offers a Bachelor of Science degree in Home Economics. Students major in Apparel, Interiors, Housing, and Merchandising or Human Development and Family Science; or Nutrition and Food Management. There are several options for each major. It is essential that you work closely with Chemeketa's home economics advisor or an advisor from OSU to assure that you choose appropriate courses.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will





need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

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	Term		
<b>First Year</b>	1	2	3
WR121 English Composition	3		
Writing or Speech electives* or **		3	3
Mathematics per placement (through MTH105 Introduction to Contemporary Mathematics or MTH111 College Algebra depending on major; some majors require higher math)	(4)	4-5	
HPE295 Health and Fitness for Life Biological and Physical Science**	4-5	4-5	3
Social Science**	6	3	6
Literature and Arts elective*	3		
<b>Second Year</b>	4	5	6

Additional required courses can be taken at Chemeketa during a second year. These vary considerably, depending upon option chosen. It is important to work carefully with a home economics advisor to meet OSU's general education (Baccalaureate core) requirements, major requirements, and option requirements.

\*To meet OSU general education requirements.

\*\*Check OSU catalog for requirements in your major and option.

## Hospitality Systems Management

The Hospitality Systems Management curriculum focuses on the four components of today's hospitality industry: food and beverage; travel and tourism; lodging, recreation, and leisure; and meeting planning and convention management. Upon graduation you may enter the hospitality industry working in such areas as travel and tourism organizations, hotel operations, restaurant management, convention and visitor associations, and recreation resource management.

You may be interested in our Cooperative Work Experience program, which allows you to earn three college credit hours to apply toward graduation requirements for work you do relating to your program. If you have a 2.0 grade point average or higher and the program chair approves, you may enroll in FS280 Cooperative Work Experience. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are*

books, \$400; class fees, \$40. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the 95 credit hours required.

Course	Title	Credit Hours
<b>Term 1</b>		
FS061	Sanitation and Safety .....	2
HRTM104	Introduction to Travel and Tourism Industry.....	3
HSM080	Introduction to the Hospitality Industry .....	3
MTH061	Business Math (or higher).....	3
OA084	Business English I.....	3
	or	
WR121	English Composition-Exposition (or higher) ...	3
PSY101	Psychology of Human Relations (or higher).....	3
<b>Term 2</b>		
BI060	Basic Science Principles (or higher).....	3
FS055	Dining Room Management.....	2
FS070	Purchasing and Store Control.....	2
HRTM105	Introduction to the Food Service Industry .....	3
HSM081	Meeting, Planning and Convention Management .....	3
MTH062	Applied Business Math (or higher).....	3
<b>Term 3</b>		
BA205	Human Relations in Business .....	3
HRTM106	Introduction to the Lodging Industry .....	3
HSM082	Marketing for the Hospitality Industry.....	3
SP111	Fundamentals of Speech (or higher).....	3
WR121	English Composition-Exposition (or higher) ...	3
<b>Term 4</b>		
FE205	Job Search Techniques .....	1
FS060	Basic Food and Nutrition.....	2
FS071	Beverage Management.....	2
FS072	Food Service Facilities Design.....	3
HSM086	Leisure in America.....	3
SP130	Business and Professional Speaking (or higher).....	3
<b>Term 5</b>		
BA051	Accounting Procedures I.....	4
	or	
BA211	Financial Accounting I.....	4
BA224	Personnel Management .....	3
HSM083	Hotel, Restaurant and Travel Law.....	3
HSM087	Foundations in Resource Recreation Management .....	3
TR054	Travel Agent Basics I .....	3
<b>Term 6</b>		
BA052	Accounting Procedures II.....	4
	or	
BA212	Financial Accounting II .....	4
CS101	Intro. to Microcomputer App. (or higher) .....	3
FS073	Hospitality Systems Management .....	3
HSM280C	Cooperative Work Experience .....	3
WR227	Technical Writing.....	3

## Hotel, Restaurant and Resort Management

(college transfer)

Southern Oregon State College offers a Bachelor's degree in Business Administration with a concentration in Hotel, Restaurant, and Resort Management. An agreement has been made with SOSOC that all 99 credits listed below will be accepted toward a degree. Students who complete all the courses outlined below will be awarded an Oregon Associate of Arts Transfer Degree with an emphasis in Hotel, Restaurant, and Resort Management.

The two-year program outlined below is designed to meet requirements at Southern Oregon State College. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling center or the Chemeketa advisor in your program. You should also make early contact with an advisor at the institutions to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on page 25.

Course	Title	Credit Hours
<b>Term 1</b>		
CS101	Introduction to Microcomputer Applications ..	3
ENG104	Introduction to Fiction .....	3
HSM080	Introduction to Hospitality Industry.....	3
WR121	English Composition-Exposition .....	3
	Science sequence .....	4
<b>Term 2</b>		
ENG105	Introduction to Dramatic Literature.....	3
HRTM105	Introduction to Food Service Industry .....	3
MTH111	College Algebra.....	5
WR122	English Composition-Logic and Style .....	3
	Science sequence .....	4
<b>Term 3</b>		
ENG106	Introduction to Poetry .....	3
HRTM106	Introduction to the Lodging Industry.....	3
MTH243	Probability and Statistics .....	4
WR123	English Composition-Research Writing .....	3
	or	
WR227	Technical Writing .....	3
	Science sequence .....	4
<b>Term 4</b>		
BA211	Financial Accounting .....	4
EC201	Introduction to Microeconomics .....	3
HRTM104	Introduction to Travel and Tourism .....	3
PSY201	General Psychology .....	3
WR241	Imaginative Writing .....	3
<b>Term 5</b>		
BA212	Financial Accounting II.....	4
BA214	Business Communications.....	3
EC202	Introduction to Macroeconomics.....	3
HPE295	Health and Fitness for Life .....	3
PSY202	General Psychology .....	3
	or	
	History elective .....	3
<b>Term 6</b>		
BA213	Managerial Accounting .....	4
EC203	Applications to Economics .....	3
PSY203	General Psychology.....	3
SP111	Fundamentals of Speech .....	3
	or	
SP112	Fundamentals of Persuasion .....	3

## Human Services

The Human Services program offers training for entry-level positions in human service agencies. It is a two-year program which com-

bines academic course work with five quarters of supervised field work. Students specialize in one of three options: Gerontology, Social Services, or Alcohol and Drug training.

This program has special admissions requirements and enrollment limits. For additional information, contact the Admissions Office at 399-5006.

By enrolling in the CPL120 Credit for Prior Learning Resume course, you may be able to earn credit for prior learning you acquired through your job, non-credit classes, community or volunteer service, and individual study.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

### Gerontology Option

The Gerontology Option trains people who plan to work in social service agencies, long-term care facilities, and other programs for older citizens. The program includes courses in interviewing, counseling, and intervention. Graduates may become caseworkers, activity directors, and social service workers.

*In addition to tuition, estimated costs for students who complete the entire Chemeketa program are books, \$645; class fees, \$31; equipment and supplies, \$75; measles vaccine, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

An Associate of Applied Science degree is awarded upon successful completion of the required 99 credit hours. Twenty-five credits of practicum are required, at least 15 of which must be in a gerontology placement.

Course	Title	Credit Hours
<b>Term 1</b>		
HS150	Personal Effectiveness for Human Service Workers .....	3
HS154	Community Resources .....	3
HS170	Introduction to Practicum .....	3
HS220	Aging and Society .....	3
HS260	Group Dynamics .....	3
WR121	English Composition-Exposition .....	3
<b>Term 2</b>		
HS152	Stress Management .....	1
HS221	Physical Aging .....	3
HS291G- HS296G	Practicum: Human Services .....	3-8
SP112	Fundamentals of Persuasion .....	3
SP130	Business and Professional Speaking .....	3
<b>Term 3</b>		
HS101	Alcohol Use, Misuse, and Addiction .....	3
HS155	Interviewing Theory and Techniques .....	3
HS222	Aging and Behavior .....	3
HS291G- HS296G	Practicum: Human Services .....	3-8
MTH052	Intro. to Algebra and Geometry (or higher) .....	3

<b>Term 4</b>	
CS101	Introduction Microcomputer Applications.....
HS265	Casework Interviewing.....
HS291G- HS296G	Practicum: Human Services.....
PSY201	General Psychology.....
SOC204	General Sociology.....

<b>Term 5</b>	
FE205	Job Search Techniques.....
HS291G- HS296G	Practicum: Human Services.....
PSY202	General Psychology.....
SOC205	General Sociology.....
	Gerontology elective*.....
	Humanities/fine arts elective .....
	or
	Science/applied science elective.....

<b>Term 6</b>	
HS267	Systems Strategies .....
HS291G- HS296G	Practicum: Human Services.....
PSY237	Growth and Development .....
SSC150	Ethnic Cultures of the Willamette Valley.....
	Gerontology elective*.....

<b>*Gerontology electives (6 hours total):</b>	
BA299D	Introduction to Elder Law .....
ES071	Work Place Safety Skills .....
HE261	Cardiopulmonary Resuscitation .....
HS165	Activity Director Training/Long Term Care .....
HS199A	Alzheimer's Disease-Coping and Caring.....
HS262	Misuse and Abuse of Alcohol and Drugs among Elderly.....
HS266	Case Management .....
MS259	Death and Dying .....
PE185DA	Beginning Low Impact-Aerobics .....
PE185DB	Intermediate Low Impact-Aerobics .....
PE185DC	Advanced Low Impact-Aerobics.....
PHL205	Biomedical Ethics .....

### Social Services Option

The Social Services option is for students interested in working for social welfare agencies. These may be serving people in such areas as aging, crisis counseling, corrections, health, recreation, retardation, and residential treatment.

The curriculum includes courses in observing, interviewing, and individual and group counseling. You may also gain a working knowledge of the various health, social, and welfare services in the community.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$671; class fees, \$14; equipment and supplies, \$90; measles vaccine, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

An Associate of Applied Science degree is awarded upon successful completion of the required 96 credit hours. Twenty-five credits of practicum are required, at least 15 of which must be in a social service placement.

Course	Title	Credit Hours
<b>Term 1</b>		
HS150	Personal Effectiveness for Human Service Workers.....	3
HS154	Community Resources .....	3
HS170	Introduction to Practicum .....	3
PSY201	General Psychology.....	3
WR121	English Composition-Exposition.....	3
<b>Term 2</b>		
HS152	Stress Management.....	1
HS260	Group Dynamics .....	3
HS291S- HS296S	Practicum: Human Services.....	3-8
PSY202	General Psychology.....	3
SP112	Fundamentals of Persuasion .....	3

SP130	or Business and Professional Speaking .....	3
<b>Term 3</b>		
HS101	Alcohol Use, Misuse, and Addiction .....	3
HS155	Interviewing Theory and Techniques .....	3
HS291S-	Practicum: Human Services .....	3-8
HS296S	Intro. to Algebra and Geometry (or higher) .....	3
MTH052	Growth and Development .....	3
PSY237		
<b>Term 4</b>		
CS101	Introduction to Microcomputer Applications .....	3
HS265	Casework Interviewing .....	3
HS291S-	Practicum: Human Services .....	3-8
HS296S	General Sociology .....	3
SOC204	Social services elective* .....	3
<b>Term 5</b>		
FE205	Job Search Techniques .....	1
HS266	Case Management .....	3
HS291S-	Practicum: Human Services .....	3-8
HS296S	General Sociology .....	3
SOC205	Social services elective* .....	3
<b>Term 6</b>		
HS267	Systems Strategies .....	3
HS291S-	Practicum: Human Services .....	3-8
HS296S	Ethnic Cultures of Willamette Valley .....	3
SSC150	Social services elective* .....	3
	Humanities/fine arts elective .....	3
	or Science/applied science elective .....	3

\*Social services electives (9 hours total): Any class in human services, psychology numbered 200 or above, anthropology, sociology, criminal justice, early childhood education, instructional assistant, sign language, independent studies, credit for prior learning, or history. A maximum of three credits may be used from HD220 or HD221.

## Alcohol and Drug Option

The Alcohol and Drug option is for students interested in working for public or private agencies offering treatment to chemically dependent people and their families. The agencies provide inpatient and outpatient programs.

The curriculum includes courses in alcohol and drug information, family dynamics, youth addiction, criminality, and individual and group skills in counseling chemically dependent clients.

*In addition to tuition, estimated costs for students who complete the entire Chemeketa program are books, \$597; class fees, \$14; equipment and supplies, \$90; measles vaccine, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

An Associate of Applied Science degree is awarded upon successful completion of the required 99 credit hours. Twenty-five credits of practicum are required, at least 15 of which must be in an alcohol and drug placement.

Course	Title	Credit Hours
<b>Term 1</b>		
HS101	Alcohol Use, Misuse, and Addiction .....	3
HS150	Personal Effectiveness .....	3
	for Human Service Workers .....	3
HS154	Community Resources .....	3
HS170	Introduction to Practicum .....	3
WR121	English Composition-Exposition .....	3
<b>Term 2</b>		
HS102	Drug Use, Misuse and Addiction .....	3
HS152	Stress Management .....	1
HS260	Group Dynamics .....	3

HS291A-	Practicum: Human Services.....	3-8
HS296A	Fundamentals of Persuasion .....	3
SP112	or Business and Professional Speaking.....	3
<b>Term 3</b>		
HS201	Family Alcoholism.....	3
HS155	Interviewing Theory and Techniques.....	3
HS291A-	Practicum: Human Services.....	3-8
HS296A	Intro. to Algebra and Geometry (or higher).....	3
MTH052	General Psychology.....	3
PSY201		
<b>Term 4</b>		
HS202	Counseling the Chemically Dependent Client I .....	3
HS291A-	Practicum: Human Services.....	3-8
HS296A	General Sociology.....	3
SOC204	Introduction to Microcomputer Applications .....	3
CS101	Alcohol and drug elective*.....	3
<b>Term 5</b>		
FE205	Job Search Techniques .....	1
HS203	Counseling the Chemically Dependent Client II .....	3
HS291A-	Practicum: Human Services.....	3-8
HS296A	General Psychology.....	3
PSY202	General Sociology.....	3
SOC205	Humanities/fine arts elective .....	3
	or Science/applied science elective.....	3
<b>Term 6</b>		
HS204	Counseling the Chemically Dependent Client III.....	3
HS267	Systems Strategies .....	3
HS2291A-	Practicum: Human Services.....	3-8
HS296A	Ethnic Cultures of the Willamette Valley.....	3
SSC150	Growth and Development .....	3
PSY237		

### \*Alcohol and drug electives

HS140	Handling the Violent Client .....	1
HS153	Introduction to Residential Youth Care .....	3
HS160	Addictive Behaviors.....	3
HS161	Dysfunctional Relationships.....	3
HS162	Relapse Prevention .....	3
HS199I	Women in Treatment .....	2
HS199J	Dual Diagnosis Clients in Treatment.....	1
HS205	Youth Addiction .....	3
HS206	The Addicted Criminal.....	3
HS207	Adult Children of Alcoholics/Addicts.....	1
HS208	Alcohol, Drugs & Sexuality.....	1
HS230	Physical, Sexual and Emotional Abuse.....	3
HS231	Treatment of Sexual Abuse Victims and Offenders .....	3
HS262	Misuse and Abuse of Alcohol and Drugs Among the Elderly.....	1
MS259	Death and Dying .....	3

## Industrial Technology and Apprenticeship

### Industrial Technology

Chemeketa grants an Associate of Applied Science degree in industrial technology. Journeymen and women may earn credit for on-the-job training and related instruction. To earn the degree, you must meet the following requirements:

1. Have achieved journeyman status in a skilled occupation.
2. Complete a minimum of 30 credit hours or equivalent at Chemeketa Community College.
3. Complete general education requirements for an Associate of Applied Science degree. (See Page 29 of this catalog.)

4. Compile a total of 90 credit hours. You may be awarded up to 22 credit hours for journeyman status, 47 credit hours for trade-related training, and seven credit hours of Cooperative Work Experience.

*In addition to tuition, estimated costs for students who complete the entire program will vary. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

### 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 people working at particular trades who need to improve their knowledge of trade theory. Students generally are apprentices registered with the Oregon Bureau of Labor, journeymen who wish to upgrade their skills and knowledge, pre-apprenticeship students, and others as approved by local committees.

Chemeketa has apprenticeship classes for plumbers, industrial workers, electricians, sheet metal workers, machinists, welders, bakers, and other trades, as required by local committees.



## Instructional Assistant

The Instructional Assistant program offers the training necessary to become a teacher's assistant in public schools and institutions.

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.

First-year students take a core of required courses, including practicum. Classes are in five general areas: instruction, non-instructional support, human relations, communication, and computer-assisted education.

Second-year students specialize in working with children at certain grade levels, with adults, with bilingual and multicultural children, or in assisting students who are in special education or vocational-technical programs.

The program also offers ED209B Practicum, Introductory Observation and Experience, a one-term orientation for students exploring education as a career.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to com-

plete the program, please meet with the program chair.

### Certificate of Completion

*In addition to tuition, estimated costs for students who complete the one-year program are books, \$360; class fees, \$10; measles vaccine, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 48 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
ED101	Introduction to Observation and Experience ..	3
ED110	Psychology of Learning .....	3
ED251	Overview of Students with Special Needs.....	3
ED258	Multicultural Education .....	3
ES071	Work Place Safety Skills .....	1
COM051	Communication Skills I .....	3
	or	
WR115	Introduction to Composition (or higher) .....	3
	or	
OA084	Business English I .....	3
<b>Term 2</b>		
ED102	Practicum .....	3
ED123	Classroom Techniques for Reading and Language.....	3
ED131	Teaching Strategies .....	3
ED133	Instructional Media and Materials.....	1
ED217	Comprehensive Classroom Management .....	3
SP111	Fundamentals of Speech .....	3
	or	
SP114	Interpersonal Communication .....	3
<b>Term 3</b>		
ED103	Practicum .....	6
ED124	Classroom Techniques in Mathematics and Science.....	3
MTH051	Basic Math (or higher).....	3
FE205	Job Search Techniques.....	1
CS101	Intro. to Microcomputer App. (or higher).....	3

### Associate of Applied Science Degree

*In addition to tuition, estimated costs for students who complete the one-year program are books, \$360; class fees, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree after you successfully complete 96 credit hours. These include the 48 credit hours listed under the one year Certificate of Completion option, 39 credits hours of required core courses, and nine additional hours in the option you select. Before you select elective courses consult with the program chair.

#### Required core courses for all options:

Course	Title	Credit Hours
ED212	Schools and Society .....	3
ED221	Specialized Practicum .....	6
ED222	Advanced Specialized Practicum.....	6
	(Must be in specialty option area)	
ED235	Instructional Technology .....	3
MTH052	Introduction to Algebra and Geometry (or higher) .....	3
PSY237	Growth and Development .....	3
	Humanities/fine arts elective .....	3
	or	
	Science/applied science elective.....	3
	Communications, HPE295, Humanities/fine arts, Math, PE, Science or Social Science elective numbered 50 or higher .....	3
	Approved electives* .....	9

**\*Approved electives:**

- Computer science course above CS101.....3
- Any course with an ECE, ED, HDFS prefix, or consult with an instructional assistant advisor.
- Foreign language 101 course (or higher) .....4

- MTH211 Foundations of Elementary Mathematics ... 3 ea.
- MTH212 Critical Thinking and Reading (or higher) .....3
- MTH213 Ethnic Cultures of the Willamette Valley .....3
- RD120 English Composition-Logic and Style (or higher).....3
- SSC150
- WR122

Select nine credit hours in the option you have chosen.

**Kindergarten/Primary**

- ECE251 Environments for Young Children.....3
- ECE152 Creative Activities .....3
- ECE154 Children's Literature and Literacy .....3
- ECE153 Music for Young Children .....3
- ED179 Literature for Preschool Children.....3
- ED208 Tutoring Techniques for Elementary Physical Education.....3
- HDFS225 Prenatal and Infant Development.....3
- HDFS247 Preschool Child Development .....3
- HDFS248 Learning Experiences for Young Children .....4
- HDFS250 Developmental Kindergarten .....3
- MTH211 Foundations of Elementary Mathematics .....3
- MTH212 Foundations of Elementary Mathematics .....3
- MTH213 Foundations of Elementary Mathematics.....3

**Upper Elementary/Middle School**

- ED208 Tutoring Techniques for Elementary Physical Education.....3
- MTH211 Foundations of Elementary Mathematics .....3
- MTH212 Foundations of Elementary Mathematics .....3
- MTH213 Foundations of Elementary Mathematics .....3
- RD120 Critical Thinking and Reading .....3
- WR121 English Composition-Exposition .....3
- WR122 English Composition-Logic and Style.....3
- WR123 English Composition-Research Writing .....3
- WR241 Imaginative Writing.....3
- WR242 Imaginative Writing.....3
- WR243 Imaginative Writing.....3
- Computer Science (numbered 100 and above).....3

**Senior High School/Adult**

- ED125 Techniques for Tutoring Adults.....3
- RD115 Accelerated Learning Tactics I .....3
- RD116 Accelerated Learning Tactics II .....3
- RD120 Critical Thinking and Reading .....3
- WR121 English Composition-Exposition .....3
- WR122 English Composition-Logic and Style.....3
- WR123 English Composition-Research Writing .....3
- WR241 Imaginative Writing.....3
- WR242 Imaginative Writing.....3
- WR243 Imaginative Writing.....3
- Computer Science (numbered 100 and above).....3
- Humanities course .....3
- Social Science course.....3

**Special Education**

- ED253 Current Issues in Special Education .....3
- ED268 Educating the Mildly and Severely Handicapped.....3
- ED269 Classroom Management of the Learning-Disabled Student.....3

**Vocational/Technical**

See program advisor.

**Multicultural/English as a Second Language**

- ED257 Second Language Teaching Techniques.....3
- ED259 Bilingual Methodology .....3
- SP115 Intercultural Communication.....3
- SSC150 Ethnic Cultures of the Willamette Valley .....3

**Journalism**

(college transfer)

The University of Oregon offers Bachelor of Arts and Bachelor of Science degrees in Journalism. Southern Oregon State College offers a Bachelor of Arts and Bachelor of Science in Communication: Journalism.

The program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

Students planning to transfer to UO should consult the UO catalog for journalism major admission requirements and to determine when to transfer. (This usually is after one year at another college.)

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition*	3	3	
Humanities courses* (ENG104, 105, 106 Introduction to Fiction, Dramatic Literature, and Poetry or ENG107, 108, 109 World Literature recommended by SOSC and UO)	3	3	3
HST110, 111, 112 World History or HST201, 202, 203 History of the United States (required at UO; recommended at SOSC)	3	3	3
Mathematics per placement test* J224 Introduction to Journalism	(4)	5	(4)
Electives (Chemeketa recommends J225 Advertising/Public Relations and J226 Layout/Production)	3	3	6
Second Year	4	5	6
Social Science or other elective courses* (SOSC recommends one year of political science)	3-4	3-4	3-4
Humanities (SOSC recommends two years of foreign language; UO requires a total of six literature courses)	3	3	3
Economics sequence: EC201, 202, 203 (recommended at SOSC; required at UO)	3	3	3
Science courses*	3	3	3
Electives (Check SOSC for electives for each option)	3	3	3

\*To meet four-year college general education requirements.



## Management

As a graduate of Chemeketa's Management program, you may become a management trainee or other entry-level employee of a small business or large firm.

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the CWE instructor/coordinator, you may enroll in BA280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,148; class fees, \$36; equipment and supplies, \$65. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 97 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA101	Business Environment .....	4
BA211	Financial Accounting I* .....	4
OA085	Business English II.....	3
	or	
WR122	English Composition-Logic and Style.....	3
OA121	Keyboarding .....	3
	or	
OA122	Keyboard Skillbuilding.....	3
	or	
OA123	Formatting.....	3
	Social Science elective*** .....	3
<b>Term 2</b>		
BA212	Financial Accounting II* .....	4
BA214	Business Communications** .....	3
CS101	Intro. to Microcomputer App. (or higher) .....	3
MTH095	Intermediate Algebra** (or higher).....	4
<b>Term 3</b>		
BA205	Human Relations in Business .....	3
BA206	Business Management Principles .....	3
BA213	Managerial Accounting .....	4
BA238	Sales and Persuasion .....	3
CS125SS	LOTUS I-Worksheets .....	4
<b>Term 4</b>		
BA215	Cost Accounting .....	3
BA223	Principles of Marketing.....	3
BA226	Business Law I .....	3
EC200	Introduction to Economics (or higher).....	3
FE205	Job Search Techniques .....	1
	Humanities/fine arts elective.....	3

<b>Term 5</b>		
BA222	Financial Management.....	3
BA227	Business Law II.....	3
BA277	Business Ethics.....	3
	or	
WR227	Technical Writing .....	3
SP111	Fundamentals of Speech .....	3
	Business elective**** .....	3
	Business elective* (BA280 Cooperative Work Experience recommended).....	3

<b>Term 6</b>		
BA224	Personnel Management .....	3
BA299	Business Policy.....	3
	Business elective**** .....	3
	Business elective**** (BA280 Cooperative Work Experience recommended).....	6

\*BA051, BA052, and BA053 may be substituted for BA211 and BA212. BA211 or BA051 requires concurrent enrollment in MTH061 or MTH095 or higher math placement.

\*\*Placement in math and English determined by testing. MTH062 may be substituted for MTH095. College transfer classes may be substituted.

\*\*\*Social science electives: Choose from PSY100, 101, 201, 202, 203; SOC204, 205, 206; HST110, 111, 112, 201, 202, 203.

\*\*\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE except OA084, BA051, BA052, and BA053.

## Manufacturing Engineering Technologies

The Manufacturing Engineering Technologies program offers training in manufacturing skills. Employees may become involved in research and development; inspection and quality control; planning, managing, and producing prototypes; performing routine manufacturing; or completing simple to complex repairs. You may enroll in the three-term Manufacturing Operations option or the six-term Manufacturing Technologies option. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for on-the-job work you do relating to your program. With the approval of the program chair, you may enroll in MFG280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

## Manufacturing Operations Option

The Manufacturing Operations option provides training in the basic setup and operation of machine tools (both manual and computer controlled) such as lathes, drills, mills, saws, and grinders; bench and layout work; inspection and quality control; and print reading and sketching relating to manufacturing careers. As a graduate, you may qualify to work as a machine tool operator, an entry-level machinist, a quality control inspector, or in a variety of manufacturing related jobs.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$487; class fees, \$152; equipment and supplies, \$200. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

A Certificate of Completion is awarded upon successful completion of these 52 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MFG063	Print Reading.....	4
MFG064	Manufacturing Fundamentals .....	5
MFG068	Manufacturing Measuring and Quality Control .....	3
MFG092	Introduction to Computers in Manufacturing .....	3
MTH052	Intro. to Algebra and Geometry (or higher) .....	3
<b>Term 2</b>		
MFG065	Tool and Work Holding Methods.....	5
MFG069	QC Applications/CMM Operations.....	4
MFG093	CNC Machine Tool Operations .....	5
MTH053	Intro. to Trig. with Geometry (or higher) .....	3
<b>Term 3</b>		
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition .....	3
MFG066	Material Cutting/Removal Methods .....	5
MFG070	Total Quality Manufacturing .....	4
MFG076	Manufacturing Materials and Cutting Tools.....	5

## Manufacturing Technologies Option

The Manufacturing Technologies option offers training in the knowledge and skills used by employees in manufacturing and related occupations. The curriculum includes courses in manufacturing materials; print reading; sketching, layout, and measuring practices; inspection and coordinate measuring machine practices; and in written and verbal communication skills.

In this option, you set up and operate manual and computer controlled machine tools including drill presses, engine lathes, milling machines, grinders, and saws. You work from prints or sketches to produce mechanical items in a variety of materials. This requires planning, layout, and fabricating using jigs, fixtures, and patterns; work holding; cutting tool selection; and applications.

As a graduate, you may qualify for positions in manufacturing including supervisor, technical report writer, estimator, purchaser, planner, or quality control technician, or in the areas of maintenance and repair, production, specialty

work, machine setup and operation, CNC programmer, or bench and layout work.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$701; class fees, \$324; equipment and supplies, \$200. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these 98 required credit hours:

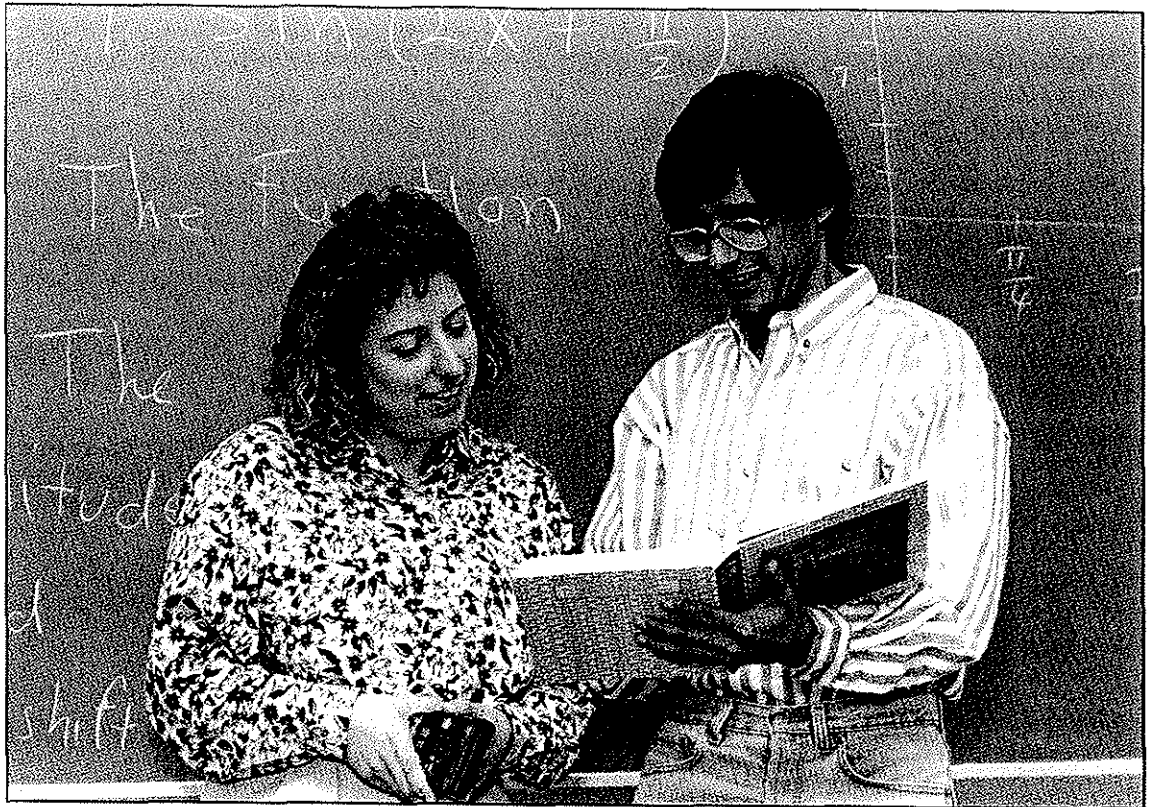
Course	Title	Credit Hours
<b>Term 1</b>		
MFG063	Print Reading.....	4
MFG064	Manufacturing Fundamentals .....	5
MFG068	Manufacturing Measuring and Quality Control .....	3
MFG092	Introduction to Computers in Manufacturing .....	3
MTH052	Intro. to Algebra and Geometry (or higher).....	3
<b>Term 2</b>		
MFG065	Tool and Work Holding Methods.....	5
MFG069	QC Applications/CMM Operations .....	5
MFG093	CNC Machine Tool Operations .....	4
MTH053	Intro. to Trig. with Geometry (or higher) .....	3
<b>Term 3</b>		
COM051	Communication Skills I .....	3
	or	
WR121	English Composition-Exposition.....	3
MFG066	Material Cutting/Removal Methods .....	5
MFG070	Total Quality Manufacturing .....	4
MFG076	Manufacturing Materials and Cutting Tools.....	5
<b>Term 4</b>		
MFG071	CAD for CAM .....	3
MFG081	Manufacturing Processing Planning.....	5
MFG094	Manufacturing Programming .....	5
PH052	Practical Physics (or higher).....	4
<b>Term 5</b>		
MFG079	Industrial Systems .....	3
MFG082	Manufacturing Production/Assembly Methods .....	5
MFG095	CAM Applications .....	5
	Social Science elective .....	3
<b>Term 6</b>		
COM053	Communications Skills III.....	3
	or	
WR227	Technical Writing .....	3
MFG083	Manufacturing Production Control .....	5
MFG096	CAD/CAM Integrations.....	5

## Mathematics

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Mathematics are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.



As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

Linear Algebra (OSU also requires MTH256; PSU requires MTH256 instead of MTH255 Differential Equations; SOSC requires MTH256)	4	(4)	(4)
Science courses* (OSU requires either PH211, 212, 213 or one-year approved courses in the physical or biological sciences)	4	4	4
Social Science courses*	3	3	3
Arts and Letters/Humanities or Social Science electives*	3	3	3
Electives	3	3-6	3-6

\*To meet four-year college general education requirements.

\*\*PSU strongly advises students planning to do graduate work in mathematics to complete two years of study in German, French or Russian; UO requires second-year level of one of these languages for admission to the Ph.D. program.

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122 and/or 123, English Composition and/or WR227 Technical Writing*	3	3	(3)
Mathematics per placement test* MTH251, 252, 254 Calculus required (EOSC, PSU, and SOSC require MTH253 instead of MTH254; WOSC requires both MTH253 and 254) Those students beginning at a lower level will need more than four years to complete B.A. or B.S. requirements)	4-5	4-5	4-5
Arts and Letters/Humanities courses** (UO requires two second-year level languages from German, French, or Russian for admission to Ph.D. program)	3-4	3-4	3-4
Computer Science courses or electives (approved computer science electives for EOSC; CS161 Computer Science I-C Language or other higher level language for OSU; CS161 for PSU; CS133F FORTRAN IV for SOSC; CS161 and 162 Computer Science II for WOSC)	4	4	4
HPE295 Health and Fitness for Life* or elective			3
<b>Second Year</b>	4	5	6
Mathematics through MTH255 Vector Calculus II and MTH253 Series and			

## Nursing

Chemeketa offers a career ladder program for women and men who want to become licensed practical nurses or registered nurses.

Chemeketa staff members are also ready to advise and help you plan your pre-nursing program if you plan to transfer to a school of nursing that grants baccalaureate degrees.

Chemeketa offers general education courses that apply to a Bachelor of Science program. See information under Nursing (college transfer).

There are some courses that must be completed with a grade of C or better prior to applying to the Nursing program. Specific entry requirements are outlined in a pre-nursing packet that you may obtain from the Advising and Counseling Office. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you con-

tact the Admissions Office at 399-5006, or the Advising and Counseling Office at 399-5120 for details if you are considering the Nursing program. Many students spend one or more years in a pre-nursing program to prepare for applying to the Nursing program.

The nursing curriculum is designed to prepare you to apply for certification or licensure at the following levels:

### Nursing Assistant

As a nursing assistant, you may work under the direction and supervision of a registered nurse or licensed practical nurse. You may assist licensed nurses in meeting normal patient needs for safety, comfort, hygiene, activity, rest, sleep, nutrition, elimination and fluid balances, oxygen, and emotional support.

After successfully completing the required first-term nursing courses, you are eligible to apply to the Oregon State Board of Nursing for a certificate as a nursing assistant.

### Level I—Licensed Practical Nurse

A licensed practical nurse is a member of a nursing or health care team and gives care to patients of all ages with stable conditions in simple nursing situations. As a licensed practical nurse, you assist registered nurses in complex nursing situations.

*In addition to tuition, estimated costs for students who complete the entire Level I program are books, \$650; class fees, \$90; equipment and supplies, \$330; testing fee, \$15. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

After successfully completing the required 49 credits of the first year of the Nursing program, you will be awarded a Certificate of Completion. You must earn grades of C or better in all required courses. Completion of this level qualifies you to apply to the Oregon State Board of Nursing to take the exam to become a licensed practical nurse.

Course	Title	Credit Hours
<b>Term 1</b>		
NUR106	Nursing.....	9
BI232	Human Anatomy and Physiology.....	4
PSY201	General Psychology.....	3
<b>Term 2</b>		
NUR108	Nursing.....	9
BI233	Human Anatomy and Physiology.....	4
PSY237	Growth and Development.....	3
<b>Term 3</b>		
NUR109	Nursing.....	10
BI234	Medical Microbiology.....	4
WR121	English Composition-Exposition.....	3

### Level II—Registered Nurse

A registered nurse, or RN, applies knowledge drawn from a broad, in-depth education in the social and physical sciences. RNs assess, plan, order, give, delegate, teach, and supervise care

that promotes a patient's optimum health and independence.

An RN guides other team members with less education and/or experience, evaluates 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.

*In addition to tuition, estimated costs for students in Level II are books, \$200; class fees, \$45; equipment and supplies, \$120; testing fee, \$30. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing 92 required credit hours of the two-year Nursing program (43 credits at Level II after the 49 credits of Level I). You must earn grades of C or better in all required courses. An A.A.S. degree in Nursing qualifies you to apply to the Oregon State Board of Nursing to take the exam to become a registered nurse.

Course	Title	Credit Hours
<b>Term 4</b>		
NUR206	Nursing.....	10
CS101	Introduction to Microcomputer Applications*	3
<b>Term 5</b>		
NUR208	Nursing.....	10
	Social science elective.....	3
	Sociology elective.....	3
<b>Term 6</b>		
NUR209	Nursing.....	8
	Humanities/fine arts/communication elective	3
	General education elective.....	3

\*May substitute a higher number CS course with CS101 as a prerequisite.

### Specialized and Re-entry Courses

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 nursing. Re-entry courses are offered fall term only; for more information, contact the nursing office.

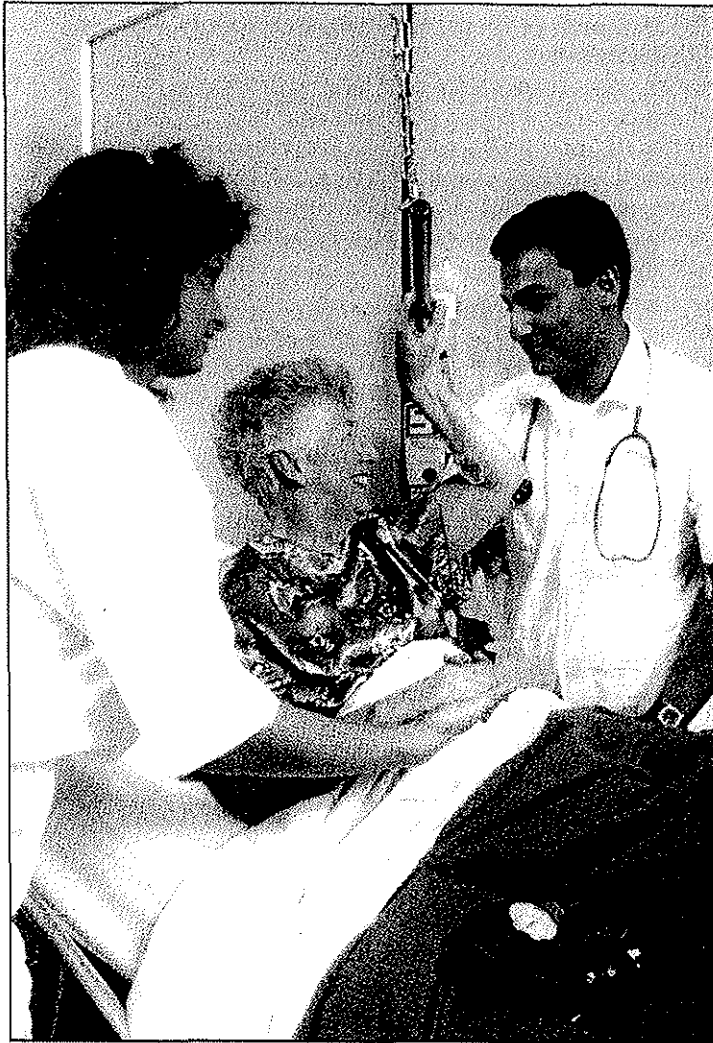
You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the department director, you may enroll in NUR280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.



## Nursing

(college transfer)

Oregon Health Sciences University offers Bachelor of Science degrees in Nursing at Eastern Oregon State College, Oregon Institute of



Technology, Southern Oregon State College, and at OHSU's School of Nursing in Portland. The curriculum is a two-year, upper division major.

Admission to the nursing programs is competitive. Students must complete 91 credits of general education before being admitted to the nursing major. A 2.5 GPA is required. Deadline for admission to the programs are February 15, 1994. It is important to check with OHSU in September for admission requirements and to obtain admissions materials early as requirements may change.

OHSU provides an opportunity for licensed practical nurses and registered nurses, including those completing Chemeketa's Licensed Practical Nurse and Registered Nurse program, to complete requirements for a baccalaureate degree. Contact OHSU for transfer requirements.

The program outline below indicates courses required for admission to the nursing major and is designed to meet prerequisite requirements. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your

skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

	Term		
	1	2	3
<b>First Year</b>			
CH104,105,106 Chemistry for Allied Health or CH121, 122, 123 General Chemistry	4-5	4-5	4-5
MTH111 College Algebra (begin math per placement test)	5		
MTH243 Probability and Statistics	4		
FN225 Nutrition			4
WR121, 122, 123 English Composition Humanities elective (Foreign Language, SP115 Intercultural Communication or ED201, 202, 204 American Sign Language strongly recommended)	3	3	3
	3-4	3-4	3-4
<b>Second Year</b>	4	5	6
BI231, 232, 233 Anatomy and Physiology	4	4	4
BI234 Microbiology		4	
PHL201 or 203 Problems of Philosophy (may substitute another Humanities course)	3		
SOC204 General Sociology	3		
PSY201 General Psychology	3		
PSY237 Growth and Development Literature elective		3	3
SP114 Interpersonal Communications	3		
SP113 Small Group Communication			3
ANTH103 Cultural Anthropology			3
Social Science electives (EC200 or 201 Introduction to Economics or Microeconomics; Political Science elective or Business Science preferred)			3
Electives (to total 91 transferable credit hours)	3	3	

## Occupational Skills Training

The Occupational Skills Training Program offers you the opportunity to earn college credit for work you do at an approved training site. When you enroll in this short-term program (two to four terms), you will receive instruction based on a curriculum personalized for your chosen occupation and your individual abilities, skills, and interests. Currently, this program is restricted to agency-sponsored clients. Sponsoring agencies include state Worker's Compensation insurers, Vocational Rehabilitation, and Adult and Family Services. The program may be available through other agencies as well.

A variety of occupational areas may be appropriate for the Occupational Skills Training program. Related classroom instruction may be included in the program if deemed part of the approved training plan. A suitable training site

and curriculum will be determined after you have met with the Skills Training Coordinator at Chemeketa. The program is offered on an open entry/open exit basis so you may start the program any time during the year.

*In addition to tuition of \$450 per term (\$1,800 for four terms), estimated costs are books and supplies for related classes, \$150 per term (\$600 for students who complete the entire program). Contact the Financial Aid Office to find out if you qualify for help with these costs, or consult with your sponsoring agency for funding.*

You may earn a Certificate of Completion by successfully completing up to 48 credit hours of ST050A-L Occupational Skills Training. Up to 12 credit hours may be applied toward an Associate of Applied Science degree as determined by each professional-technical program.

Interested agencies should contact the Occupational Skills Training Coordinator in the Cooperative Work Experience Office, Building 17, 399-5026 on the Salem Campus.



## Office Administration and Technology

Chemeketa offers short-term, one-year, and two-year programs in office administration and technology for those who wish to pursue a career as an office support specialist.

The short-term program is an open-entry, open-exit curriculum for people who want to develop or refresh their clerical skills in order to qualify for office work. You may select individual courses to meet your needs, or you may work toward a Certificate of Completion.

The one-year program offers three areas of office support specialization. After completing the first term, you may pursue a course of study in word processing, bookkeeping, or general clerical skills. You may earn a Certificate of Completion by successfully completing the credit hours required.

The two-year program is designed for people who want to become secretaries, administrative assistants, or other administrative support specialists. The program has six options: engineering, executive, information processing, legal, medical, and office accounting. You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each option.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these

areas. To assess the time you will need to complete the program, please meet with the program chair.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do on approved job sites in the business community. With the approval of the program chair, you may enroll in OA280 Cooperative Work Experience, and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

### Short-Term Program

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

A four-week non-credit intensive refresher program is available if you are a current or former office worker wishing to update or improve your skills.

The short-term program is offered on the Salem campus and by Chemeketa centers in Dallas, McMinnville, and Woodburn. For additional information, call 399-5169 in Salem, 623-5567 in Dallas, 472-9482 in McMinnville, and 981-8820 in Woodburn.

*In addition to tuition, estimated costs for students who complete the required courses are books, \$123; class fees, \$20; equipment and supplies, \$15. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion and proficiency statement by successfully completing the required credit hours listed below. If you enroll weekly, you may earn a proficiency statement.

#### Required Courses:

Course	Title	Credit Hours
OA051	Civil Service Exam Preparation .....	3
OA061A	Electronic Calculators A .....	1
OA084	Business English I .....	3
OA089A	Filing A .....	1
OA089B	Filing B .....	1
OA090	Bookkeeping .....	3
OA099AB	Proofreading/Editing A,B .....	1 ea.
OA116	Office Procedures .....	3
OA121A	Keyboarding A .....	1
OA121B	Keyboarding B .....	1
OA122A	Keyboard Skillbuilding A .....	1
OA122B	Keyboard Skillbuilding B .....	1
OA123A	Formatting A .....	1
OA123B	Formatting B .....	1
OA201P	Word Processing Procedures 1-WordPerfect.....	3
	or	
OA200	Introduction to Information Processing .....	3
OA225	Machine Transcription IA .....	1

#### Optional Courses:

FE205	Job Search Techniques.....	1
MTH061	Business Math.....	3
OA061B	Electronic Calculators B .....	1
OA091A	Computerized Bookkeeping.....	2
OA091B	Payroll Procedures .....	2
OA099C	Proofreading/Editing C .....	1
OA101	Office Careers Survey.....	1
OA123C	Formatting C .....	1
OA225B	Machine Transcription IB.....	1
OA280	Cooperative Work Experience.....	6 max.



## One-Year Program

The one-year program has three areas of office support specialization: bookkeeping, general clerical, and word processing. These areas provide training for those interested in working as word processing operators, general office clerks, receptionists, typists, file clerks, transcriptionists, bookkeepers, and accounting clerks. You may enroll part time or full time.

Upon successful completion of this program, you will receive a Certificate of Completion in Office Administration and Technology. The term-by-term schedule that follows shows three areas of specialization. Based on your personal interests and goals, we recommend that you choose one of the specialty areas to follow for your program of study. *Your Certificate will not show an area of specialization, and you may earn only one Certificate in the one-year program area even though you may choose to complete courses in all three specialty areas.*

*In addition to tuition, estimated costs for students who complete the bookkeeping required courses are books, \$484; class fees, \$72; equipment and supplies, \$30. For students who complete the general clerical required courses: books, \$485; class fees, \$72; equipment and supplies, \$30. For students who complete the word processing required courses: books, \$427; class fees, \$96; equipment and supplies, \$30. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion in the one-year program by successfully completing 46 required credit hours in any of the three specialty areas.

Course	Title	Credit Hours
<b>Term 1 (Required for all areas of specialization.)</b>		
MTH061	Business Math	3
OA084	Business English I	3
OA116	Office Procedures	3
OA122	Keyboard Skillbuilding	3
OA200	Introduction to Information Processing	3
<b>Term 2 (Bookkeeping)</b>		
BA051	Accounting Procedures I	4
MTH062	Applied Business Math	3
OA061	Electronic Calculators	2
OA085	Business English II	3
OA210	Office Microcomputer Applications	4
<b>Term 3 (Bookkeeping)</b>		
BA052	Accounting Procedures II	4
BA214	Business Communications	3
OA089	Filing	2
OA091	Computer Bookkeeping and Payroll Procedures	4
OA201P	Word Processing Procedures I-WordPerfect	3
<b>Term 2 (General Clerical)</b>		
OA061	Electronic Calculators	2
OA085	Business English II	3
OA089	Filing	2
OA201P	Word Processing Procedures I-WordPerfect	3
	Business elective*	3
	Business elective*	3
<b>Term 3 (General Clerical)</b>		
BA214	Business Communications	3
OA099	Proofreading/Editing	3
OA123	Formatting	3
OA210	Office Microcomputer Applications	3
	Business elective <sup>f</sup>	3

<b>Term 2 (Word Processing)</b>		
OA061	Electronic Calculators	2
OA085	Business English II	3
OA089	Filing	2
OA099	Proofreading/Editing	3
OA201P	Word Processing Procedures I-WordPerfect	3
	Business elective*	3

<b>Term 3 (Word Processing)</b>		
BA214	Business Communications	3
OA123	Formatting	3
OA202P	Word Processing Procedures II-WordPerfect	3
OA210	Office Microcomputer Applications	3
OA225ABC	Machine Transcription I	3

\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

## Two-Year Program

Chemeketa's Office Administration and Technology two-year program is designed for people who want to become secretaries, administrative assistants, or other administrative support specialists.

If you are employed as an office support worker and you want to increase your skills in order to advance in your career, you may benefit from this training. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

The program has six options: engineering, executive, information processing, legal, medical, and office accounting.

You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each option.

### Engineering Option

The Engineering option prepares you to work for a consulting firm, a civil or structural engineering business, or a drafting and architectural company. In these offices, you may have a variety of duties such as typing contracts and specifications, billing, handling and drafting correspondence, keeping financial records, and maintaining technical reference materials and manuals.

To prepare you for these jobs, the program includes classes in written communication skills, technical mathematics, and civil and structural engineering, as well as office skills.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,245; class fees, \$108; equipment and supplies, \$65. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
CV1045	Engineering Orientation for the Office Professional	1
MTH061	Business Math	3
MTH070	Elementary Algebra	4
OA084	Business English I	3
OA116	Office Procedures	3
OA200	Introduction to Information Processing	3

<b>Term 2</b>	
MTH081	Technical Mathematics I.....4
OA061	Electronic Calculators.....2
OA085	Business English II.....3
OA089	Filing.....2
OA122	Keyboard Skillbuilding.....3
OA201P	Word Processing Procedures I-WordPerfect.....3

<b>Term 3</b>	
BA214	Business Communications.....3
MTH082	Technical Mathematics II.....4
OA099	Proofreading/Editing.....3
OA119	Exploring Office Desktop Publishing.....3
OA123	Formatting.....3

<b>Term 4</b>	
BA101	Business Environment.....4
BA244	Records Management.....3
DRF059	Print Reading.....2
OA225ABC	Machine Transcription I.....3
	Business elective**.....3

<b>Term 5</b>	
BA211	Financial Accounting I.....4
	or
BA051	Accounting Procedures I*.....4
BA251	Office Management.....3
BLD059	Materials of Construction.....2
CVL074	Contracts, Specifications and Construction Estimating.....4
OA210	Office Microcomputer Applications.....3

<b>Term 6</b>	
OA117	Executive Office Simulation.....3
	Business elective** (OA280 Cooperative Work Experience recommended).....3
	Humanities/fine arts elective.....3
	or
	Science/applied science elective.....3
	Social science elective.....3
SP111	Fundamentals of Speech.....3
	or
SP114	Interpersonal Communications.....3

\*If you select BA051, you may not use BA211 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

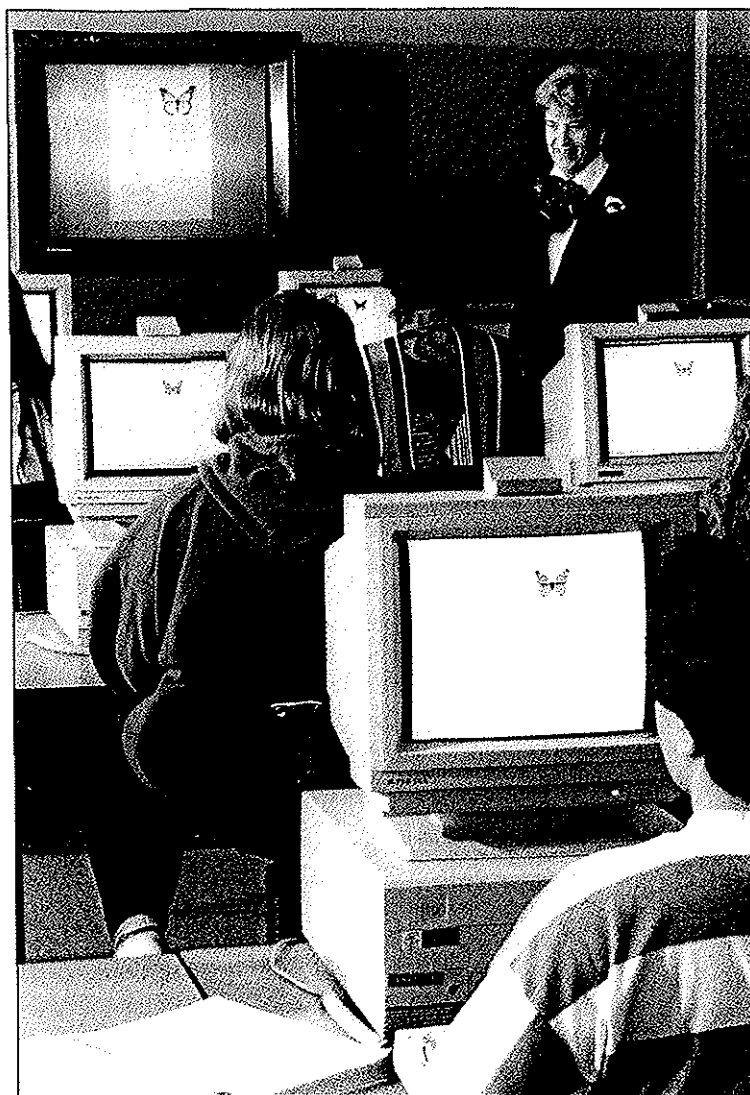
## Executive Option

The Executive option prepares you for a variety of positions as a secretary, administrative assistant, or other administrative support staff person. This work requires you to be able to organize a variety of tasks, accept responsibility, show initiative while a member of a team, and work well with others. You should be skilled in areas such as English use, keyboarding, transcribing from machine or Alphahand dictation, and operating business machines. You should have knowledge of records management, word processing, data processing, accounting, and office procedures.

If you satisfactorily complete the curriculum requirements, you are eligible to apply to sit for the Certified Professional Secretary examination in the spring of your second year during your final term.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,067; class fees, \$120; equipment and supplies, \$70. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 95 credit hours:



Course	Title	Credit Hours
<b>Term 1</b>		
BA101	Business Environment.....	4
OA084	Business English I.....	3
OA116	Office Procedures.....	3
OA122	Keyboard Skillbuilding.....	3
OA200	Introduction to Information Processing.....	3
<b>Term 2</b>		
MTH061	Business Math.....	3
OA085	Business English II.....	3
	Business elective**.....	3
OA201P	Word Processing Procedures I-WordPerfect.....	3
SP111	Fundamentals of Speech.....	3
	or	
SP114	Interpersonal Communication.....	3
<b>Term 3</b>		
BA214	Business Communications.....	3
OA061	Electronic Calculators.....	2
OA089	Filing.....	2
OA119	Exploring Office Desktop Publishing.....	3
OA123	Formatting.....	3
OA202P	Word Processing Procedures II-WordPerfect.....	3
<b>Term 4</b>		
BA211	Financial Accounting I.....	4
	or	
BA051	Accounting Procedures I*.....	4
BA244	Records Management.....	3
EC200	Introduction to Economics.....	3
	or	
EC201	Introduction to Microeconomics.....	3
OA099	Proofreading/Editing.....	3
OA225ABC	Machine Transcription I.....	3
<b>Term 5</b>		
BA212	Financial Accounting II.....	4

	or		
BA052	Accounting Procedures II*	.....	4
BA226	Business Law.....	.....	3
BA251	Office Management.....	.....	3
OA210	Office Microcomputer Applications.....	.....	3
	Business elective**.....	.....	3

<b>Term 6</b>			
OA117	Executive Office Simulation.....	.....	3
	Business elective** (OA280 Cooperative Work Experience recommended).....	.....	4
	Business elective**.....	.....	3
	Humanities/fine arts elective.....	.....	3
	or		
	Science/applied science elective.....	.....	3
	Social science elective.....	.....	3

\*If you select BA051 or BA052, you may not use BA211 or BA212 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

### Information Processing Option

The Information Processing option prepares you for a career in either a centralized word processing environment or an office emphasizing information processing. This program stresses training on both dedicated word processing equipment and microcomputers using popular office software applications.

In addition, you will develop skills in proofreading, transcription, and formatting, as well as other office skills needed to succeed in today's electronic office.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$977; class fees, \$144; equipment and supplies, \$70. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 95 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MTH061	Business Math.....	3
OA084	Business English I.....	3
OA116	Office Procedures I.....	3
OA122	Keyboard Skillbuilding.....	3
OA200	Introduction to Information Processing.....	3
<b>Term 2</b>		
OA085	Business English II.....	3
OA099	Proofreading/Editing.....	3
OA119	Exploring Office Desktop Publishing.....	3
OA201P	Word Processing Procedures I-WordPerfect.....	3
OA210	Office Microcomputer Applications.....	3
<b>Term 3</b>		
BA214	Business Communications.....	3
OA061	Electronic Calculators.....	2
OA089	Filing.....	2
OA123	Formatting.....	3
OA202P	Word Processing Procedures II-WordPerfect.....	3
	Business elective**.....	3
<b>Term 4</b>		
BA101	Business Environment.....	4
BA244	Records Management.....	3
OA205	Desktop Publishing I.....	3
OA225ABC	Machine Transcription I.....	3
	Business elective**.....	3
<b>Term 5</b>		
BA211	Financial Accounting I.....	4
	or	
BA051	Accounting Procedures I*.....	4
BA251	Office Management.....	3
OA117	Executive Office Simulation.....	3
OA204	Advanced WordPerfect.....	3
	Business elective**.....	3

(CS125SS LOTUS I-Worksheets  
or OA206 Desktop Publishing II-PageMaker  
recommended)..... 3

<b>Term 6</b>		
OA226AB	Machine Transcription II.....	2
SP111	Fundamentals of Speech.....	3
	or	
SP114	Interpersonal Communication.....	3
	Business elective** (OA280 Cooperative Work Experience recommended).....	3
	Humanities/fine arts elective.....	3
	or	
	Science/applied science elective.....	3
	Social science elective.....	3
	Business elective**.....	3

\*If you select BA051, you may not use BA211 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

### Legal Option

The Legal option prepares you for a beginning position in a law office or in the legal department of a company or agency.

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

*In addition to tuition, estimated costs for students who complete the entire program are books, \$995; class fees, \$174; equipment and supplies, \$70. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 95 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA101	Business Environment.....	4
OA084	Business English I.....	3
OA116	Office Procedures I.....	3
OA122	Keyboarding Skillbuilding.....	3
OA200	Introduction to Information Processing.....	3
<b>Term 2</b>		
BA226	Business Law.....	3
MTH061	Business Mathematics.....	3
OA074	Introduction to the Law Office.....	4
OA085	Business English II.....	3
OA201P	Word Processing Procedures I-WordPerfect.....	3
<b>Term 3</b>		
BA214	Business Communications.....	3
OA075	Legal Office Procedures I.....	3
OA119	Exploring Office Desktop Publishing.....	3
OA123	Formatting.....	3
OA202P	Word Processing Procedures II-WordPerfect.....	3
<b>Term 4</b>		
BA244	Records Management.....	3
OA076	Legal Office Procedures II.....	3
OA099	Proofreading/Editing.....	3
OA225ABC	Machine Transcription I.....	3
SP111	Fundamentals of Speech.....	3
	or	
SP114	Interpersonal Communication.....	3
	or	
SP130	Business and Professional Speaking.....	3
<b>Term 5</b>		
BA211	Financial Accounting I.....	4
	or	
BA051	Accounting Procedures I*.....	4
BA251	Office Management.....	3
OA061	Electronic Calculators.....	2
OA077	Legal Machine Transcription I.....	3
OA089	Filing.....	2

OA210	Office Microcomputer Applications.....	3
<b>Term 6</b>		
OA117	Executive Office Simulation .....	3
	Business elective** (OA280 Cooperative Work Experience recommended) .....	4
	Business elective** .....	3
	Social Science elective .....	3
	Humanities/fine arts elective.....	3
	or Science/applied science elective .....	3

\*If you select BA051, you may not use BA211 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

### Medical Option

The Medical option prepares you to work in medically-related offices where you may make appointments, manage patient records, meet patients, type correspondence, transcribe patient records, maintain financial records, and complete insurance forms.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,076; class fees, \$153; equipment and supplies, \$70. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 95 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MED051	Medical Terminology I.....	3
OA084	Business English I.....	3
OA116	Office Procedures I.....	3
OA122	Keyboard Skillbuilding .....	3
OA200	Introduction to Information Processing.....	3
<b>Term 2</b>		
MED052	Medical Terminology II.....	3
MTH061	Business Mathematics .....	3
OA061	Electronic Calculators .....	2
OA085	Business English II.....	3
OA089	Filing.....	2
OA201P	Word Processing Procedures II-WordPerfect.....	3
<b>Term 3</b>		
BA214	Business Communications .....	3
ES071	Work Place Safety Skills.....	1
MED055	Medical Law and Ethics .....	3
OA099	Proofreading/Editing.....	3
OA119	Exploring Office Desktop Publishing .....	3
OA123	Formatting.....	3
<b>Term 4</b>		
BA211	Financial Accounting I.....	4
	or BA051 Accounting Procedures I* .....	4
BA244	Records Management.....	3
BI071	Body Structure and Function I.....	3
OA210	Office Microcomputer Applications.....	3
OA225ABC	Machine Transcription I.....	3
<b>Term 5</b>		
BA101	Business Environment .....	4
BA251	Office Management .....	3
BI072	Body Structure and Functions II.....	3
MED054	Medical Office Procedures .....	4
	Social science elective .....	3
<b>Term 6</b>		
MED064	Introduction to Medical Science .....	3
OA080	Medical Machine Transcription.....	3
OA117	Executive Office Simulation .....	3
	Business elective** (OA280 Cooperative Work Experience recommended) .....	3
SP111	Fundamentals of Speech .....	3
	or SP114 Interpersonal Communication.....	3

\*If you select BA051, you may not use BA211 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

### Office Accounting Option

The Office Accounting option prepares you for office positions where accounting tasks are heavily emphasized and for positions such as accounting clerk, payroll clerk, or full-cycle bookkeeper.

This option provides you with a broad range of training in accounting, both manual and computerized, in addition to training in office skills such as information processing, office procedures, records management, and office management.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,011; class fees, \$144; equipment and supplies, \$70. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA211	Financial Accounting I.....	4
	or BA051 Accounting Procedures I.....	4
MTH061	Business Math.....	3
OA084	Business English I.....	3
OA116	Office Procedures I.....	3
OA200	Introduction to Information Processing .....	3
<b>Term 2</b>		
BA212	Financial Accounting II.....	4
	or BA052 Accounting Procedures II*.....	4
OA061	Electronic Calculators .....	2
OA085	Business English II.....	3
OA091A	Computerized Bookkeeping.....	2
OA122	Keyboard Skillbuilding .....	3
OA201P	Word Processing Procedures I-Wordperfect.....	3
<b>Term 3</b>		
BA053	Accounting Procedures III.....	4
MTH062	Applied Business Math .....	3
OA089	Filing.....	2
OA091B	Payroll Procedures .....	2
OA099	Proofreading/Editing.....	3
OA123	Formatting .....	3
<b>Term 4</b>		
BA214	Business Communications.....	3
BA244	Records Management .....	3
OA210	Office Microcomputer Applications .....	3
OA225ABC	Machine Transcription I.....	3
	Business elective** .....	3
<b>Term 5</b>		
BA101	Business Environment.....	4
BA251	Office Management.....	3
OA119	Exploring Office Desktop Publishing .....	3
OA117	Executive Office Simulation.....	3
	Business elective** (CS1255S Lotus I- Worksheets recommended).....	3
<b>Term 6</b>		
BA226	Business Law.....	3
SP111	Fundamentals of Speech .....	3
	or SP114 Interpersonal Communication .....	3
	Business elective** (OA280 Cooperative Work Experience recommended).....	3
	Humanities/fine arts elective .....	3
	or Science/applied science elective.....	3
	Social science elective.....	3

\*If you select BA052, you may not use BA212 as a business elective.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

# Philosophy

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Philosophy are Oregon State University, Portland State University, and University of Oregon.

The program outlined below is designed so that you may meet requirements of these institutions in two years, if you attend full time. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

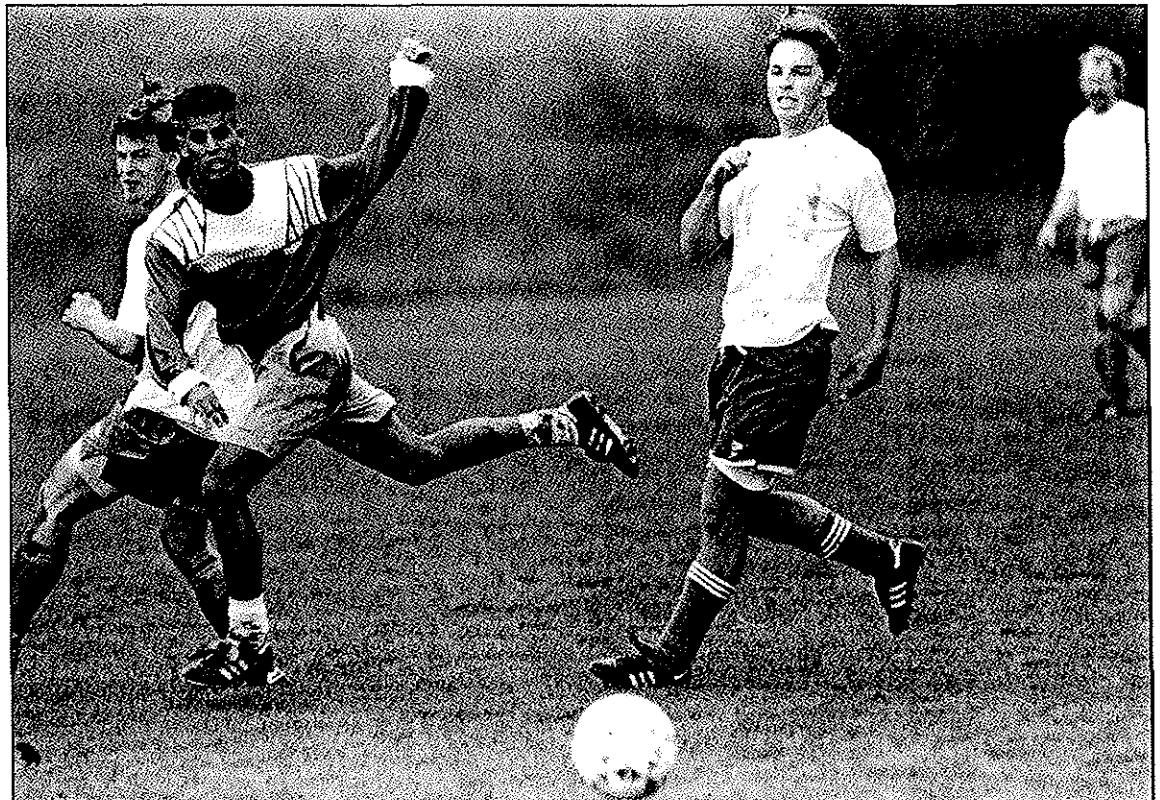
	Term		
	1	2	3
First Year			
WR121, 122 and/or 123 English Composition*			(3)
Arts and Letters/Humanities courses*	3	3	3
Science or Mathematics courses*	4-5	4-5	4-5
Social Science courses*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Electives (UO requires two years of foreign language)	3	3	3
Second Year	4	5	6
PHL201, 202, Problems of Philosophy, PHL203 Elementary Ethics (PHL201, 203, and 204 required at PSU; none required at OSU and UO) or Humanities courses*	3	3	3
Social Science electives*	3	3	3
Math or Science electives*	4	4	4
Electives (second year foreign language for UO)	6	6	6

\*To meet four-year college general education requirements.

# Physical Education/ Human Movement Studies

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physical Education or Human Movement Studies are Eastern Oregon State College, Oregon State University, Southern Oregon State College, and Western Oregon State College. Oregon State University offers a bachelor's degree in Exercise and Sports Science with options in Athletic Training, Fitness Program



Management, Physical Activity and Development, Sports Leadership, and Applied Exercise and Sports Science. SOSC offers options in Athletic Training/Sports Medicine and Health Promotion/Fitness Management.

Those students planning to teach Physical Education will need to complete a year of post-baccalaureate work to meet teacher certification at all state system colleges except WOSC. Refer to the section on Elementary and Secondary Education in this catalog.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121 and/or WR122 or 123 English Composition or SP111 Fundamentals of Speech*	3	3	(3)
Mathematics (per placement test (through MTH112 Trigonometry for OSU; to meet general education or B.S. degree requirements at SOSC and WOSC; MTH111 or 211, 212, or 213 for EOSC)	(4)	4-5	4-5
Arts and Letters/Humanities courses*	3	3	3
PE194 Professional Activities	2	2	2
Science courses* (BI231, 232, 233 Human Anatomy and Physiology for EOSC, OSU, and SOSC)	4	4	4
PE131 Intro. to Physical Education Elective	3		(3)
<b>Second Year</b>	4	5	6
Social Science courses (PSY201, 202 for OSU; PSY201, 202, 203 for Athletic Training option at SOSC)*	3	3	3
HPE295 Health and Fitness for Life* (EOSC, OSU, WOSC)		3	
HE250 Personal Health	3		
CH121, 122, 123 College Chemistry or CH221, 222, 223 General Chemistry required at OSU; choose electives for other colleges	(5)	(5)	(5)
Social Science electives* (SOC204 for Sports Leadership at OSU)	3	3	3
Arts and Letters/Humanities* or electives (FN225 Nutrition required at EOSC and OSU)	0-6	0-6	0-6
PE194 Professional Activities (not required at all schools; recommended as electives)	2	2	2

\*To meet four-year college general education requirements.

## Physics

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physics are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, and University of Oregon.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
Mathematics per placement test (all colleges require math through MTH254 Vector Calculus I; EOSC, PSU, SOSC, and UO require MTH252 Integral Calculus)	4-5	4-5	4-5
CH221, 222, 223 General Chemistry (Not required but recommended at SOSC)		5	5
WR121, 122, and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Arts and Letters/Humanities or Social Science courses* **	3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective			(3)
<b>Second Year</b>	4	5	6
Mathematics per placement test (Most colleges require or recommend math through MTH254; OSU and PSU also require MTH253 and MTH256 Applied Differential Equations; UO requires MTH256)	4-5	(4-5)	(4-5)
PH211, 212, 213 General Physics for Engineers and Scientists (PSU also accepts PH201, 202, 203 General Physics)	5	5	5
Arts and Letters/Humanities or Social Science courses*	3-4	3-4	3-4
Additional Arts and Letters/Social Science electives* or free electives	3	3	3
Electives (EOSC requires CS133F FORTRAN IV or CS161 Computer Science I-C Language; OSU requires CS161; PSU requires BI101, 102, 103 General Biology, G201, 202, 203 Geology, or other approved courses in a related area of science;			



SOSC requires computer literacy; Chemeketa recommends all students take CS161 (3-4) (3-4) (3-4)

\*To meet four-year college general education requirements.

\*\*French, German, or Russian recommended for students planning on graduate work.

## Political Science

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts or Bachelor of Science degrees in Political Science are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. It is advisable for you to make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
	1	2	3
<b>First Year</b>			
WR121, 122, and/or 123 English Composition*	3	3	(3)
Social Science courses*	3	3	3
Arts and Letters/Humanities courses*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Math/Science courses*	4	4	4
Electives (Foreign Language, Computer Science, or Math recommended for OSU; CS101 Introduction to Microcomputer Applications for SOSC)	3	3	3
<b>Second Year</b>	4	5	6
PS201, 202 American Government recommended (required at SOSC and OSU; PS201 for WOSC; PS201, 202 not required at PSU)	3	3	
PS203 State and Local Government and/or PS205 International Relations recommended (required at UO and WOSC)			(3)
Math/Science courses*	4	4	4
Arts and Letters/Humanities courses*	3	3	3
Social Science courses*	3	3	3
Electives (Social Science electives for WOSC)	3	3	3

\*To meet four-year college general education requirements.

## Pre-Engineering see Engineering

## Pre-Law

(college transfer)

University of Oregon is the only Oregon state college or university which has a School of Law. (Lewis and Clark College and Willamette University are the Oregon private schools which have Schools of Law).

Applicants for law school must have a baccalaureate degree from an accredited college or university. Admission to law schools is highly competitive.

Law schools do not recommend any particular major for pre-legal education. In general, they prefer a liberal undergraduate background to one which is narrowly specialized. Students may pursue an undergraduate major of their choice. The University of Oregon School of Law emphasizes the importance of well-developed skills in writing and communications and of acquiring the ability to read with understanding, to think logically, and to perform research and analysis competently.

## Pre-Professional Study (medicine, dentistry, veterinary medicine)

(college transfer)

Oregon Health Sciences University offers a D.M.D. degree in Dentistry and an M.D. degree in Medicine, and Oregon State University offers a D.V.M. in Veterinary Medicine.

Because admission into these professional schools is highly competitive, students should plan to transfer to a four-year institution upon completion of the first year. Students should complete the most rigorous chemistry sequence for which they are qualified, as well as stipulated courses in basic science and general education.

The one-year program outlined below is designed to meet requirements for these majors. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

The program outlined below is designed so that you may meet requirements of these institutions in two years, if you attend full time. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

First Year	Term		
	1	2	3
WR121, 122, and/or 123 English Composition or approved Communications course*	3	3	3
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry if not qualified for CH221-223)	5	5	5
Mathematics (per placement test)	4-5	4-5	4-5
Arts and Letters/Humanities sequence	3	3	3
Social Science sequence or electives*	3	3	3

\*To meet four-year college general education requirements.

## Professional-Technical Teacher Preparation

The Professional-Technical Teacher Preparation program at Chemeketa is for people who wish to become high school teachers in professional-technical vocational areas.

The program is designed for people who have gained professional skills from business and industry who now desire to share their knowledge and experience. As a graduate of this program, you will be eligible for a special renewable license which will enable you to teach in Oregon's public high schools. Additional upper division coursework is required for a Bachelor's degree and Basic Teaching Certificate.

To be accepted into this program, you will need to provide verification of 4,000 hours of work experience in one of the following professional-technical fields: industry and technology, health services, business and management, human resources, natural resources, or arts and communication.

You will also be required to demonstrate basic reading, writing, math, and computer skills on the college's placement test or through verification of course completion.

The program will include all the courses listed below, plus any additional coursework needed to achieve professional-technical expertise as determined by an individual assessment or an advisory committee. Each term students will gain practicum experience by working in local high schools.

*In addition to tuition, estimated costs for students who complete the program courses below are books, \$400; class fee, \$10; measles vaccination, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn a Certificate of Completion by successfully completing these 47 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
ED209B	Introductory Observation and Experience .....	3
ED212	Schools and Society .....	3
ED251	Overview of Students with Special Needs.....	3
ED258	Multicultural Education .....	3
ES071	Work Place Safety Skills .....	1
WR121	Writing Composition-Exposition .....	3
<b>Term 2</b>		
ED131	Teaching Techniques .....	3
ED133	Instructional Media and Materials.....	1
ED209C	Professional Technical Practicum I.....	6
ED217	Comprehensive Classroom Management .....	3
	Math to be determined by committee.....	3
<b>Term 3</b>		
ED209D	Professional Technical Practicum II.....	9
ED292	Occupational Analysis, Curriculum and Evaluation.....	3
SP111	Interpersonal Communication .....	3

## Psychology

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Psychology are Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa

keta advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
<b>First Year</b>	1	2	3
WR121, 122, and/or 123 English Composition (WR227 Technical Writing required by SOSC)*	3	3	(3)
PSY201, 202, 203 General Psychology (PSY201, 202 for WOSC)	3	3	3
Mathematics per placement test* (Mathematics through MTH111 College Algebra required by EOSC, UO; PSU requires and OSU recommends MTH111 and MTH243 Probability and Statistics)	(4)	4-5	(4)
Arts and Letters/Humanities courses*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Electives	3-6	3-6	0-6
<b>Second Year</b>	4	5	6
Social Science courses*	3	3	3
Arts and Letters/Humanities* (EOSC requires five hours of philosophy)	3	3	3
Science courses* (EOSC requires 5 hours in 200 level biology, chemistry or physics; UO requires biology, chemistry, or physics)	4-5	4-5	4-5
Electives (PSU requires CS133F FORTRAN IV EOSC and SOSC require CS101 Introduction to Microcomputer Applications (Chemeketa recommends CS101 or other Computer Science courses for all schools)	6	6	6

\*To meet four-year college general education requirements.

## Real Estate

The goal of the Real Estate program is to prepare students for a wide variety of jobs which require knowledge of the complexities of real estate. The required courses cover factors affecting the value, control, use, appreciation, responsibilities, and privileges associated with real property. You may select individual courses to meet your needs, state license requirements, or you may work toward an Associate of Applied Science degree.

With this technical training, you may fill a variety of jobs in county assessors' or county recorders' offices, city planning departments, the Federal Housing Administration, veterans affairs agencies, 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 and subdivision firms, real estate brokerages, and appraising offices.

Students interested in fee appraising should consult with the real estate program chair, Jim Cockrell at 399-6069, or the business director's office, 399-5114.

We strongly suggest that you consult with your assigned advisor to plan your course of study before you begin the first term. The college requires you to take English and mathematics placement tests before you apply for admission. If the results show that your skills are above the levels of the required first term courses, you may request to substitute elective or general education courses.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in RE280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,040; class fees, \$36; equipment and supplies, \$60. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
BA101	Business Environment.....	4
BA260	Real Estate Principles.....	3
MTH070	Elementary Algebra (or higher).....	4
OA085	Business English II.....	3
	or	
WR227	Technical Writing.....	3
OA121	Keyboarding.....	3
<b>Term 2</b>		
BA263	Real Estate Law.....	3
BA264	Real Estate Finance.....	3
CS101	Intro. to Microcomputer App. (or higher).....	3
EC200	Introduction to Economics (or higher).....	3
MTH062	Applied Business Math (or higher).....	3
<b>Term 3</b>		
BA211	Financial Accounting I.....	4
BA214	Business Communications.....	3
BA262	Real Estate Practices.....	3
PSY101	Psychology of Human Relations.....	3
RE061	Real Estate Appraisal I.....	3
<b>Term 4</b>		
CS125SS	LOTUS I-Worksheets.....	4
RE056	Escrow Procedures I.....	3
RE062	Real Estate Appraisal II.....	3
RE066	Real Estate Investment Analysis.....	3
	Humanities/science elective*.....	3
<b>Term 5</b>		
BA199D	Appraisal Standards of Practice (USPAP).....	2
BA232	Introduction to Business Statistics.....	3
RE063	Real Estate Appraisal III.....	3
RE070	Zoning, Subdividing, and Community Planning.....	3

Business elective\*\* (RE280 Cooperative Work Experience recommended) .....6

Term 6	
BLD054	Dwelling Construction Under UBC .....3
RE064	Mass Appraising of Real Estate .....3
RE069	Elements of Design and Construction .....3
	Business elective** (RE280 Cooperative Work Experience recommended) .....6

\*Students may choose among the following electives: Art, Foreign Languages, Multidisciplinary Studies, Philosophy, General Science, Geology, Physical Science, and Physics.

\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA084.

## Small Business Management

The Small Business Management program has two options from which to choose.

### One-Year Program

This program is a one-year course that features classes, workshops, and business consultation. The owner's business becomes the textbook and laboratory, achievement of business and family goals is the course assignment, and putting the owner in control of the business is the course objective. Students are enrolled annually, but are allowed to reapply each year for a maximum of three years in the program.

### Three-Year Program

This SBM program is for owners and their partners who operate a small business and have access to the financial records of the company. The purpose is to teach recordkeeping, decision making, and management skills.

Class meetings are held weekly, and the instructor visits each business monthly. Instruction includes small business taxation, recordkeeping and accounting, marketing and advertising, and human relations and legal considerations.

For enrollment information, call 399-5181.

## Sociology

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts or Bachelor of Science degrees in Sociology are Oregon State University, Portland State University, University of Oregon, and Western Oregon State College. Eastern Oregon State College offers an Anthropology/Sociology degree with emphasis in Sociology and Southern Oregon State College's degree is in Sociology and Anthropology.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing,

and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

First Year	1	Term 2	3
WR121, 122, and/or 123 English Composition or WR227 Technical Writing* (SOSC requires WR123; OSU strongly recommends WR123 or 227)	3	3	(3)
SOC204, 205, 206 General Sociology (OSU requires only SOC204; SOSC requires SOC204 and 205)	3	3	3
Mathematics or Science* (PSU requires math through MTH243 Probability and Statistics)	4-5	4-5	4-5
Arts and Letters/Humanities sequence* (OSU strongly recommends PHL201 Problems of Philosophy)	3	3	3
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
Social Science electives* (EOSC requires ANTH101, 102, 103 Human Evolution, Archeology, Introduction to Cultural Anthropology; SOSC requires ANTH103 Introduction to Cultural Anthropology; see WOSC catalog for required elective)	3	3	3
Arts and Letters/Humanities electives*	3	3	3
Math or Science courses*	4	4	4
HPE295 Health and Fitness for Life* or elective	3		
Electives* (CS101 Introduction to Microcomputer Applications for EOSC and SOSC)	3	6	6
See WOSC catalog for Interdisciplinary electives.			

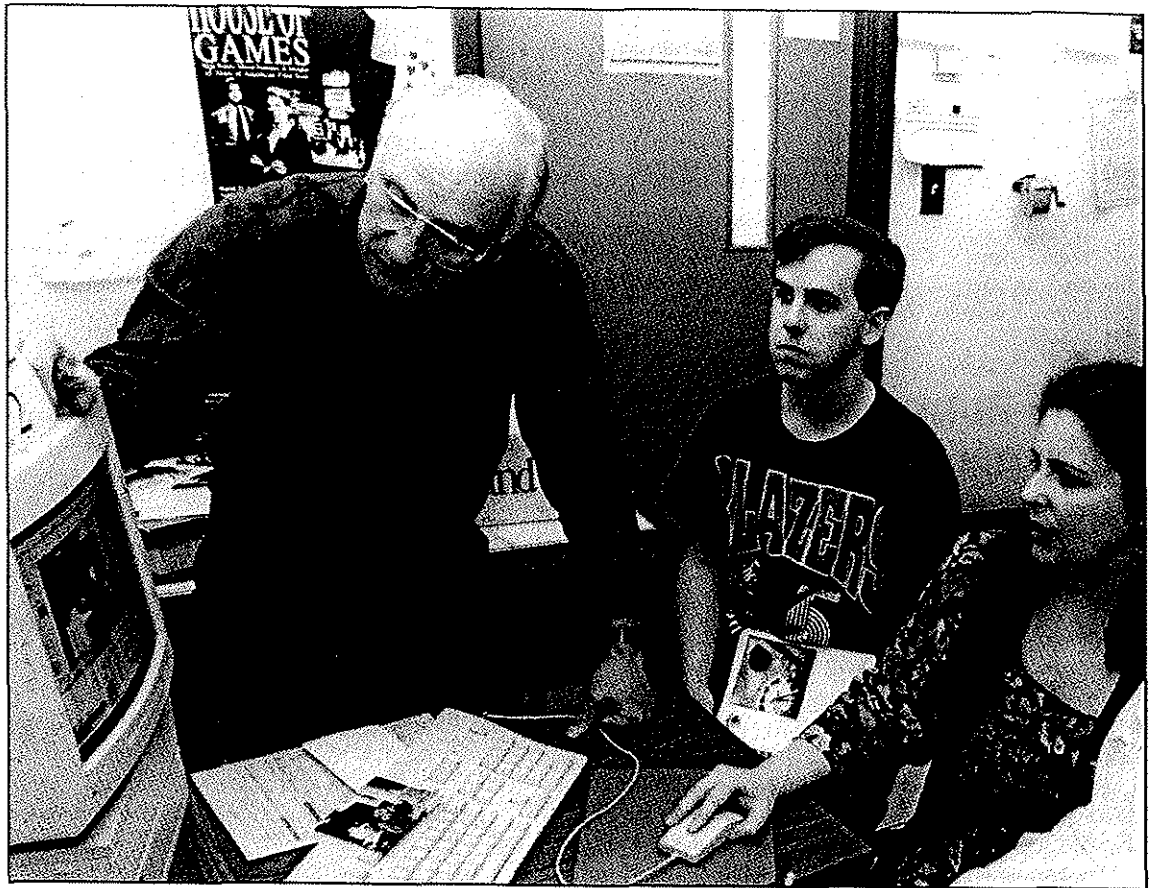
\*To meet four-year college general education requirements.

## Speech

(college transfer)

Oregon State University, Portland State University, University of Oregon, and Western Oregon State College offer Bachelor of Arts and/or Bachelor of Science degrees in Speech or Speech Communications. Southern Oregon State College offers a baccalaureate degree in Communications with options in Human Communications and Broadcasting.

The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your



skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

	Term		
First Year	1	2	3
WR121, 122, and/or 123	3	3	(3)
SP111 Fundamentals of Speech	3		
SP112 Fundamentals of Persuasion (not required at SOSC and WOSC)		3	
SP113 Fundamentals of Small Group Communication (not required at OSU or WOSC)			3
SP114 Interpersonal Communication			3
Arts and Letters/Humanities courses*	3	3	3
Social Science courses*	3	3	3
Math or Science*	4	4	4
<b>Second Year</b>	<b>4</b>	<b>5</b>	<b>6</b>
Social Science electives* (HST110, 111, 112 World History or ENG107, 108, 109 World Literature for UO tele- communications majors)**	3	3	3
Arts and Letters/Humanities electives* (SP115 Intercultural Communica- tions recommended for SOSC; UO			

Rhetoric and Communications ma- jors need nine hours in theater arts or film classes)	3	3	3
Science courses*	4	4	4
HIPE295 Health and Fitness for Life* or elective	3		
Electives (SOSC recommends PHL203 Elementary Ethics and PHL204 In- troduction to Logic for Human Communications majors and J224 for Broadcasting majors; WOSC re- quires 15 hours as electives in Jour- nalism, Speech, and Writing; J224 Introduction to Journalism recom- mended)	3	6	6

\*To meet four-year college general education requirements.

\*\*UO Telecommunications majors must take two courses in history and one sequence in either HST110, 111, 112 World History or ENG107, 108, 109 World Literature.

## Visual Communications

The Visual Communications curriculum offers students opportunities to gain knowledge, skills, and experience to become press operators, process photographers, typesetters, and graphic designers. You may learn about desktop publishing and the operation of a variety of equipment including process cameras, printing presses, densitometers, and enlargers. You may substitute lower division college transfer courses for the general education mathematics and science classes to complete program requirements. These changes and any others must be approved by the program chair.

This program has special admission requirements and enrollment limits. For additional in-

formation, contact the Admissions Office at 399-5006.

The program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$390; class fees, \$25; equipment and supplies, \$300. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

You may earn an Associate of Applied Science degree by successfully completing these 92 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
COM051	Communication Skills I.....	3
	or	
WR121	English Composition-Exposition .....	3
MTH051	Basic Mathematics (or higher).....	3
	or	
	General education elective* .....	3
VC051	Graphic Design and Character Generation .....	6
	or	
VC052	Process Photography, Stripping and Platemaking.....	6
	or	
VC053	Presswork and Reproduction Systems.....	6
	General education elective .....	3
<b>Term 2</b>		
COM052	Communication Skills II.....	3
	or	
SP111	Fundamentals of Speech.....	3
	or	
SP114	Interpersonal Communication.....	3
MTH052	Intro. to Algebra and Geometry (or higher) .....	3
VC051	Graphic Design and Character Generation .....	6
	or	
VC052	Process Photography, Stripping and Platemaking.....	6
	or	
VC053	Presswork and Reproduction Systems.....	6
VC067	Basic Technical Photography.....	5
<b>Term 3</b>		
PSY100	Introduction to Psychology.....	3
	or	
PSY201	General Psychology .....	3
	or	
PSY246	Introduction to Industrial Psychology.....	3
VC051	Graphic Design and Character Generation .....	6
	or	
VC052	Process Photography, Stripping and Platemaking.....	6
	or	
VC053	Presswork and Reproduction Systems.....	6
	Humanities/fine arts elective.....	3
	or	
	Science/applied science elective .....	3

The second year consists of 45 credits in the technical area of Visual Communications and three credits of general education electives to be selected with the program chair. Term 4, 5, and 6 are suggested as follows:

<b>Term 4</b>		
VC068	Intermediate Technical Photography.....	6
VC074	Special Problems in Graphic Communications ..	4
VC061	Advanced Graphic Design .....	6
	or	

VC062	Image Conversion and Image Carriers for Offset Lithography.....	6
	or	
VC063	Advanced Presswork.....	6
<b>Term 5</b>		
VC061	Advanced Graphic Design.....	6
	or	
VC062	Image Conversion and Image Carriers for Offset Lithography.....	6
	or	
VC063	Advanced Presswork.....	6
VC074	Special Problems in Graphic Communications..	4
VC083	Cost Accounting for Printers .....	3
	Communications, health education, humanities/fine arts, math, physical education, science, or social science elective..	3
<b>Term 6</b>		
VC071-		
VC079	Special Problems in Graphic Comm.....	16

\*General education elective may be substituted for this math requirement if student tests above MTH051.

## Welding

The Welding program offers two options. The three-term Welding Technology program combines training with classes in the background knowledge needed by workers in welding occupations. You practice and develop your welding skills in the laboratory and may take an examination for certification in arc welding. The six-term Welding Fabrication program is for those who want to acquire the technical knowledge and skills required for workers in welding, fabrication, and related occupations.

Welding 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.

The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

### Welding Technology

This program prepares you for a variety of positions in job specialty production and maintenance shops. Graduates may find work as metallic inert gas (MIG) welders, arc welders, oxyacetylene welders, semiautomatic welding equipment operators, and tungsten inert gas (TIG) welders.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$158; class fees, \$227; equipment and supplies, \$390; certification test \$100 (op-*



tional). Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 48 required credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MTH051	Basic Mathematics (or higher).....	3
WLD051	Basic Arc Welding.....	5
WLD056	Blueprint Reading and Sketching.....	3
WLD061	Basic Gas Metal Arc Welding (MIG).....	3
WLD071	Basic Oxyacetylene Welding.....	2
WLD074	Weld Shop Safety.....	1
<b>Term 2</b>		
WLD052	Intermediate Arc Welding.....	5
WLD057	Layout Practices.....	1
WLD062	Intermediate Gas Metal Arc Welding (MIG).....	3
WLD072	Oxyacetylene Cutting.....	2
WLD073	Basic Gas Tungsten Arc Welding (TIG).....	4
WLD081	Welding Metallurgy I.....	2
<b>Term 3</b>		
WLD053	Advanced Arc Welding.....	3
WLD058	Weld Shop Problems.....	7
WLD063	Advance Gas Metal Arc Welding (MIG).....	3
WLD082	Welding Metallurgy II.....	2

### Welding Fabrication Program

As a graduate of the Welding Fabrication program you 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 you a background in manufacturing materials, processes, and systems including shear and press brake operation, blueprint reading, and shop drawing and layout. The curriculum includes written and oral communications and general education classes and emphasizes related scientific, mathematical, and general mechanical principles.

At the end of the sixth term you may take a plate or pipe certification test. The fee for this test is determined by the number of students involved and the type of test.

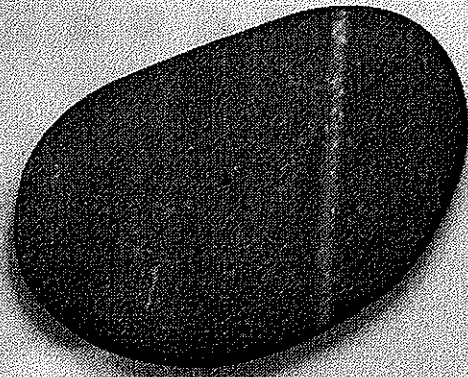
In addition to tuition, estimated costs for students who complete the entire program are books, \$519; class fees, \$396; equipment and supplies, \$390; certification test \$100 (optional). Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 102 credit hours:

Course	Title	Credit Hours
<b>Term 1</b>		
MTH051	Basic Math (or higher).....	3
WLD051	Basic Arc Welding.....	5
WLD056	Blueprint Reading and Sketching.....	2
WLD061	Basic Gas Metal Arc Welding (MIG).....	3
WLD071	Basic Oxyacetylene Welding.....	2
WLD074	Weld Shop Safety.....	1
<b>Term 2</b>		
MTH052	Intro. to Algebra and Geometry (or higher).....	3
WLD052	Intermediate Arc Welding.....	5
WLD057	Layout Practices.....	1
WLD062	Intermediate Gas Metal Arc Welding (MIG).....	3
WLD072	Oxyacetylene Cutting.....	2
WLD073	Basic Gas Tungsten Arc Welding (TIG).....	4
WLD081	Welding Metallurgy I.....	2
<b>Term 3</b>		
MTH053	Intro. to Trig. with Geometry (or higher).....	3
WLD053	Advanced Arc Welding.....	3
WLD063	Advanced Gas Metal Arc Welding (MIG).....	3
WLD058	Weld Shop Problems.....	7
WLD082	Welding Metallurgy II.....	2
<b>Term 4</b>		
DRF072	Introduction to AutoCAD.....	3
GS104	Physical Science (or higher).....	4
MFG056	Machining Fundamentals I.....	3
MFG093	CNC Machine Tool Operations.....	5
WFB087	Fabrication Practices III.....	3
<b>Term 5</b>		
COM051	Communication Skills I (or higher).....	3
MFG057	Machining Fundamentals II.....	3
MFG079	Industrial Systems.....	5
MFG094	Manufacturing Programming.....	5
<b>Term 6</b>		
COM052	Communication Skills II (or higher).....	3
MFG097	Interaction Skills.....	3
PSY100	Introduction to Psychology (or higher).....	3
WFB088	Fabrication Practices IV.....	3
WFB096	Shop Projects.....	2

**Zoology**  
see Biology

COURSE DESCRIPTIONS





## How courses are numbered

*Courses in this catalog are numbered to conform with course numbers used throughout the Oregon state system of higher education.*

*The numbers following the letters of course numbers indicate these classifications:*

**001 to 049 Basic skills courses.** Credits for these courses do not apply toward a degree and may not be transferred to a four-year college or university.

**050 to 099 Professional-Technical courses.** Credits for most of these courses may be applied toward an Associate of Applied Science degree.

**100 to 199 Freshman-level college courses.** Normally, these credits may be transferred to higher-education institutions in Oregon.

**200 to 299 Sophomore-level college courses.** Normally, these credits may be transferred to higher-education institutions in Oregon.



This list of course descriptions reflects the diversity and scope of the many credit courses Chemeketa currently offers. However, some of our current courses may not be included here as the college may add classes after this catalog is published.

The courses are listed alphabetically by letter prefix.

You will find prerequisites specified in many of these course descriptions. These are conditions you must meet before you enroll in a course. It is your responsibility as a student to fulfill the prerequisite.

Some prerequisites indicate that you must complete certain preparatory courses or must have the consent of the course instructor. To gain consent, meet with the instructor. Consent is based upon the instructor's assessment of your readiness to enroll in the course.

The letters, **F**, **W**, **Sp**, and **Su** at the end of a course description indicate the term (fall, winter, spring, 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 courses not included here. They are also listed in the *Schedule of Classes*.



## Definitions of Electives

You may find this table helpful in choosing the classes necessary to fulfill your Associate of Applied Science and Associate of Arts degree requirements.

Electives	Course prefixes which satisfy electives <i>(All courses selected must be numbered 050 or higher)</i>
Social Science	ANTH (Anthropology), EC (Economics), GEOG (Geography), HST (History), HDFS (Human Development and Family Studies), PS (Political Science), PSY (Psychology), SOC (Sociology), SSC (Social Science), WS (Women's Studies)
Humanities/ Fine Arts	ART (Art), ED (American Sign Language Classes only), CHN (Chinese), ENG (English), FA (Film Arts), FR (French), GER (German), JPN (Japanese), HUM (Humanities), NOR (Norwegian), MS (Multidisciplinary Studies), MUS (Music), MUP (Music Performance), PHL (Philosophy), R (Religion), RUS (Russian), SPAN (Spanish), TA (Theater Arts)
Science/ Applied Science	BI (Biology), BOT (Botany), CH (Chemistry), FN (Foods and Nutrition), G (Geology), GS (General Sciences), GE (General Engineering), OC (Oceanography), PH (Physics), ZOO (Zoology)
Communications	COM (Communication Skills), ENL (English as a Non-Native Language), J (Journalism), SP (Speech), WR (Writing), plus these specific classes: RD115, RD116, and HD112

## Accounting

see Business Administration

## AH

### Allied Health

see also Chemistry, Dental Assisting, Emergency Medical Technology, Emergency Services, Health Education, Health Care Support Services, and Nursing.

#### AH050 Health Care Delivery Systems

1 class hr/wk, 1 cr.

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

#### AH080 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. Focuses on supportive behavioral patterns and handling emotional stress of the individual as well as coping with emotional conflict within oneself. Sp

#### AH205 Biomedical Ethics

3 class hrs/wk, 3 cr.

Focuses on ethics in medical and health care fields. Studies roles of patients and health care providers, highlights personal and professional issues, and examines special areas including case studies, life-death questions, and social attitudes. Offered as needed.

## ANTH

### Anthropology

#### ANTH101 Human Evolution

3 class hrs/wk, 3 cr.

Studies the processes of the biocultural evolution of humans with emphasis on evolutionary theory, Mendelian and population genetics, the fossil record, classification of primates, and the nature of race. F, W

#### ANTH102 Archeology

3 class hrs/wk, 3 cr.

An overview of human's prehistoric development. Covers basic archaeological method and theory and the techniques used for dating the prehistoric past. Focuses on the agricultural revolution and the rise of the world's earliest civilizations, and provides a general overview of the time of unrecorded human experience and the early beginnings of recorded history. W

#### ANTH103 Introduction to Cultural Anthropology

3 class hrs/wk, 3 cr.

A survey of culture and how it shapes "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

#### ANTH207 Cultural Anthropology

3 class hrs/wk, 3 cr.

An analysis of the significance of culture for humans, including 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. Offered as needed.

#### ANTH208 Cultural Anthropology

3 class hrs/wk, 3 cr.

An exploration of human culture. Includes a cross-cultural study of marriage and the family and an examination of kinship and social groupings, belief systems, mythology, the functions of religion, and art and creativity in human societies. Offered as needed.

#### ANTH209 Cultural Anthropology

3 class hrs/wk, 3 cr.

A study of cultural growth and expansion, the nature of cultural change, effects of technical assistance on developing nations, and ethics of applied anthropology. Prerequisite: ANTH207 and ANTH208 recommended. Offered as needed.

## APR

### Apprenticeship

#### APR040 Construction-Beginning

3 class hrs/wk, 3 cr.

Designed to familiarize students with the basic concepts of construction. Includes city and regional planning, managing, contracting, designing, engineering, estimating, bidding, and inspecting, as well as the production work normally associated with construction. Prerequisite: Employment related to construction. Offered as needed.

#### APR041 Equity in Construction

2 class and 2 lab hrs/wk, 3 cr.

Designed to give the student an understanding of the construction industry and its basic tools and procedures. Sp

#### APR053A Inside Wire Electricians Apprenticeship I-A

4 class and 1 lab hr/wk, 5 cr.

Provides technical skills required of an inside wire electrician. Includes trade history and concepts, trade math, basic electrical DC theory, and introduction to National Electrical Code. Prerequisite: MTH070 or equivalent with a grade of C or higher. Class fee, \$10. F

#### APR053B Inside Wire Electricians Apprenticeship I-B

4 class and 1 lab hr/wk, 5 cr.

Covers mathematical formulas of equations, basic AC theory, use of test equipment, and applicable National Electrical Code. Prerequisite: APR053A. Class fee, \$10. W

#### APR053C Inside Wire Electricians Apprenticeship II-A

4 class and 1 lab hr/wk, 5 cr.

Provides technical skills required of an inside wire electrician. Includes human relations, trade math, blueprints and specifications, electrical theory of combination circuits, conductors, insulators, and applicable Na-

tional Electrical Code. Prerequisite: APR053B. Class fee, \$10. F

#### APR053D Inside Wire Electricians Apprenticeship II-B

4 class and 1 lab hr/wk, 5 cr.

Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses and overcurrent devices, wire devices, hazardous locations, busways, residential calculation, and applicable National Electrical Code. Prerequisite: APR053C. Class fee, \$10. W

#### APR053E Inside Wire Electricians Apprenticeship III-A

4 class and 1 lab hr/wk, 5 cr.

Covers applied electrical theory, residential and commercial wiring practices, busways, motor fundamentals, and applicable National Electrical Code. Prerequisite: APR053D. Class fee, \$10. F

#### APR053F Inside Wire Electricians Apprenticeship III-B

4 class and 1 lab hr/wk, 5 cr.

Course includes motor generators and controls, and applicable National Electrical Code. Prerequisite: APR053E. Class fee, \$10. W

#### APR053G Inside Wire Electricians Apprenticeship IV-A

4 class and 1 lab hr/wk, 5 cr.

Includes trade history, safety and first aid, blueprint reading, commercial and residential calculations, wiring methods, related theory, and National Electrical Code. Prerequisite: APR053F. Class fee, \$10. F

#### APR053H Inside Wire Electricians Apprenticeship IV-B

4 class and 1 lab hr/wk, 5 cr.

A review of the National Electrical Code including theory and application of motor controls, solid state fundamentals, special termination, layout, hazardous locations, and transformer locations. Prerequisite: APR053G. Class fee, \$10. W

#### APR058A Plumber Apprentice I-A

4 class and 1 lab hr/wk, 5 cr.

Includes an introduction to plumbing, basic math, related science, codes, blueprint reading, and first aid and CPR. Prerequisite: Indentured apprentice or consent of instructor. Class fee, \$10. F

#### APR058B Plumber Apprentice I-B

4 class and 1 lab hr/wk, 5 cr.

Includes mathematics, installation practices, related plumbing code, health and safety, and blueprint reading and sketching. Prerequisite: APR058A. Class fee, \$10. W

#### APR058C Plumber Apprentice II-A

4 class and 1 lab hr/wk, 5 cr.

Includes installation and related codes, safety and CPR, welding and brazing, and blueprint reading. Prerequisite: APR058B. Class fee, \$10. F

#### APR058D Plumber Apprentice II-B

4 class and 1 lab hr/wk, 5 cr.

Includes single occupancy installation, trade math, properties of water, pressure and testing, and single occupancy code. Prerequisite: APR058C. Class fee, \$10. W

**APR058E Plumber Apprentice III-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes installation of residential and commercial fixtures and appliances, mathematics and science related to gas and pipe sizing codes, and blueprint reading. **Prerequisite:** APR058D. Class fee, \$10. F

**APR058F Plumber Apprentice III-B**  
4 class and 1 lab hr/wk, 5 cr.  
Includes commercial installation practices, related math and science, OSHA, safety, CPR, and uniform plumber code. **Prerequisite:** APR058E. Class fee, \$10. W

**APR058G Plumber Apprentice IV-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes installation practices emphasizing industrial and institutional systems and service; blueprints of drainage, venting, and special waste systems; mathematics of volume and pipe sizing; safety and sanitation; and applicable uniform plumbing codes. **Prerequisite:** APR058F. Class fee, \$10. F

**APR066A Sheetmetal Apprentice I-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes introduction to trade, terminology, tools, mathematics, safety, fasteners, rigging, and hoisting. **Prerequisite:** Indentured apprentice or consent of instructor. Class fee, \$10. F

**APR066D Sheetmetal Apprentice II-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes parallel line development, hangers and supports, and insulation. **Prerequisite:** APR066C or consent of instructor. Class fee, \$10. F

**APR066F Sheetmetal Apprentice III-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes shop production and organization, estimating, field measuring and fitting, louvers, dampers, and access doors. **Prerequisite:** APR066E or consent of instructor. Class fee, \$10. F

**APR066I Sheetmetal Apprentice IV-A**  
4 class and 1 lab hr/wk, 5 cr.  
Includes radial line development and fume and exhaust system design. **Prerequisite:** APR066H or consent of instructor. Class fee, \$10. F

## ART

### Art

**ART101 Understanding Art**  
3 class hrs/wk, 3 cr.  
How art and artists reflect and impact society. Investigates the nature, purpose, and meaning of art. F, W, Sp, Su

**ART115, 116, 117 Basic Design**  
2 class and 2 lab hrs/wk, 3 cr.  
An introduction to basic principles of design. **ART115:** explores black and white two-dimensional design. **ART116:** use of color use and two-dimensional design. **ART117:** a study of three-dimensional design. **ART115:** F; 116: Su, W; 117: Sp

**ART119 Design, Layout, and Pasteup**  
2 class and 2 lab hrs/wk, 3 cr.  
Lettering and layout design including essential pasteup techniques, camera-ready re-

quirements, and use of tools. **Prerequisite:** ART115 or consent of instructor. F, W, Sp, Su

**ART154 Pottery I-Handbuilding**  
6 lab hrs/wk, 3 cr.  
An introduction to ceramics through handbuilding. Includes basic form and design considerations as well as pinch, coil, slab construction, press mold, and glazing techniques. Class fee \$9. F, W, Sp

**ART155 Pottery II-Beginning Wheel Throwing**  
6 lab hrs/wk, 3 cr.  
Basic techniques for producing pottery on the potter's wheel. Emphasis includes forming, trimming, glazing, and firing of projects, as well as visual and functional form considerations. Class fee \$9. W, Sp, Su

**ART156 Pottery III-Intermediate Techniques**  
6 lab hrs/wk, 3 cr.  
A continuation of ART155. Projects encourage student experimentation as well as glaze testing, kiln firing, and secondary design considerations. **Prerequisite:** ART155 or consent of instructor. Class fee \$9. Sp

**ART197 Gallery Design and Management**  
2 class and 2 lab hrs/wk, 3 cr.  
Offers practice in the organization and management of exhibits. Includes publicity, communications, and use of equipment and supplies. Students will execute an art exhibit. Sp

**ART198A-E Independent Studies**  
Variable 1-5 credits  
Faculty-supervised independent study in an area of student interest. **Prerequisite:** Consent of instructor. Offered as needed.

**ART204 Introduction to Art History**  
3 class hrs/wk, 3 cr.  
Surveys visual arts, painting, sculpture, architecture, and minor arts of Western civilization from prehistoric times through early Christian period. F

**ART205 Introduction to Art History**  
3 class hrs/wk, 3 cr.  
Surveys visual arts, painting, sculpture, architecture, and minor arts of Western civilization from Early Middle Ages through 1500. W

**ART206 Introduction to Art History**  
3 class hrs/wk, 3 cr.  
Surveys visual arts, painting, sculpture, architecture, and minor arts of Western civilization from 1500 through the present. Sp

**ART221 Graphic Design**  
2 class and 2 lab hrs/wk, 3 cr.  
Study and practice in the principles and processes of graphic communication and production from concept design to camera-ready copy. Emphasizes the aesthetic foundation of good design. **Prerequisite:** ART115, ART119, or consent of instructor. ART231 recommended. W

**ART225 Applied Design**  
2 class and 2 lab hrs/wk, 3 cr.  
Principles and concepts of design applied to selected projects. Includes planning, design sketches, and functional and aesthetic considerations. **Prerequisite:** ART115, ART119, ART221, or consent of instructor. W

**ART231 Beginning Drawing**  
6 lab hrs/wk, 3 cr.  
Introduces fundamental approaches to drawing, using a variety of monochromatic media. Provides individualized instruction in drawing skills designed for the beginner. F, W, Sp, Su

**ART232 Life Drawing**  
6 lab hrs/wk, 3 cr.  
Develops concepts and skills introduced in ART231. Intensive study of the human figure and the challenges it presents to the artist. **Prerequisite:** ART231 or consent of instructor. Class fee \$9. F, W, Sp

**ART233 Contemporary Drawing Media**  
6 lab hrs/wk, 3 cr.  
Continuation of ART232 emphasizing development of personal style and expression, personal imagery, and mixed media approaches. **Prerequisite:** ART231 or consent of instructor. ART232 recommended. Sp

**ART244 Stained Glass**  
6 hrs/wk, 3 cr.  
Basics of designing and crafting stained glass. Techniques include copper foil, leading, cutting, assembling, and soldering. F, W, Su

**ART245 Intermediate Stained Glass**  
6 lab hrs/wk, 3 cr.  
Builds upon skills gained in ART244. Focuses on more elaborate uses of glass as an art medium, including sandblasting and fusing. **Prerequisite:** ART244. F, W, Su

**ART246 Advanced Stained Glass**  
6 lab hrs/wk, 3 cr.  
Brings together all previous experience with glass for the purpose of making an artistic statement with contemporary results. **Prerequisite:** ART245. F, W, Sp, Su

**ART254 Pottery IV-Low-Fire Ceramics**  
2 class and 4 lab hrs/wk, 3 cr.  
An introduction to low-fire ceramic materials. Emphasizes both creative and functional elements. **Prerequisite:** ART155 or ART156. Class fee \$9. Offered as needed.

**ART260 General Photography**  
2 class and 4 lab hrs/wk, 3 cr.  
Fundamental and technical aspects of photography. Students supply camera, film, paper, tripod, and flash. Costs of film, paper, and supplies run between \$35 and \$75. Chemeketa provides enlargers, chemicals, and other incidental darkroom equipment. Class fee \$8. W, Sp, Su

**ART261 Intermediate Photography**  
2 class and 4 lab hrs/wk, 3 cr.  
Covers varied materials and processing techniques such as light measuring, gamma, densitometry, interpretation and uses of technical data, design improvement, and aesthetic approaches to photography. Incorporates use of darkroom techniques, densitometers, and special films and developers into project-oriented assignments. **Prerequisite:** ART260 or consent of instructor. Class fee \$8. W, Sp, Su

**ART271 Beginning Silkscreen Printing**  
6 lab hrs/wk, 3 cr.  
Introduction to the methods, materials, and techniques of printmaking with an emphasis



on silkscreen printing, including the photostencil process as well as traditional stencil methods. **Prerequisite:** ART231 or consent of instructor. Class fee \$9. F, W, Sp

### **ART272 Introduction to Printmaking**

6 lab hrs/wk, 3 cr.

Demonstrates methods, materials, and techniques of printmaking using media such as intaglio (etching) and relief (woodcut and linocut). May introduce some monoprinting techniques. **Prerequisite:** College-level drawing, basic design, or consent of instructor. Class fee, \$9. W, Sp

### **ART273 Advanced Silkscreen Printing**

6 lab hrs/wk, 3 cr.

Continuation of ART274. Mastery of the techniques of silkscreen printing. **Prerequisite:** ART274. Class fee \$9. F, W, Sp

### **ART274 Intermediate Silkscreen Printing**

Continuation of the silkscreen printing technique introduced in ART271. **Prerequisite:** ART271. Class fee, \$9. F, W, Sp

### **ART281 Painting**

6 lab hrs/wk, 3 cr.

Introduces traditional approaches to and techniques of painting. Includes introduction to materials, color theory, and historical perspectives. For beginning painters who have strong fundamental drawing skills. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART231, ART115 and ART116 recommended. W, Sp

### **ART284 Watercolor**

6 lab hrs/wk, 3 cr.

Technique and use of watercolor. Includes characteristics of watercolor as a medium, compositional problems, observation of detail, potential for personal expression, and color theory and design elements. **Prerequisite:** ART231 or consent of instructor. F, W, Sp

### **ART285 Intermediate Watercolor**

6 lab hrs/wk, 3 cr.

Continuation of ART284 to develop technical control and acquire formal knowledge of art in general. **Prerequisite:** ART284 or consent of instructor. F, W, Sp

### **ART286 Advanced Watercolor**

6 lab hrs/wk, 3 cr.

A continuation of projects and explorations begun in ART284 and ART285. A self-motivated contract class. **Prerequisite:** ART284 and ART285, or consent of instructor. F, W, Sp

### **ART291 Sculpture**

6 lab hrs/wk, 3 cr.

Covers tools, materials, and processes of sculpture and explores three-dimensional form. Involves technical and compositional exercises. Class fee \$9. F

### **ART292 Ceramic Sculpture**

6 lab hrs/wk, 3 cr.

An introduction to the potential and characteristics of clay as a creative sculptural medium. Class fee \$9. W

### **ART293 Sculpture/Lost Wax Casting**

6 lab hrs/wk, 3 cr.

Explores producing metal sculpture from a wax original. Includes lost-wax process from modeling the original in wax through fin-

ishing of the cast metal work. **Prerequisite:** ART117, ART155, ART291, ART292, or consent of instructor. Class fee \$9. Sp

### **ART299 Art as a Profession**

3 class hrs/wk, 3 cr.

For art students and practicing visual artists. Deals with professional skills and concerns in business, marketing, promotion, presentation, employment, and education opportunities. **Prerequisite:** A studio art class, studio art experience, or consent of instructor. Class fee \$9. F, W, Sp

## **Astronomy**

see Physics

## **AUM**

### **Automotive Technology**

#### **AUM050 Introduction to Automotive**

4 class and 8 lab hrs/wk, 3 cr.

An in-depth look at automotive mechanics' duties and job opportunities, including present and future employment trends. Focuses on the complex and rapidly changing expectations of auto mechanics. Su

#### **AUM051 Basic Automotive Engines**

3 class and 6 lab hrs/wk, 5 cr.

Construction, working principles, and methods of servicing a gasoline internal combustion engine. Stresses proper use of tools, torque wrenches, micrometers, and other equipment. Class fee \$15. F

#### **AUM052 Automotive Machine Shop**

2 class and 6 lab hrs/wk, 4 cr.

Designed to familiarize the student with the methods, technical aspects, theory, checks, and procedures used to recondition internal combustion engines and related components. Classroom theory along with hands-on laboratory experiences using precision measuring tools, torque wrenches, and machining equipment will introduce the student to the duties of an automotive machinist. Examines procedures, precision measuring devices, and special tools as well as theories of leverage, pressure/volume, expansion, momentum, inertia, and work related to engines. **Prerequisite:** AUM051 or consent of instructor. Class fee \$15. W

#### **AUM056 Automotive Shop Safety**

1 class hr/wk, 1 cr.

Guidelines for safety in the automotive industry. Rules, regulations, and methods for the safe use of automotive shop equipment and work areas will be studied through class discussion and the use of filmstrips. F

#### **AUM057 Automotive Brake Systems**

2 class and 6 lab hrs/wk, 4 cr.

Covers the principles of automotive brake systems, including theory, service, and repair of disc and drum brakes, manual power brakes, and brake system control and indicating devices. Class fee \$15. F

#### **AUM058 Auto Steering and Suspension**

2 class and 8 lab hrs/wk, 5 cr.

Principles of automotive wheel, steering, and suspension systems. Includes study of

front and rear suspension alignment; theory of suspension operation, wheel service and balance; and application of accepted repair procedures on automotive suspension. Class fee \$18. W

#### **AUM061 Manual Drive Trains and Axles I**

3 class and 6 lab hrs/wk, 5 cr.

Theory and service of automotive power trains. Covers clutches and clutch linkage, drive shafts and universal joints, front wheel drive axles, manual transmissions, manual transaxles, rear axles, and differentials (including open and limited slip). Includes friction, gear reduction, and torque multiplication through use of gearsets, inertia, and momentum as they apply to power train components. Class fee \$10. Sp

#### **AUM062 Manual Drive Trains and Axles II**

1 class and 6 lab hrs/wk, 3 cr.

A continuation of AUM061 concentrating on diagnosis and service of automotive power train components on vehicles in the lab. Practical application of diagnosis, service, and repair of clutches, drive shafts, universal joints, front wheel drive axles, manual transmissions, manual transaxles, rear axles, differentials, and four-wheel drive transfer cases. **Prerequisite:** AUM061. Class fee \$10. F

#### **AUM063 Automatic Transmissions and Transaxle**

3 class and 6 lab hrs/wk, 5 cr.

Fundamentals of automatic transmission operation, including methods of gear change, power flows, and basic hydraulic principles used in automatic transmissions. Emphasizes servicing and proper overhaul of automatic transmissions. Class fee \$15. F

#### **AUM066 Basic Fuel Systems**

3 class and 3 lab hrs/wk, 4 cr.

Principles of carburetion and carburetor circuits. Covers the basics of pressure differential, the venturi principle, fuel systems, gasoline, and engine variables pertinent to gasoline. Basic one-, two-, and four-barrel carburetor overhaul, service and adjustment, and fuel pump testing and inspection. F

#### **AUM067 Advanced Carburetion and Fuel Injection**

3 class and 5 lab hrs/wk, 5 cr.

Includes hands-on experience with advanced carburetor systems; the diagnosis of problems in the systems; operating principles of electromechanical (feedback) carburetors; theory and principles of carburetor-accessory special feature devices; and carburetor computer control input, operation, and adjustments. Covers in-depth analyses of today's fuel injection systems, including computer functions, input, output, and some system diagnosis. Study of emission, including causes, testing, and instrumentation. **Prerequisite:** AUM066 or consent of instructor. W

#### **AUM068 Automotive Electrical Systems I**

3 class and 3 lab hrs/wk, 4 cr.

An introduction to automotive electricity and electronics, as well as automotive accessory systems and circuits. Sp



**AUM073 Automotive Repair**

9 lab hrs/wk, 3 cr.

Work experience on prescribed automobile repairs using acquired skills. Speed and accuracy stressed. Laboratory time will be dedicated to automatic transmission, automatic transaxle, and engine repair and service. **Prerequisite:** Sixth-term standing in Automotive Technology program or consent of instructor. Class fee \$15. Sp

**AUM076 Automotive Electrical Systems II**

3 class and 3 lab hrs/wk, 4 cr.

Designed to familiarize students with fundamentals of DC electricity pertaining to the automotive trade. Course includes instruction in basic electrical fundamentals, storage batteries, starters, charging systems, and ignition systems. F

**AUM077 Automotive Electrical Systems III**

3 class and 5 lab hrs/wk, 5 cr.

A continuation of AUM076. Covers testing, diagnosis, and theory of operations of advanced ignition, charging, and cranking systems; electronic ignitions; oscilloscope testing and meter usage; and vehicle computer systems and testing. Basic electrical principles, laws, and forces are discussed and reviewed. **Prerequisite:** AUM076 or consent of instructor. Class fee \$5. W

**AUM078 Automotive Workplace Procedures and Ethics**

1 class hrs/wk, 1 cr.

Outlines duties and responsibilities of parts and service department personnel and their interaction with automotive technicians. Covers the legal aspects and responsibilities of the technician as they pertain to Environmental Protection Agency, OSHA, and safety regulations. Stresses work habits, ethical practices, and interaction with employers, potential employers, and other employees. Sp

**AUM081 Tune-up and Diagnosis**

3 class and 8 lab hrs/wk, 6 cr.

Tune-up and diagnostic procedures of gasoline internal combustion engines. Includes use of diagnostic equipment on vehicles during laboratory practices and repair and diagnosis of electrical and fuel systems in relation to tune-up. Stresses experience on components and vehicles during lab periods. **Prerequisite:** AUM067 and AUM077, or consent of instructor. Class fee \$15. Sp

**AUM082 New Automotive Developments**

3 class and 3 lab hrs/wk, 4 cr.

Familiarizes students with the theory, operation, and testing of automotive electronic engine control systems. Includes emission control systems, automotive computer systems, and turbo-charging and fuel-injection systems as they relate to engine control systems. **Prerequisite:** AUM066 and AUM067, AUM076 and AUM077. Class fee \$5. Sp

**AUM086 Automotive Heating and Air Conditioning**

3 class and 5 lab hrs/wk, 5 cr.

Theory and operation of automotive heating and air conditioning systems, methods for service and repair of heating and air conditioning systems, and troubleshooting techniques. Class fee \$10. W

**AUM091 Power Systems**

3 class and 3 lab hrs/wk, 4 cr.

Theory of operation, maintenance, and minor repair of small two- and four-cycle engines. Covers assembly and disassembly procedures, along with measurement and testing of small engines and an introduction to diesel engine theory. Class fee \$5. Sp

**AUM092 Automotive Diesel Engines**

2 class and 3 lab hrs/wk, 3 cr.

Construction, working principles, and methods of servicing automotive diesel engines. **Prerequisite:** AUM051. Sp

**AUM280A-L Cooperative Work Experience**

1-12 cr.

Places students in a business, industry, or agency for on-the-job training and experience related to instruction. Field experience supervised by college instructors and work experience coordinators. Offered as needed.

**AUP****Auto Parts Sales****AUP081 Engine Theory**

2 class and 3 lab hrs/wk, 3 cr.

Construction, working principles, and methods of servicing internal combustion engines. Emphasizes location and identification of various parts and components. Compares after-market parts with original equipment. Students take engines apart, study internal parts, and reassemble engines. F

**AUP082 Chassis Theory**

2 class and 3 lab hrs/wk, 3 cr.

Fundamentals of automotive fluid power systems relating to brake systems. Covers locations and functions of various components of the automobile chassis. Compares after-market and original manufactured chassis parts. F

**AUP083 Auto Parts I**

2 class and 6 lab hrs/wk, 4 cr.

Studies the auto parts distribution network from manufacturers through vendors to customers. Includes following policies and procedures of a jobber outlet, studying different methods of parts catalog indexing, and using various catalogs to fill parts orders. F

**AUP086 Power Train Theory**

2 class and 3 lab hrs/wk, 3 cr.

Covers the operation and some repair procedures of essential power train components of automobiles. Emphasizes location and identification of various parts and components. Compares after-market parts with original equipment. W

**AUP087 Auto Electrical Theory**

2 class and 3 lab hrs/wk, 3 cr.

Basic electrical terminology, fundamentals, and principles of operation applying to circuitry of automobiles. Covers theory of operation of ignition, charging, cranking, and lighting systems. Emphasizes location and identification of various parts and components. Compares after-market parts with original equipment. W

**AUP088 Auto Parts II**

2 class and 6 lab hrs/wk, 4 cr.

Instruction in the use of automotive parts catalog and catalog indexing systems. Covers working with parts inventory systems and parts classification, the telephone, merchandise displays, and the parts customer under supervised conditions in the lab area. W

**AUP091 Auxiliary Systems**

2 class and 2 lab hrs/wk, 3 cr.

Operation and identification of repairable and replaceable parts and components in auxiliary systems, such as power windows, seats, and vacuum controls (head lamp doors, power brake units, and door locks), power steering, and other automotive assist units. Emphasizes emission control devices of all types as well as the basic operations and components of automotive air conditioners. Includes new developments dealing with safety, economy, and operation of the vehicles. Sp

**AUP093 Fuel Systems**

2 class and 3 lab hrs/wk, 3 cr.

An introduction to automotive fuel injection. Covers fundamental principles of carburetion and the basis of fuel systems with detailed instruction on basic carburetor circuits. Emphasizes location and identification of various parts and components of single barrel, two-barrel, and four-barrel carburetors. Sp

**AUP096 Auto Parts III**

2 class and 6 lab hrs/wk, 4 cr.

An in-depth orientation on the use of acceptable sales techniques as they pertain to the parts industry. Introduces the student to the computer inventory control system. Includes verbal and written sales presentations. Sp

**AUP280 Cooperative Work Experience**

see AUM280.

**BA****Business Administration****BA031 AMA Managing and Resolving Conflict**

2.5 class hrs/wk, for 5 weeks, 1 cr.

Designed for managers and supervisors. Presents skills to resolve conflicts effectively and develop productive working relationships among staff. Class fee \$89. Offered as needed.

**BA032 AMA Communication Skills for Managers**

2.5 class hrs/wk, for 5 weeks, 1 cr.

A step-by-step guide to effective oral, non-verbal, and written communication. For business, industry, and government supervisors, managers, and executives. Class fee \$89. Offered as needed.

**BA033 AMA First-Line Management**

2.5 class hrs/wk, for 5 weeks, 1 cr.

Concentrates on practical skills for new and prospective supervisors in business, industry, and government. Deals with leadership styles, decision making, rewards, productivity, conflict, grievances, and problem employees. Class fee \$89. Offered as needed.

**BA035 AMA Reading and Interpreting Financial Statements**

2.5 class hrs/wk, for 5 weeks, 1 cr.

A practical course for managers in understanding three critical tools of financial analysis: comparison of statement of periods, use of horizontal and vertical percentage analysis, and computation of ratios. Class fee \$89. Offered as needed.

**BA036 AMA Success Through Assertiveness**

2.5 class hrs/wk for 5 weeks, 1 cr.

Helps students develop skills for improving responses to difficult situations and in communicating desires, interests, and feelings. Class fee \$89. W

**BA043 AMA How to Delegate Effectively**

2.5 class hrs/wk for 5 weeks, 1 cr.

For current and future managers in business and government who want to become more comfortable with delegating responsibilities. Class fee \$89. Sp

**BA044 AMA A Manager's Guide to Human Behavior**

2.5 class hrs/wk, for 5 weeks, 1 cr.

Emphasizes the importance to managers of communicating clearly, motivating employees, and understanding human needs to gain maximum results. Presents relevant examples for managers in personnel, marketing, sales, finance, or general operations. Class fee \$89. Offered as needed.

**BA046 AMA Effective Team Building**

2.5 class hrs/wk for 5 weeks, 1 cr.

For managers and prospective managers in business and government who want practical, step-by-step team-building and employee involvement techniques. Class fee \$89. W

**BA047 AMA Negotiating Skills for Managers**

2.5 class hrs/wk for 5 weeks, 1 cr.

Proven techniques for management negotiators in business, industry, and government. Ranges from determining negotiation strategies to planning seating arrangements and selecting meeting sites. Class fee \$89. W

**BA048 AMA Leadership Skills for Managers**

2.5 class hrs/wk, for 5 weeks, 1 cr.

Suggests realistic guidelines for raising employees' levels of competence and motivation. Covers ways to improve communication; set achievement targets; help subordinates develop by coaching and counseling, delegating responsibilities, and reviewing their performance; and cope with tensions. Includes discussion of practical business ethics. Class fee \$89. W

**BA049A,B,C,D Supervisory Techniques and Procedures IA, IB, IC, ID**

12 class hrs/wk, 1 cr. each

First of four skill-building courses designed for front-line supervisors in both the public and private business sectors. W

**BA050 Supervisory Techniques and Procedures II**

2.5 class hr/wk, for 5 weeks, 1 cr.

A continuation of BA049. Class fee \$49. W

**BA051 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: MTH061 or MTH070. F, W, Sp, Su

**BA052 Accounting Procedures II**

4 class hrs/wk, 4 cr.

Continuation of BA051. Covers basic procedures and theory of double-entry business accounting. For students who do not plan to enroll in Chemeketa's two-year accounting program or to attend a four-year college. Prerequisite: BA051 and MTH061. W, Sp

**BA053 Accounting Procedures III**

4 class hrs/wk, 4 cr.

Accounting for corporations, capital stock, corporate earning, corporate bonds, investments, analysis of financial statements, and manufacturing firms. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's accounting curriculum. Prerequisite: BA052. Sp

**BA054 Governmental/Nonprofit Accounting I**

3 class hrs/wk, 3 cr.

Comprehensive study of accounting for governmental and non-profit entities. Considers budgets, revenue and expenditure accounting, general funds, special revenue funds, 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. F, Sp

**BA055 Governmental/Nonprofit Accounting II**

3 class hrs/wk, 3 cr.

Compares and contrasts principles of accounting and reporting for state and local government with those of state and local school systems, colleges and universities, hospitals, and the federal government. Familiarizes the student with budgeting, cost determination, and audits of governmental and nonprofit entities. Offered as needed.

**BA056 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: Concurrent enrollment in BA213 or consent of instructor. F

**BA057 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: BA056 or consent of instructor. W

**BA058 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: BA057 or consent of instructor. Sp

**BA059 Auditing**

3 class hrs/wk, 3 cr.

Outlines responsibilities and duties of independent, external auditors in applying acceptable auditing standards, assisting with financial audits, preparing audit work papers, and making crucial decisions. Emphasizes internal control and collection of sufficient evidence. Prerequisite: BA057 or consent of instructor. Sp

**BA061 AMA Accounting for Managers**

2.5 class hrs/wk, for 5 weeks, 1 cr.

Non-technical, basic accounting for managers. How to interpret financial information and incorporate it into decision making. For non-financial executives in general management, manufacturing, marketing, personnel, and research and development. Class fee \$89. Offered as needed.

**BA062 AMA Writing for Management Success**

2.5 class hrs/wk, 5 weeks, 1 cr.

How business, government, and industry employees may communicate more effectively by improving their writing and grammar skills. Class fee \$89. F

**BA070 Merchandising**

3 class 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 course in marketing. Prerequisite: BA223. Offered as needed.

**BA077 New Supervisor Orientation**

2 class hrs/wk, 2 cr.

How front-line supervisors may guide and motivate employees toward greater productivity. Focuses on management styles, communication, performance appraisals, and personnel development. Offered as needed.

**BA092 Federal Cost Principles, Monitoring and Reporting**

1 class hr/wk, 1 cr.

Study of federal cost principles and allocation. Includes federal financial assistance reporting and monitoring of A-128 and A-133 subrecipients. Offered as needed.

**BA097 Supervisory Communication**

1 class hr/wk, 1 cr.

How supervisors may work together to develop awareness skills so they may communicate responsibly and appropriately with each other and their staff members. Offered as needed.

**BA101 Business Environment**

4 class hrs/wk, 4 cr.

An introduction to the inter-relationships of business, government, and society; roles of businesses and members of the business community; ethics and social responsibility; and employment opportunities in various business fields. F, W, Sp, Su

**BA106ABC Business Leadership**

2 class hrs/wk, 2 cr. each

How to develop leadership qualities and improve oneself by participating in community activities and student organizations. Offered as needed.

**BA160 Purchasing I**

3 class hrs/wk, 3 cr.

Discusses purchasing functions, policies, procedures, manuals, legal considerations, public relations, ethics, quality and sources of supplies, storekeeping, and personnel. W

**BA173 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 aspects of business. Offered as needed.

**BA199C Special Studies-  
Entrepreneurship: Preparing to  
Start Your Own Business**

3 class hrs/wk, 3 cr.

Designed for those who are considering going into business for themselves. Includes determining self-employment readiness; assessing personal strengths and weaknesses, understanding small business concepts, analyzing the ambiguities and risks involved, and developing a preliminary small business plan. Class fee \$5. F, Sp

**BA199D USPAP**

2 class hrs/wk, 2 cr.

A thorough examination of the Uniform Standards of Professional Appraisal Practice (USPAP) used by government and the appraisal industry. Prerequisite: RE061 or one course in real estate appraising. F, Sp

**BA199E USPAP Plus**

3 class hrs/wk, 3 cr.

A thorough examination of the Uniform Standards of Professional Appraisal Practice (USPAP) used by government and the appraisal industry, and examples of valuation problems and concepts commonly encountered in appraisal practice. Prerequisite: One course in real estate appraising. F, Sp

**BA200K Conflict Resolution at  
Work**

1 class hr/wk, 1 cr.

Stresses skills and methods which lead to conflict resolution in the workplace. Offered as needed.

**BA201 Community Leadership**

1 class hr and 7 lab hrs/wk, 3 cr.

Motivation techniques to prepare persons to become effective community leaders. Offered as needed.

**BA205 Human Relations in  
Business**

3 class hrs/wk, 3 cr.

An exploration of fundamental human relations concepts as they apply to organiza-

tional and personal life. Areas of emphasis include self-management and interpersonal skills. F, W, Sp, Su

**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

**BA207 Collective Bargaining and  
Labor Arbitration**

3 class hrs/wk, 3 cr.

An introduction to the history of collective bargaining in the United States. Covers labor agreements, management rights, conditions of employment, contract negotiation procedures, resolution of impasses, grievances, and arbitration. Offered as needed.

**BA211 Financial Accounting I**

4 class hrs/wk, 4 cr.

Accounting for service and merchandising firms. Includes recording transactions, adjustments, financial statements, worksheets, closing entries, cash and accounts receivable, notes and interest, and accounting for inventories. For accounting program students and students transferring to four-year institutions. Prerequisite: MTH070 or MTH061. F, W, Sp, Su

**BA212 Financial Accounting II**

4 class hrs/wk, 4 cr.

Study of payroll transactions and liabilities; current, long-term, and partnership liabilities; formation and division of earnings; changes in ownership and liquidation; capital acquisition and reporting; dividends; stock splits; donated capital; analyzing and using financial statements; earnings measurement theory and practice; reporting income taxes on financial statements; corporate bonds; corporation accounting principles; and cash flow statements. Prerequisite: BA211, and MTH062 or MTH070, or consent of instructor. F, W, Sp, Su

**BA213 Managerial Accounting**

4 class hrs/wk, 4 cr.

Covers the accountant's role in an 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. 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 business letters, memorandums, and reports. Prerequisite: OA085 or WR122. F, W, Sp, Su

**BA215 Cost Accounting**

3 class hrs/wk, 3 cr.

Analysis of methods of detailed and specific identification of cost elements in business. Emphasizes job orders, processes, and standard cost accounting systems and their related theory; principles, techniques, and managerial use of cost accounting data; and use

of budget and performance reports as related to cost accounting. Prerequisite: BA211, BA212, and BA213. F, W

**BA221 Production and Operations  
Management**

3 class hrs/wk, 3 cr.

Overview of the functions an organization must perform to produce goods or services. Emphasis on the role operational policy plays in the overall strategy of an organization and how that policy affects other areas such as marketing, finance, accounting, personnel, and management information systems. Offered as needed.

**BA222 Financial Management**

3 class hrs/wk, 3 cr.

Managerial finance and how financial decisions affect society at large. A discussion of the tax environment, ratio analysis, financial planning and control, current asset management, and loans and leases. Prerequisite: BA213. W, Sp

**BA223 Principles of Marketing**

3 class hrs/wk, 3 cr.

Emphasizes marketing planning and strategy as dictated by the consumer through marketing research. Surveys marketing research, product development, sales, and feedback on consumer acceptance. Prerequisite: BA101 or consent of instructor. F, W, Sp, Su

**BA224 Personnel Management**

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. F, 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 contracts. 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

**BA228 Computer Accounting  
Applications**

3 class hrs/wk, 3 cr.

Study of computers in accounting. Software applications include general ledger, in-house tax system, and intermediate accounting. For students in the accounting curriculum. Prerequisite: BA056, BA256, CS101, or consent of instructor. Class fee \$12. F, Sp

**BA229 Consumer Finance**

3 class hrs/wk, 3 cr.

Principles and concepts of consumer economics. Covers consumer decision making, money management, use of credit, food shopping, housing, family transportation, insurance, savings, and investment. F, Sp

**BA232 Introduction to Business  
Statistics**

3 class hrs/wk, 3 cr.

Elementary statistical techniques to aid decision making in business. Includes popula-

tions and variances, indexes, estimating, hypotheses testing, analysis of variances, time series, and correlation. **Prerequisite:** MTH095. W, Sp, Su

### **BA233 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. Offered as needed.

### **BA234 International Business**

3 class hrs/wk, 3 cr.

A managerial view of international marketing. Presents theories and trends in global marketing of goods and services. Analyzes cultural, legal, political, and monetary factors; development of an appropriate marketing mix; import management; and trade promotion. **Prerequisite:** BA101, BA223, or equivalent business background as determined by instructor. Offered as needed.

### **BA238 Sales and Persuasion**

3 class hrs/wk, 3 cr.

Emphasizes behavioral sciences, sales psychology and techniques, and communication. How to sell ideas and attitudes within a firm, and products and services to customers. F, Sp

### **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. W

### **BA241 Risk and Insurance**

3 class hrs/wk, 3 cr.

Concepts of risk, 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, life, and health insurance, with emphasis on underlying economic needs each is designed to meet. Offered as needed.

### **BA242 Investments**

3 class hrs/wk, 3 cr.

How investors may consolidate and coordinate previous experiences with basic information and data in order to survive in the marketplace. Explains the individual investment opportunities as part of an investor's portfolio. **Prerequisite:** BA101, BA211, or equivalent as determined by instructor. F, W, 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. A discussion of the influences of perception, personality, attitudes, culture, family life, and social class on how and why people buy and consume products. F

### **BA244 Records Management**

3 class hrs/wk, 3 cr.

Principles and procedures for efficient organization and control of business records. Covers management of the creation, maintenance, storage, and disposition of records. Includes manual, mechanical, and automated records systems and micrographics in the study of information resource management. F, 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, including planning, organizing, staffing, actuating, and controlling. **Prerequisite:** Second-year standing or consent of instructor. Offered as needed.

### **BA251 Office Management**

3 class hrs/wk, 3 cr.

A study of administrative office manager responsibilities. Includes planning, organizing, and controlling business services, systems, and procedures. W, Sp

### **BA255 Elements of Supervision**

3 class hrs/wk, 3 cr.

Studies current supervisory processes, reviews supervisory responsibilities, provides practical instruction for new and current supervisors; and examines the role of supervision in business and industry. Offered as needed.

### **BA256 Income Tax Accounting I**

4 class hrs/wk, 4 cr.

First of two courses in preparing federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the Board of Tax Service Examiners' educational requirements to take the Oregon tax preparer's licensing examination. **Prerequisite:** BA212 or BA052, or consent of instructor. F, Sp

### **BA257 Income Tax Accounting II**

4 class hrs/wk, 4 cr.

Second of two introductory courses in preparing federal and Oregon individual income tax returns. See BA256. **Prerequisite:** BA256 or consent of instructor. F

### **BA260 Real Estate Principles**

3 class hrs/wk, 3 cr.

The nature, importance, and character of real property, real estate business, markets and brokerages; taxes and assessment; contracts; and ownership. F, Sp

### **BA261 Land Use Economics**

3 class hrs/wk, 3 cr.

Land use, taxation, valuation, planning, zoning, and development with emphasis on their relationships to economic and social problems. Examines the overall real estate community and its participants. **Prerequisite:** BA260. Offered as needed.

### **BA262 Real Estate Practices**

3 class hrs/wk, 3 cr.

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. Discusses Oregon License Law, ethics, and residential construction techniques. **Prerequisite:** BA263 and BA264. F, W, Sp, Su

### **BA263 Real Estate Law**

3 class hrs/wk, 3 cr.

Examines Oregon law relating to estates, ownership, use, taxation, and transfer of interests in real estate. Includes discussion of legal descriptions, public restrictions, and contract law. F, W, Sp, Su

### **BA264 Real Estate Finance**

3 class hrs/wk, 3 cr.

The real estate mortgage market and how it competes with other products purchased on credit. Forces that modify the operation of the mortgage market, the availability of funds, lending policies, and methods of financing real property. Explores loan instruments and introduces appraising techniques. **Prerequisite:** BA263. F, W, Sp, Su

### **BA269 Principles of Banking**

3 class hrs/wk, 3 cr.

Fundamentals of bank functions to give beginning bankers a broad (and operational) perspective. Includes the role of banks in the community. Primary topics include teller functions, deposit functions, trust services, bank loans, and investments. F, W, Sp

### **BA270 Money and Banking**

3 class hrs/wk, 3 cr.

Basic economic principles most closely related to money and banking for current and prospective bank managers. Stresses practical application of the economics of money and banking to an 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

### **BA271 Analyzing Financial Statements**

3 class hrs/wk, 3 cr.

Techniques necessary for evaluating financial conditions and the operation of business enterprises. Includes financial statement analysis and accounting, flow of business funds, and tools and techniques for analyzing financial statements. **Prerequisite:** BA212. Offered as needed.

### **BA273 Marketing for Bankers**

3 class hrs/wk, 3 cr.

Presents bank marketing relations, advertising, and personal selling. Covers concepts and philosophies of marketing specifically related to banking, including information research, target markets, the marketing mix, and methods of market planning. 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. Offered as needed.

### **BA278 Law and Banking-Principles**

3 class hrs/wk, 3 cr.

Legal aspects of banking. A non-technical presentation of all aspects of the legal system that directly affect banking. W

### **BA280 Cooperative Work Experience**

see AUM280.

**BA281 Consumer Lending**  
3 class hrs/wk, 3 cr.

A survey of various types of credit arrangements in which a borrower pays a charge for repaying debts in delayed payments. Includes credit evaluation, consumer credit evaluation, consumer credit policy, requirements of making credit decisions, loan documentation, and closing. **Prerequisite:** BA269 and current employment in a financial institution or enrollment in the Banking and Finance program. **Offered as needed.**

**BA282 The Trust Business**  
3 class hrs/wk, 3 cr.

The changing role of a trust department, the services it provides, and how it fits into the overall banking business. **Prerequisite:** BA269 or on-the-job banking experience. **F**

**BA284 Law and Banking-Applications**  
3 class hrs/wk, 3 cr.

An introduction to laws pertaining to secured transactions, letters of credit, and bank collection processes. Discusses check losses and a broad range of legal issues related to processing checks. Includes up-to-date summaries of laws related to collateral, perfection, and default. Case studies illustrate important legal points related to banking practices. **Prerequisite:** BA269. **Sp**

**BA299 Business Policy**  
3 class hrs/wk, 3 cr.

An analysis of management decisions, executive responsibilities, and company objectives within the framework of today's society. Policy development is studied through business cases and field study. Emphasis on written communication of decisions, policies, and plans. **Prerequisite:** BA206, BA223, BA226, and BA215. **Offered as needed.**

**BA299B Special Studies: Budgeting in the Public Sector**  
3 class hrs/wk, 3 cr.

Provides an overview of the techniques and politics of public sector budget preparation, modification, and implementation. Includes history, decision-making process, methods, and implementation of public sector budgeting. **Prerequisite:** Basic math skills. **W**

**BA299C Purchasing Processes and Administration**  
3 class hrs/wk, 3 cr.

Familiarizes business students and purchasing/material management professionals with the nature and content of the semi-annual certification exams administered by the National Association of Purchasing Management. The review material provides an overview of exam format and content of C.P.M. Exam Modules I (purchasing) and II (administration). Sample tests are used to help students learn test-taking skills and to help them understand the scope of the examinations. **Prerequisite:** None; however, three to five years experience in purchasing or an allied business field is recommended. **Sp**

**BA299D Introduction to Elder Law**  
3 class hrs/wk, 3 cr.

Introduces legal and ethical issues specifically affecting the rights and opportunities of the elderly. Explains and discusses financial, medical, and personal-care options available to aging persons who want to preserve and maintain control of themselves and their

property and to plan and provide for orderly implementation of their long-term decisions. **F**

**BA299E New Product Planning**  
3 class hrs/wk, 3 cr.

Surveys the investigation and introduction of a new product, the building of a business case for the new product, and monitoring the results. **Offered as needed.**

**BAN**

**Banking and Finance**  
see also *Business Administration*

**BAN052 Home Equity Lending-AIB**  
3 class hrs/wk for 5 weeks, 1 cr.

An introduction to the major characteristics of the home equity loan, focusing mainly on the loan's features and benefits. Covers the basics of pricing, marketing, and underwriting. **Prerequisite:** BA269 or employment in banking. **F**

**BAN054 English the Easy Way**  
3 class hrs/wk for 5 weeks, 1 cr.

Includes grammar, punctuation, and word study. **Offered as needed.**

**BAN055 Spanish for Bankers**  
3 class hrs/wk for 5 weeks, 1 cr.

Basics of Spanish as related to specific banking/business terminology. **Offered as needed.**

**BAN056 Introduction to Commercial Lending**  
3 class hrs/wk, 3 cr.

A survey of the functions of a bank's commercial lending division. Includes aspects of commercial lending: economic, management of loan portfolios, and influence of regulation and business development. **Prerequisite:** Employment in banking or enrollment in Banking and Finance program. **Offered as needed.**

**BAN057 Loan and Discount Series-AIB**  
3 class hrs/wk, 3 cr.

Covers promissory notes, supporting documents, and concepts of secure transactions; how to calculate interest and discount commercial paper; guaranties; general collateral agreements; examination and processing of documents accompanying notes secured by bonds, stocks, and savings accounts; and concepts of attachment, perfection, priority, defaults, and foreclosure. Specifically useful for notetellers and commercial lending clerks. **Prerequisite:** Employment in banking or enrollment in Banking and Finance program. **Offered as needed.**

**BAN058 Real Estate Documentation**  
3 class hrs/wk for 5 weeks, 1 cr.

Concentrates on lending practices for family residences. Emphasizes basics of processing loans and underwriting. Covers loan programs, interviews, applications, underwriting property borrower's credit, and closing and servicing mortgages. **Prerequisite:** BA269 or employment in banking. **W**

**BAN059 Small Business Financing**  
3 class hrs/wk, for 5 weeks, 1 cr.

Focuses on the importance of bank financing to small businesses and to the community as

a whole. **Prerequisite:** BA269 or employment in banking. **F**

**BAN059A Financial Planning**  
3 class hrs/wk, 3 cr.

Examines the financial planning process and its applications. **Offered as needed.**

**BAN060 Investment Basics for Bankers-AIB**  
3 class hrs/wk, 3 cr.

Discusses theory and practice of trust department investment services. Covers securities market, alternatives to securities investments, trust department investment operations, techniques and practical applications, and investment policies and portfolio management. **Offered as needed.**

**BAN062 New Accounts Procedures**  
3 class hrs/wk for 5 weeks, 1 cr.

Customer service procedures in opening new bank accounts. **Offered as needed.**

**BAN063 Product Knowledge**  
3 class hrs/wk for 5 weeks, 1 cr.

Includes three separate modules: consumer products, corporate products, and trust products. Emphasizes the range of services banks offer to meet customer needs and increase sales opportunities. **Prerequisite:** Employment in banking or enrollment in the Banking and Finance program. **Offered as needed.**

**BAN064 Personnel and the Law**  
3 class hrs/wk for 5 weeks, 1 cr.

Concentrates on numerous laws that shape banking's personnel policies and procedures. Includes Civil Rights Act, Equal Pay Act, equal employment opportunity, and laws and legislation affecting Vietnam-era veterans. **Offered as needed.**

**BAN064A Understanding and Selling Bank Services**  
3 class hrs/wk, 3 cr.

Provides the skills needed to sell bank services and meet customer needs while cultivating a positive attitude towards selling. **Sp**

**BAN065 Speaking Skills for Bankers**  
3 class hrs/wk for 5 weeks, 1 cr.

Provides the skills for effective communication with co-workers and customers. **W**

**BAN065A Writing Skills for Bankers**  
3 class hrs/wk for 5 weeks, 1 cr.

Provides an understanding of core communication principles essential for effective written communication. Students will apply these principles in developing personal and professional successes. **F**

**BAN066 Supervisory Training-AIB**  
3 class hrs/wk, 3 cr.

Theoretical and practical skills for supervisors. Covers management roles and responsibilities, management teamwork, task analysis, job performance techniques, employee orientation, and delegation of responsibilities. **Prerequisite:** Current or previous employment in banking. **Offered as needed.**

**BAN066A Pre-Supervisory Training**  
3 class hrs/wk for 5 weeks, 1 cr.

Preparation for changing from non-supervisory to supervisory role. Covers basic func-

tions of job supervision, providing guidelines for managing this change successfully.

### **BAN067 Teller Training and Development**

3 class hrs/wk for 5 weeks, 1 cr.

Helps bank tellers develop and improve abilities and knowledge essential in performance of their duties. Emphasizes dealing with customers and following normal banking procedures. F

### **BAN069 Contemporary Issues in Banking**

3 class hrs/wk, 3 cr.

Investigates contemporary problems and issues that confront the banking industry. Focuses on the latest competitive, regulatory, technological, and market-related developments that continue to alter the nature of commercial banking. Prerequisite: BA269. Offered as needed.

### **BAN070 Economics for Bankers**

3 class hrs/wk, 3 cr.

An introduction to the principles of economics as they pertain to banking. Special emphasis on macroeconomics. Offered as needed.

### **BAN072 Consumer Compliance**

3 class hrs/wk for 5 weeks, 1 cr.

Deals with consumer protection regulations as they apply to credit and civil rights. Recommends policies and procedures which avoid common violations. Prerequisite: BA269 or employment in banking. W

### **BAN072A Consumer Variable Rate Lending**

3 class hrs/wk for 5 weeks, 1 cr.

The background, functions, and marketing of consumer variable rate loans. Prerequisite: BA269. Offered as needed.

### **BAN074 Consumer Bankruptcy**

3 class hrs/wk for 5 weeks, 1 cr.

The relationship of the Bankruptcy Reform Act to consumer bankruptcy. Includes strategies for avoiding bankruptcy, a bank's responsibility during bankruptcy proceedings, internal control systems, and strategies to decrease bankruptcy losses. Prerequisite: BA269 and current affiliation with a commercial banking institution involved in consumer lending and collection activities, or enrollment in Banking and Finance program. Offered as needed.

### **BAN075 Problem Loans**

3 class hrs/wk for 5 weeks, 1 cr.

Problem loan prevention using case studies. Students examine common mistakes which cause problem loans and how to minimize losses and deal effectively with problem loans. Offered as needed.

### **BAN077 Bank Management Fundamentals**

3 class hrs/wk, 3 cr.

Introduces a variety of modern management theories and approaches. Studies good management skills, including basic functions of planning, staffing, leading, and controlling. Offered as needed.

### **BAN078 Bank Customer Service**

3 class hrs/wk for 5 weeks, 1 cr.

How to develop better communication skills in working with bank customers. Covers effective ways of establishing contact, deter-

mining needs, defining and resolving problems, and closing transactions. Prerequisite: BA269 or employment in banking. W

### **BAN080 Deposit Operations**

3 class hrs/wk, 3 cr.

Examines deposit operations of banks in the context of the U.S. payments system. Explores how banks operate their deposit-taking activities and manage deposited funds. Emphasis is on system rather than product. Prerequisite: BA269. Offered as needed.

### **BAN081 Trust Operations**

3 class hrs/wk, 3 cr.

Discusses concepts and ideas that comprise the various trust functions and translates them into workable procedures. Prerequisite: BA269. Offered as needed.

### **BAN085 Fundamentals of Analyzing Financial Statements**

3 class hrs/wk, 1 cr.

Promotes basic understanding of financial statements and their use in lending. Uses financial statement analysis techniques employed in making commercial loan decisions. Prerequisite: BA212, BA269, or employment in banking. F

### **BAN093 International Banking**

3 class hrs/wk, 3 cr.

An overview of fundamentals of international banking. Discusses how money is transferred among countries, how trade is financed, what international financing agencies do, what instruments are used in international financial markets, and how the Eurodollar market operates. Emphasizes the fast-moving field of international banking with discussions on such topics as country risk assessment, Edge Act corporations, and foreign exchange activities. Prerequisite: BA269. Offered as needed.

### **BAN280 Cooperative Work Experience**

see AUM280.

## **BI Biology**

### **BI060 Basic Science Principles**

2 class and 2 lab hrs/wk, 3 cr.

Designed for dental assisting students. Presents introductory concepts of chemistry, physics, cell biology, and microbiology. Includes practical application of problem solving, scientific observation and measurement, use of equipment, and basic laboratory techniques. Class fee \$8. F

### **BI071 Body Structure and Function I**

2 class and 2 lab hrs/wk, 3 cr.

Normal structure and function of the human body, chemical principles, characteristics of the cell as a basis for life, organization of tissues, organs and systems; and structure and function of body systems. Class fee \$8. F

### **BI072 Body Structure and Function II**

2 class and 2 lab hrs/wk, 3 cr.

A continuation of BI071. Prerequisite: BI071. Class fee \$8. W

### **BI101 General Biology**

3 class and 3 lab hrs/wk, 4 cr.

Investigates the diversity of organisms, principles of ecology, and effects and consequences of ecosystem alteration by humans. This sequence need not be taken in order, although some carryover from one term to the next does occur. Class fee \$12. F, Sp

### **BI102 General Biology**

3 class and 3 lab hrs/wk, 4 cr.

Covers basic principles of genetics, natural selection, evolution, origin of species, population genetics, and animal behavior. Class fee \$12. F, W, Sp

### **BI103 General Biology**

3 class and 3 lab hrs/wk, 4 cr.

Covers principles of animal physiology. Emphasizes human reproductive, nervous, circulatory, immune, and respiratory systems. Also covers plant structure and function. Class fee \$12. W, Sp

### **BI103A Introduction to Plant Propagation**

3 class and 3 lab hrs/wk, 4 cr.

Deals with the propagation of ornamental and fruit-bearing crops of the commercial nursery and agriculture industries. Includes seed, cutting, and tissue culture propagation methods. Lab fee \$12. W

### **BI200 Principles of Ecology-Field Biology**

3 class and 3 lab hrs/wk, 4 cr.

Emphasizes the broad concepts of ecology using Western Oregon coniferous forests as a model. Concepts are first introduced in the classroom and then examined in detail using student-collected field data. Prerequisite: BI101, 102, or consent of instructor. Class fee \$12. Su

### **BI231 Human Anatomy and Physiology**

3 class and 3 lab hrs/wk, 4 cr.

In-depth examination of the structure and function of the human body. First of a three-term sequence. Includes a short review of chemical principles and cell characteristics as a basis for structure and function, as well as a study of tissues and the integumentary, skeletal, and nervous systems. Prerequisite: CH104 or consent of instructor. Class fee \$12. F, W, Sp; offered summer as needed.

### **BI232 Human Anatomy and Physiology**

3 class and 3 lab hrs/wk, 4 cr.

Second of a three-term sequence. Studies muscle, blood, circulatory, immune, and respiratory systems. Prerequisite: BI231 or consent of instructor. Class fee \$12. F, W, Sp, offered summer as needed.

### **BI233 Human Anatomy and Physiology**

3 class and 3 lab hrs/wk, 4 cr.

Third of a three-term sequence. Study of endocrine, digestive, urinary, and reproductive systems. Includes an examination of body fluids, electrolytes, Ph balance and medical genetics. Introduces human genetics. Prerequisite: BI232 or consent of instructor. Class fee \$12. F, W, Sp, offered summer as needed.



### **BI234 Microbiology**

3 class and 3 lab hrs/wk, 4 cr.

A survey of bacteria and other microorganisms emphasizing their impact upon human health. Includes discussion of infection, immunity, common pathogens, and methods and mechanisms of control. **Prerequisite:** CH104 or equivalent as determined by the instructor. Class fee \$12. F, W, Sp, offered summer as needed.

## **BLD**

### **Building Inspection**

#### **BLD050 Introduction to Building Inspection**

3 class hrs/wk, 3 cr.

Provides background information and legal basis of building codes. Explores and compares performance versus specification standards. Discusses Uniform Building Code, Uniform Plumbing Code, Uniform Housing Code, and National Electrical Code. F

#### **BLD051 Building Codes I**

3 class hrs/wk, 3 cr.

Explores nonstructural standards of the Uniform Building Code. Includes occupancy classifications, building area, height and location limitations; types of construction; and exit and fire resistive standards. F

#### **BLD052 Building Codes II**

3 class hrs/wk, 3 cr.

Continues BLD051. Covers building construction hazards such as vertical shafts, treatment of exterior and interior surfaces, exit requirements, fire protection systems, public property, and weather protection. **Prerequisite:** BLD051. W

#### **BLD053 Building Codes III**

3 class hrs/wk, 3 cr.

Continuation of BLD052. Covers pedestrian protection during construction, permanent occupancy of public property, prefabricated construction, fire extinguishing systems, fire detection systems, energy conservation, and architectural barriers. **Prerequisites:** BLD051 and BLD052. Sp

#### **BLD054 Dwelling Construction under the UBC**

3 class hrs/wk, 3 cr.

Relates the Uniform Building Code to residential buildings and miscellaneous structures. Includes administration, definitions, foundations, occupancy standards, wood framing systems, roof coverings, and wall coverings. Sp

#### **BLD055 Building Department Administration**

3 class hrs/wk, 3 cr.

A study of building department administration including the laws and principles that affect personnel and code compliance. Sp

#### **BLD059 Materials of Construction**

2 class hrs/wk, 2 cr.

Materials and processes regulated by the building code. Testing standards as a quality control of traditional and nontraditional building materials. Class fee \$10. W

#### **BLD060 Fire Protection for Buildings**

3 class hrs/wk, 3 cr.

Installation, functions, and requirements of sprinkler systems. W

#### **BLD061 Structural Inspection-Wood**

3 class hrs/wk, 3 cr.

Introduces basic methods of wood framing. Deals with allowable stresses, loads, and fundamental design of wood products and construction systems. Class fee \$10. W

#### **BLD062 Structural Inspection-Masonry**

3 class hrs/wk, 3 cr.

Specific code requirements for all types of masonry construction, both structural and nonstructural. Includes an introduction to fireplace construction. Class fee \$10. Sp

#### **BLD063 Structural Inspection-Concrete**

3 class hrs/wk, 3 cr.

Concrete as a construction material. Covers physical properties, including mix design, handling, storage, delivery, proper placement, and fire resistive qualities. Class fee \$10. F

#### **BLD064 Structural Inspection-Steel**

3 class hrs/wk, 3 cr.

Steel as a construction material and its use in light, medium, and heavy steel frame construction; methods of connections; fire resistive qualities; and manufacturing and fabrication processes. **Prerequisite:** BLD051 or consent of instructor. Class fee \$10. W

#### **BLD066 Structural Plan Review**

2 class and 3 lab hrs/wk, 3 cr.

The fundamentals of structural plan review, including the analysis and design of beams, columns, and connections. **Prerequisite:** CVL054. W

#### **BLD067 Nonstructural Plan Review**

2 class and 3 lab hrs/wk, 3 cr.

Introduces techniques of examining non-structural plans by becoming familiar with plan and construction documents and specifications. Covers applications of code requirements. **Prerequisite:** BLD051 and BLD052. Sp

#### **BLD071 Plumbing Codes I**

3 class hrs/wk, 3 cr.

Investigates certain standards of the Uniform Plumbing Code. Covers principles of plumbing design, materials, and installation standards related to dwelling construction. F

#### **BLD072 Plumbing Codes II**

3 class hrs/wk, 3 cr.

A comprehensive study of plumbing code requirements relating to water and gas distribution systems, storm and sanitary sewer systems, water heater installations, and mobile home connections. **Prerequisite:** BLD071 or consent of instructor. W

#### **BLD081 Mechanical Codes I**

3 class hrs/wk, 3 cr.

Covers basic thermodynamics. Helps students gain a working knowledge of the Uniform Mechanical Code relative to size, location, and proper installation of heating and ventilation systems. W

#### **BLD082 Mechanical Codes II**

3 class hrs/wk, 3 cr.

Provides a working knowledge of Uniform Mechanical Code commercial kitchen equipment, fuel gas piping, and related testing standards. **Prerequisite:** BLD081. Sp

#### **BLD091 One-and Two-Family Electrical Code**

3 class hrs/wk, 3 cr.

Helps students understand wiring design, methods, and equipment for general use, as related to one- and two-family dwelling applications. W

#### **BLD092 CABO One-and Two-Family Dwelling Code**

3 class hrs/wk, 3 cr.

A study of the CABO One- and Two-Family Dwelling Code as it relates to residential construction and applicable codes. Includes administrative, structural, mechanical, plumbing, and electrical requirements. Sp

#### **BLD093A-F Building Inspection Lab**

4 lab hrs/wk, 1 cr. each

Examines working conditions typical to building inspection. Students will have an opportunity to apply knowledge gained in the classroom to actual field conditions. Class fee \$10. F, W, Sp

#### **BLD280 Cooperative Work Experience**

see AUM280.

## **BOT**

### **Botany**

#### **BOT201 General Botany**

3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the study of plant ecology, generalized plant cells, photosynthesis, and respiration. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. F

#### **BOT202 General Botany**

3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the study of genetics, evolution of plant diversity, and the biology of non-vascular plants. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. W

#### **BOT203 General Botany**

3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the growth, development, and structure of vascular plants, including the effects of light, hormones, water, and nutrients. Laboratory work emphasizes the classification of flowering plants. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. Sp

**CH****Chemistry****CH104 Chemistry for Allied Health**

3 class and 2 lab hrs/wk, 4 cr.

First course in a three-term sequence for nursing and allied health students. Applies chemical principles to the life sciences. Includes matter, atomic structure, chemical bonds, reactions, molecules, and solutions. **Prerequisite:** MTH070 or equivalent as determined by instructor. Class fee \$8. F, W, Sp, Su

**CH105 Chemistry for Allied Health**

3 class and 2 lab hrs/wk, 4 cr.

Continuation of CH104. Introduces and investigates organic reactions. Topics include energy, radiation, acids, gases, and organic compounds. **Prerequisite:** CH104. Class fee \$8. W

**CH106 Chemistry for Allied Health**

3 class and 2 lab hrs/wk, 4 cr.

Continuation of CH105. Covers the chemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids. **Prerequisite:** CH105. Class fee \$8. Sp

**CH115 Consumer Chemistry**

3 class and 2 lab hrs/wk, 4 cr.

First of a three-term sequence. Introduces non-scientists to chemistry. Explores the meaning of science and chemistry and how they are connected to other disciplines and to the students' lives. Covers science vs. technology, scientific method, atomic structure and theory, nuclear chemistry, chemical bonding, nomenclature, chemical reactions, acids and bases, oxidation and reduction, and chemistry of the earth. Class fee \$8. F

**CH116 Consumer Chemistry**

3 class and 2 lab hrs/wk, 4 cr.

Second of a three-term sequence for the non-science major. Covers organic chemistry, polymers, energy and the future, air and its pollution, water and its pollution, agricultural chemistry, and food production in the third world. **Prerequisite:** CH115. Class fee \$8. W

**CH117 Consumer Chemistry**

3 class and 2 lab hrs/wk, 4 cr.

Third of a three-term sequence for the non-science student. Covers carbohydrates, fats, proteins, vitamins, brewing, baking, food additives, household chemicals, cosmetics, chemotherapy, drugs, sports medicine, and chemical toxicology. **Prerequisite:** CH116. Class fee \$8. Sp

**CH121 College Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

First of a three-term sequence. Introduction to the fundamentals of chemistry. A transfer course for students majoring in fields other than chemistry. Examines the interrelationships of chemistry to all disciplines of science. Topics include scientific method, atomic theory, stoichiometry, energy, periodicity, atomic structure, and bonding. **Prerequisite:** MTH070 or equivalent as determined by instructor. Class fee \$12. F, W

**CH122 College Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

Second in a three-term sequence. Provides basic understanding of molecular compound formations, changes of state, solutions, and reaction rates. Covers quantitative

composition, stoichiometry, the gaseous state, acids, bases, salts, oxidation-reduction, and organic chemistry. **Prerequisite:** CH121. Class fee \$12. W, Sp

**CH123 College Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

Continues with acid/base theory, oxidation-reduction reactions, nuclear chemistry, chemical equilibrium, organic chemistry, and the chemistry of living systems. **Prerequisite:** CH122. Class fee \$12. F, Sp

**CH201 Chemistry for Engineers**

3 class and 3 lab hrs/wk, 4 cr.

First of a three-term sequence. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, gas laws, and chemical thermodynamics: heat, work, and energy. **Prerequisite:** MTH095. Class fee \$12. F

**CH202 Chemistry for Engineers**

3 class and 3 lab hrs/wk, 4 cr.

Second of a three-term sequence. Covers liquids, phase changes, solutions, colloids, water pollution, distillation, chemical equilibrium, spontaneous changes, free energy, heat engines, acids and bases, atomic structure, quantum theory, stimulated emission, and laser light. **Prerequisite:** CH201. Class fee \$12. W

**CH203 Chemistry for Engineers**

3 class hrs and 3 lab hrs/wk, 4 cr.

Third of a three-term sequence. Covers chemical bonds, polar molecules, the periodic table, conductivity, bonding theories, molecular shapes, crystals, nonconductors, semiconductors, liquid crystals, metals, alloys, ceramic materials, polymers, electrochemistry, oxidation and reduction, electrochemical cells, galvanic cells, electrolysis, and electrolytic processes. **Prerequisite:** CH202. Class fee \$12. Sp

**CH221 General Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

First of a three-term sequence for students majoring in science and related professional fields. Includes matter and measurement; atoms, molecules and ions; chemical formulas and equations; atomic structure; periodic table; the gas laws; metals; and thermochemistry. **Prerequisite:** MTH095. Class fee \$12. F

**CH222 General Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

Continuation of CH221. Includes Hess' Law, First Law of Thermodynamics, covalent bonding, Lewis structures, resonance, electro-negativity, molecular structures, hybridization, molecular orbital theory, vapor pressures, phase diagrams, crystal structures, solutions, colligative properties, precipitation reactions, acid/base reactions, oxidation-reduction reactions, gaseous equilibrium, LeChatelier's principle, acids and bases, buffer solutions, and acid/base titration. **Prerequisite:** CH221. Class fee \$12. W

**CH223 General Chemistry**

4 class and 3 lab hrs/wk, 5 cr.

An in-depth study of acids and bases, ionic reactions, complex ions, oxidation and reduction, electrochemistry, quantitative analysis, and nuclear reactions. **Prerequisite:** CH222 or CH123. Class fee \$12. Sp

**CH241 Organic Chemistry**

3 class and 4 lab hrs/wk, 5 cr.

Principles of organic chemistry for students majoring in the health, biological, and environmental sciences. Emphasizes structure, nomenclature, physical properties, and chemical reactivities of organic molecules. Stresses bonding, functional groups, alkanes and cycloalkanes, conformational analysis, stereochemistry, and alkenes and alkynes. Microscale laboratory will reinforce concepts. **Prerequisite:** CH123 or CH223. Class fee \$12. F

**CH242 Organic Chemistry**

3 class and 4 lab hrs/wk, 5 cr.

Stresses alcohols, ethers, free-radical reactions, aromatic compounds, spectroscopy, oxidation-reduction, aldehydes, and ketones. **Prerequisite:** CH241. Class fee \$12. W

**CH243 Organic Chemistry**

3 class and 4 lab hrs/wk, 5 cr.

Stresses carboxylic acids and their derivatives, amines, condensation reactions, carbohydrates, lipids, amino acids, proteins, and nucleic acids. **Prerequisite:** CH242 or consent of instructor. Class fee \$12. Sp

**CJ****Criminal Justice****CJ100 Survey of the Criminal Justice System**

3 class hrs/wk, 3 cr.

A review of court systems and procedures from 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. Offered as needed.

**CJ101 Criminology**

3 class hrs/wk, 3 cr.

How factual materials pertaining to the causes and control of crime are related to biological, sociological, and psychological theories of punishment and treatment. Identifies imprisonment, probation, and parole as society's reactions to crime. Variations of these reactions are studied. Offered as needed.

**CJ110 Introduction to Law Enforcement**

3 class hrs/wk, 3 cr.

The history and philosophy of law enforcement and the administration of justice. Preview of a professional career in law enforcement. How agencies function in relation to public relations and professional and political ethics. Offered as needed.

**CJ131 Introduction to Penology**

3 class hrs/wk, 3 cr.

An introduction to the history and development of the prison system and the role of imprisonment as a correctional tool. Surveys some of the more significant activities involved in the treatment of incarcerated prisoners. Offered as needed.

**CJ132 Introduction to Parole and Probation**

3 class hrs/wk, 3 cr.

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. Offered as needed.

**CJ200 Police and Public Policy**  
3 class hrs/wk, 3 cr.

Discusses the role of criminal justice practitioners in maintaining community relations. Examines the interrelationships and role expectations of agencies and the public, police and community tension, minority groups, social forces, and police image. Offered as needed.

**CJ206 Crime and Delinquency**  
3 class hrs/wk, 3 cr.

Study of crime and delinquency data using age, sex, race, socioeconomic and educational status, urbanization, and other variables. Makes an in-depth inquiry into victimological studies together with collective and political criminality. Discusses class culture and its relationship with gang delinquency. Offered as needed.

**CJ207 Seminar in Criminal Justice**  
3 class hrs/wk, 3 cr.

Analysis of current and temporary issues in criminal justice. Stresses creative thinking and problem solving. Offered as needed.

**CJ210 Introduction to Criminal Investigation**  
3 class hrs/wk, 3 cr.

Covers the fundamentals of crime scene investigation which aid in the detection and apprehension of law violators. Offered as needed.

**CJ215 Criminal Justice Administration**  
3 class hrs/wk, 3 cr.

A survey of the administrative practices of criminal justice agencies with special emphasis on law enforcement. Covers administration in the public services area including organizational theory and management, personnel management, and policy and procedures formulation. Offered as needed.

**CJ220 Introduction to Substantive Law and Oregon Criminal Code**  
3 class hrs/wk, 3 cr.

Origin and structure of common-law crimes and procedures, and 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. Offered as needed.

**CJ226 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 the role of law enforcement in police procedures. Includes criminal procedures processes. Offered as needed.

**CJ230 Introduction to Juvenile Corrections**  
3 class hrs/wk, 3 cr.

Historical and contemporary aspects of juvenile offenders. Examines juvenile court philosophies and current treatment programs. Offered as needed.

**CJ231 Introduction to Corrections Process**

3 class hrs/wk, 3 cr.

Analyzes historical and contemporary backgrounds of adult offenders emphasizing current prevention, control, and rehabilitative programs. Offered as needed.

**CJ232 Introduction to Corrections Casework**

3 class hrs/wk, 3 cr.

Approaches to behavior modification through interviewing and counseling. Techniques in counseling and interviewing for entry-level practitioners in corrections. Traces development of positive relationships between the client and corrections personnel. Offered as needed.

**CJ280 Cooperative Work Experience**

see AUM280.

**COM**

**Communication Skills**

see also Human Development, Reading, Skills Development, Writing

**COM051 Communication Skills I**  
3 class hrs/wk, 3 cr.

Designed to improve communicative skills through writing. Students work on writing assignments intended to replicate technical and professional writing needs. Class fee \$2. F, W, Sp, Su

**COM052 Communication Skills II**  
3 class hrs/wk, 3 cr.

Designed to improve the student's speaking, reading, writing, and listening skills. Provides practice in effective habits of communication through listening, participating in interpersonal communication, presenting demonstrations orally, working in groups, interviewing for jobs, and learning about persuasion. Prerequisite: COM051 or equivalent. F, W, Sp

**COM053 Technical Report Writing**  
3 class hrs/wk, 3 cr.

Prepares students for jobs that demand skills in various writing situations with special emphasis on clarity, coherence, conciseness, and accuracy. Prerequisite: COM051 or consent of instructor. Class fee \$2. Sp

**CPL**

**Credit for Prior Learning**

**CPL120 Prior Learning Resume**  
3 class hrs/wk, 3 cr.

How to obtain credit hours for prior learning. Focuses on identifying career and educational goals; defining college level learning; identifying, documenting, and describing prior learning; writing competency statements; and preparing a resume for credit evaluation. Class fee \$5. Offered as needed.

**CIS**

**Computer Information Science**

**CIS120 Computer Information Science I**

3 class and 3 lab hrs/wk, 4 cr.

First in a three-course sequence. Introduction to terminology and overview of the historical development of computer and information science. Focuses on the basic concepts of computer hardware and software systems, the science of information representation, and the fundamental elements of program design and computer language. Concepts are reinforced in a laboratory environment. Prerequisite: MTH070 and RD115, or equivalent level of skill as demonstrated by satisfactory score on placement test. Class fee \$12. F

**CIS121 Computer Information Science II**

3 class and 3 lab hrs/wk, 4 cr.

Second in a three-course sequence. Introduction to the fundamental logic in designing specific algorithms for processing information systems. Concepts are reinforced in a laboratory environment. Prerequisite: CIS120 or concurrent enrollment, or consent of instructor. Class fee \$12. F, W

**CIS122 Computer Information Science III**

3 class and 3 lab hrs/wk, 4 cr.

A comparison of the Microsoft Windows and Macintosh microcomputer graphic environments with a focus on how each system addresses comparable user needs. Hypercard will be used as a tool for studying additional computer science topics. Prerequisite: CIS121 or consent of instructor. Class fee \$12. Sp

**CS**

**Computer Science**

**CS050 Data Communications Lab**  
4 lab hrs/wk, 2 cr.

Local area networks (LANs), are designed, constructed, and operated. Prerequisite: Concurrent enrollment in a class to be determined by the program chair. Class fee, \$8. W, Sp

**CS060 Techniques of User Training**  
2 class hrs/wk, 2 cr.

Introduces teaching methods, materials, and instructional design as related to training computer users. Prerequisite: Second-year standing in the Computer Programming program. Sp

**CS061 Computer Lab Assistant**  
3 lab hrs/wk, 1 cr.

Hands-on experience in working with students in a microcomputer lab. Prerequisite: Second-year standing in Computer Programming program. Class fee, \$8. W

**CS068 Microcomputer Graphics**  
3 class and 3 lab hrs/wk, 4 cr.

How to code a microcomputer to produce lines, graphics, and charts. Includes stationary and changing shapes. Prerequisite: CS133B or equivalent as determined by the instructor. Class fee \$12. F, Sp

**CS090 Program Logic and Testing**

3 class and 3 lab hrs/wk, 4 cr.

Program design and testing techniques geared to improving a programmer's debugging skills. **Prerequisite:** CS233C. Class fee \$12. F, W

**CS100 Beginning Microcomputer Use**

1 class hr/wk, 1 cr.

An introduction to the use of microcomputers in an office. A brief overview of necessary hardware and software, proper use of the equipment, operation of a microcomputer, use of purchased programs, and maintenance of computer files. Class fee, \$8. F, W, Sp, Su

**CS101 Introduction to Microcomputer Applications**

3 class hrs/wk, 3 cr.

Introduces the basic microcomputer hardware/software system. Covers operating system concepts and beginning commands; word processing, spreadsheet, and database applications; and other applications as they become available. **Prerequisite:** MTH051 or equivalent as determined by the instructor, RD090 or equivalent as determined by the instructor, and keyboard familiarity. Class fee \$12. F, W, Sp, Su

**CS104Q Worksheets-Quattro**

3 class and 3 lab hrs/wk, 4 cr.

Includes concepts associated with data type (labels and values), arithmetic formulas, and internal functions. Covers financial and statistical applications, as well as the use of commands to perform data distribution and to manipulate worksheet appearance. **Prerequisite:** CS101. Class fee \$12. F, W, Sp, Su

**CS113 Understanding Computers**

3 class hrs/wk, 3 cr.

An up-to-date survey of electronic data processing, computer hardware and software systems, and developments that provide a basis for further advancements in information processing. F, W, Sp

**CS125DB DBASE**

3 class hrs/wk, 3 cr.

Covers the use of the relational database language. The DBASE language is used to introduce personal computer (PC) database language concepts. The student may, with the instructor's approval, use other DBASE language dialects. **Prerequisite:** CS101 or equivalent as determined by the instructor. Class fee \$12. W

**CS125FX Micro Database Software-FoxPro**

3 class hrs/wk, 3 cr.

The FoxPro language is used to introduce personal computer (PC) database language concepts. **Prerequisite:** CS101 or equivalent as determined by the instructor.

**CS125P Micro Database Software-Paradox**

3 class hrs/wk, 3 cr.

The Paradox language is used to introduce personal computer (PC) database language concepts. **Prerequisite:** CS101 or equivalent as determined by the instructor. Class fee, \$12. Sp

**CS125SS LOTUS I-Worksheets**

3 class and 3 lab hrs/wk, 4 cr.

Use of electronic spread sheets in a multi-worksheet environment. Covers various spreadsheet and software packages. **Prerequisite:** CS101 or equivalent as determined by the instructor. Class fee, \$12. W

**CS131 Introduction to Data Processing**

3 class hrs/wk, 3 cr.

Concepts, elements, and structure of business data processing systems. Includes classifying, calculating and reporting functions, programming, and computer fundamentals. **Prerequisite:** MTH061 or equivalent as determined by the instructor, and RD090 or equivalent as determined by the instructor. Class fee \$12. F, W, Sp, Su

**CS133A Assembler I**

4 class hrs/wk, 4 cr.

Introduces IBM System Assembler language, using standard and decimal instruction sets. **Prerequisite:** CIS121. Class fee \$12. W

**CS133B Introduction to Programming BASIC**

4 class and 1 lab hrs/wk, 4 cr.

Covers introductory-level computer programming. Emphasizes program design using structured problem solving and programming techniques. How to analyze problems and solve them by designing, coding, debugging, and running programs in BASIC language. Purpose of the course is to explain the structure and logic of programs and what they are, and to help students understand the usefulness and limitations of computers, rather than to train professional programmers. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee \$12. F, W, Sp, Su

**CS133C COBOL I**

4 class hrs/wk, 4 cr.

An introduction to ANS COBOL programming. Coding, debugging, and documenting simple business-oriented programs. Emphasizes language structure and problem solving by applying top-down structured programming techniques. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee \$12. W

**CS133E EASYTRIEVE PLUS**

3 class hrs/wk, 3 cr.

How to code simple business-oriented programs. Emphasizes language structure and rules, file management, and retrieval. **Prerequisite:** CS233C or equivalent as determined by the instructor. Class fee \$12. W

**CS133F FORTRAN IV**

4 class hrs/wk, 4 cr.

An introduction to language structure, manipulation of arrays, input and output formats, coding techniques, function, subroutines, disk files, and memory-dump debugging. Program assignments involve simple management and science problems. **Prerequisite:** MTH095 or equivalent as determined by the instructor. Class fee \$12. Offered as needed.

**CS133R RPG for Programmers**

3 class and 3 lab hrs/wk, 4 cr.

Basic features of the RPG III language. Students write several RPG programs that print reports and build and maintain files. **Prerequisite:**

CIS121 or equivalent as determined by the instructor. Class fee \$12. Sp

**CS133U C Language**

3 class and 3 lab hrs/wk, 4 cr.

An introduction to C programming language. Covers the structure of the language, the manipulation of data and arrays, and how to handle input and output functions. **Prerequisite:** CIS121. Class fee \$12. W

**CS135DB Advanced DBASE**

3 class and 3 lab hrs/wk, 4 cr.

Development of an application system which includes a menu program, update program, and inquiry and reporting programs. **Prerequisite:** CS125DB. Class fee \$12. Offered as needed.

**CS135SS LOTUS II-Macros**

3 class hrs/wk, 3 cr.

Uses of LOTUS 1-2-3. Emphasizes writing and development of LOTUS macros. **Prerequisite:** CS125SS. Class fee \$12. W

**CS0140A OS Concepts and Facilities**

3 class hrs/wk, 3 cr.

A study of the concepts and facilities of the IBM OS/VSI operating system. Includes an introduction to IBM OS job-control language. Students run exercises on the IBM system located in the college computer center. **Prerequisite:** CS133C. Class fee \$12. Sp

**CS140B Microcomputer Operating Systems**

3 class hrs/wk, 3 cr.

Studies operating systems currently used on large and small minicomputers. How to use these operating systems to access files and communicate with other microcomputers. **Prerequisite:** CS101, CIS120, or equivalent as determined by the instructor. Class fee \$12. Offered as needed.

**CS140M MS/DOS Operating Systems**

1 class hr/wk, 1 cr.

A study of the MS/DOS operating system used on IBM-PC type microcomputers. Includes practice in using MS/DOS to run a microcomputer and access files. **Prerequisite:** CS101 or equivalent as determined by the instructor.

**CS140U UNIX**

1 class hr/wk, 1 cr.

A study of the UNIX operating system. Includes practice in using the UNIX operating system to run a microcomputer, access files, and communicate with other microcomputers. **Prerequisite:** CS101 or equivalent as determined by the instructor.

**CS145 Microcomputer Hardware/Software Evaluation**

3 class and 2 lab hours/wk, 4 cr.

A study of the hardware concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and hardware. **Prerequisite:** Concurrent enrollment in CS240, or CS140B and ELT067. Class fee, \$12. W

**CS161 Computer Science I-C Language**

4 class hrs/wk, 4 cr.

Provides a foundation in programming concepts for computer science majors and other

students. Emphasizes the program structure of sequence, selection, iteration, and modularity. Introduces arrays and pointers. **Prerequisite:** Grade C or higher in MTH111 or equivalent as determined by the instructor. Class fee, \$12. F

### **CS162 Computer Science II-C Language**

**4 class hrs/wk, 4 cr.**

Continuation of CS161. Use of pointers, multidimensional arrays, structures, and other C building blocks in a modular environment. Includes sorting and searching techniques; building of stacks, queues, and linked lists; and analysis of preferred algorithms for a given problem. **Prerequisite:** Grade C or higher in CS161 or equivalent as determined by the instructor. W

### **CS171 Principles of Computer Organization**

**3 class and 3 lab hrs/wk, 4 cr.**

Introduces the organization of a digital computer. Covers number systems, encoding of data, Boolean and digital logic fundamentals, processor components, instruction execution, Assembler language programming, and the Assembler process. **Prerequisite:** Second-year standing in the Microcomputer Support Specialist program. Class fee, \$12. W

### **CS233A Assembler II**

**3 class and 6 lab hrs/wk, 5 cr.**

A programming option for students interested in becoming systems programmers. Subprogram modules and macros are written, linked, and tested. **Prerequisite:** CS133A. Class fee \$12. Offered as needed.

### **CS233B BASIC for Programmers**

**3 class and 3 lab hrs/wk, 4 cr.**

Features and instructions of BASIC language. How to write computer programs using BASIC that print reports and build and maintain files. Students develop reports and file contents. **Prerequisite:** CS133B or equivalent as determined by the instructor. Class fee \$12. Sp

### **CS233C COBOL II**

**4 class hrs/wk, 4 cr.**

Continuation of CS133C. Business-oriented programs are coded, debugged, and documented using top-down structured programming techniques. Emphasizes coding techniques to make program coding, debugging, and documentation, as well as program maintenance, easier. **Prerequisite:** CS133C. Class fee \$12. Sp

### **CS233I Prolog**

**3 class and 3 lab hrs/wk, 4 cr.**

How to use a computer program to search files and synthesize concepts and relationships from the file information. Covers storing facts in files and extracting new data from given facts. Class fee \$12. Sp

### **CS233M Modula-2**

**3 class and 3 lab hrs/wk, 4 cr.**

An introduction to computer programming using Modula-2 language. Includes programming techniques, basic concepts, and principles. Class fee \$12. Sp

### **CS233U Advanced C**

**3 class and 3 lab hrs/wk, 4 cr.**

A continuation of CS133U. Studies features and instructions of the C language. Empha-

sizes application-oriented programs that produce printed reports, maintain files, and modify an operating system. Class fee \$12.

**Prerequisite:** CS133U. Sp

### **CS234C COBOL/CICS Programming Techniques**

**4 class hrs/wk, 4 cr.**

Advanced course in ANS COBOL. Complete business application packages are coded and documented. Emphasis on efficiency coding, file backup and restoration procedures, systems planning, modular programming, VSAM files, systems documentation, data management techniques, independent research, and problem solving. **Prerequisite:** CS234L and CS246. Class fee \$12. Sp

### **CS234L On-Line Programming Techniques**

**4 class hrs/wk, 4 cr.**

Study of CICS on-line application programming using the COBOL language. **Prerequisite:** CS233C or consent of instructor. Class fee \$12. F

### **CS236 Advanced Languages for Microcomputers**

**2 class and 3 lab hrs/wk, 3 cr.**

Covers structured programming and the effects different high-level programming languages have on microcomputer operating systems. **Prerequisite:** CS131 and one of the following: CS133B, CS233B, or a course in any other programming language. Class fee \$12. Sp

### **CS237 Software Design**

**3 class and 3 lab hrs/wk, 4 cr.**

Coding and documentation of microcomputer programs as well as the special considerations and requirements of interactive programs. **Prerequisite:** Consent of instructor. Class fee \$12. Offered as needed.

### **CS240 Advanced MS/DOS and Utilities**

**3 class hrs/wk, 3 cr.**

Study of advanced MS/DOS capabilities and commands. Incorporates the use of third-party utility programs, hard disk management concepts, MS/DOS in a network environment, and MS/DOS-OS-AIX migration considerations. **Prerequisite:** CS140B or consent of instructor. Class fee \$12. W

### **CS244 Systems Analysis I**

**3 class hrs/wk, 3 cr.**

Basic administrative procedures. Principles of organizing, planning, and administering a procedure program. Methods of carrying out individual systems and procedures studies. Procedures analysis and improvement techniques, the role of systems and procedures in business management, systems charting, work simplification, and measurement. **Prerequisite:** Second-year standing in the Computer Programming or Business Administration programs. Sp

### **CS246 Systems Analysis II**

**3 class hrs/wk, 3 cr.**

Fundamentals of automated systems and procedures. Techniques and principles of top-down systems analysis and design, data gathering, feasibility studies, problem analysis, systems economics, forms design and control, procedure writing, and the planning involved in the installation of electronic data processing systems. **Prerequisite:** CS244. F

### **CS252B Advanced Programming-BASIC**

**3 class and 3 lab hrs/wk, 4 cr.**

An advanced course in Microsoft BASIC. Complete business application packages are coded and documented. Includes efficiency coding, file backup and restoration procedures, system planning, modular programming, indexed files, systems documentation, data management techniques, independent research, and problem solving. **Prerequisite:** CS233B. Class fee \$12. W

### **CS260 Computer Science III: Data Structures**

**4 class hrs/wk, 4 cr.**

Continuation of CS162. Covers additional concepts in recursion, graphs, and object-oriented programming. **Prerequisite:** Grade C or higher in CS162 or equivalent as determined by the instructor. Class fee, \$12. Sp

### **CS270 Information Systems Administration**

**4 class hrs/wk, 4 cr.**

Studies file and control structures involved in data retrieval and updating, backup procedures, and security considerations. Examines requirements necessary for meeting an organization's objectives. **Prerequisite:** CS246. Sp

### **CS271 Computer Organization and Assembler Language**

**3 class and 3 lab hrs/wk, 4 cr.**

Computer peripheral devices and the necessary instruction sets. An introduction to use of loaders and macros, programming of interrupt handlers and device drivers, and interfacing to higher level languages. **Prerequisite:** CS171. Class fee, \$12. Sp

### **CS275 Data Base Management**

**3 class hrs/wk, 3 cr.**

Addresses database development, a concept which includes data modeling, database design, and database implementation. Identifies the entity-relationship and object data modeling techniques, and the importance of normalizing data models. Techniques of implementing these models into a relational database scheme will be presented and relational algebra concepts will also be discussed. **Prerequisite:** CS244. W

### **CS278 Data Communications**

**3 class hrs/wk, 3 cr.**

Fundamental concepts in data communication including definition of terms, communication of concepts, comparison of voice and data communication (analog vs. digital signals), medium access, elementary data link protocols, topologies, servers, and operating system standards implemented in Local Area Networks (LAN). **Prerequisite:** Second-year standing in Computer Programming program. Class fee, \$12. Sp

### **CS279 Network Management**

**3 class hrs/wk, 3 cr.**

A study of local area network systems (LANS) and wide area network systems (WANS) using Novell's operating system. The design, construction, operation, maintenance, and management of a network, including the installation of software packages, printers, and users will be covered. **Prerequisite:** CS145, CS140B, CS278, and CS050. Sp

**CS280 Cooperative Work Experience**  
see AUM280.

**CS285 Fourth-Generation Language-SQL**  
3 class hrs/wk, 3 cr.

Use of standard SQL commands and syntax forms to perform typical query commands. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee, \$12. F

## CT

### Clothing/Textiles

**CT199 Basic Clothing for the Consumer**

1 class and 2 lab hrs/wk, 2 cr.

An overview of basic clothing construction techniques, garment selection, and the purchase of ready-to-wear apparel. Sp

**CT210 Clothing Construction**  
6 lab hrs/wk, 3 cr.

Applies principles and techniques of construction to individual projects. Offered as needed.

**CT212 Clothing Construction II**  
6 lab hrs/wk, 3 cr.

How to create clothes from fit to finish. Includes altering and adapting patterns, creating a basic fitting garment, sewing new fabrics, tailoring, and fabric care. Offered as needed.

## CTX

### Construction

**CTX050 Fundamentals of Construction**

10 lec and 22 lab hrs/wk, 18 cr.

Provides an orientation to construction methods, standards, and safety practices common to all construction trades. The combination of lecture and laboratory provides an overview of the construction trades and allows students to experience specific skill areas. Information and assistance will be given to students in choosing a trade area for future employment and career development. F, W

**CTX060 Applied Construction Principles**

5 class and 27 lab hrs/wk, 15 cr.

Instruction in the field of commercial carpentry with an emphasis on forming, framing, and rigging. Much of this course can be directly applied to residential carpentry. Students will be given opportunities in the laboratory and field to participate in the actual and/or simulated building and erection of foundations, forms, and framed structural components. **Prerequisite:** CTX050. W, Sp

## CVL

### Civil-Structural Technology

**CVL045 Engineering Orientation for the Office Professional**

1 class hr/wk, 1 cr.

An introduction to the engineering profession for a secretary-receptionist-bookkeeper. Covers disciplines, principles, ethics, and practices. Discusses possible duties of an en-

gineering secretary-receptionist-bookkeeper which may differ from more traditional job requirements. Offered as needed.

**CVL053 Calculator Proficiency**  
2 class hrs/wk, 2 cr.

Instruction in operation of HP42S or HP485Y hand-held engineering calculator. Covers simple and complex mathematical operations including trigonometry. Introduces the use of modules and printers. **Prerequisite:** Introduction to trigonometry and completion of two years of high school algebra. F

**CVL054 Engineering Fundamentals**  
3 class hrs/wk, 3 cr.

Static forces and their effect upon rigid bodies at rest. Includes stresses and strains caused by tensile, compressive, and shearing forces. **Prerequisite:** MTH053 or equivalent as determined by the instructor. F

**CVL059 Soil Mechanics Fundamentals**  
3 class hrs/wk, 3 cr.

Includes the study and comparison of soil classifications, the problems of soil, and use of soil in construction. Study of subsurface soils investigation reports and comparisons to values given in the Uniform Building Code. **Prerequisite:** MTH052 or MTH081. Class fee \$5. F

**CVL060A Plane Surveying I-Lecture**

3 class hrs/wk, 3 cr.

A beginning study of surveying techniques, including fundamentals of taping and leveling, care and handling of surveying instruments, and office procedures. **Prerequisite:** MTH081 and concurrent enrollment in CVL060B, or consent of instructor. F

**CVL060B Plane Surveying I-Lab**  
6 lab hrs/wk, 2 cr.

A beginning study of basic survey field techniques, and care and handling of survey equipment. **Prerequisite:** Concurrent enrollment in CVL060A or consent of instructor. Class fee \$10. F

**CVL061A Plane Surveying II-Lecture**

3 class hrs/wk, 3 cr.

A continuation of CVL060A. Study of distance and direction measurement using theodolites, steel tapes, traversing and associated office computations, areas, stadia, circular curves, as well as a brief outline of public land surveys. Exposure to electronic distance measuring devices. **Prerequisite:** CVL060A, and concurrent enrollment in CVL061B and MTH082. W

**CVL061B Plane Survey II-Lab**  
6 lab hrs/wk 2 cr.

Continuation of CVL060B. Students use theodolites to traverse and locate various engineering and topographic features. **Prerequisite:** Concurrent enrollment in CVL061A or consent of instructor. Class fee, \$10. W

**CVL064A Construction and Route Surveying-Lecture**

3 class hrs/wk, 3 cr.

Practical applications of a plane survey practice. Students will solve route alignment and construction staking problems. Advanced surveying practice such as state plane coordi-

nates and astronomy will be introduced. **Prerequisite:** CVL061A, MTH082, concurrent enrollment in CVL064B, or consent of instructor. Sp

**CVL064B Construction and Route Surveying-Lab**  
6 lab hrs/wk, 2 cr.

Course will review practical applications of all surveying practices. Students stake right-of-way, grades, curbs, water lines, and buildings. **Prerequisite:** Concurrent enrollment in CVL064A or consent of instructor. Class fee \$10. Sp

**CVL066A Surveying for Drafters**  
2 class hrs/wk, 2 cr.

Basics of surveying terminology and practices. Calculations are made to balance a traverse, solve curves, and determine volume. **Prerequisite:** MTH052 and concurrent enrollment in CVL066B, or consent of instructor. Sp

**CVL066B Surveying for Drafters Lab**

6 lab hrs/wk, 2 cr.

Basics of taking measurements using levels and rods. Distance and direction measurements are made with theodolite, stadia, and steel tape. Simple procedures for the care and adjustment of survey equipment is covered. **Prerequisite:** Concurrent enrollment in CVL066A or consent of instructor. Class fee \$10. Sp

**CVL074 Construction Estimating, Contracts and Specifications**  
3 class and 3 lab hrs/wk, 4 cr.

Study of construction estimating, specifications, and contracts. Instruction in determining how much material will be required to build a specific project. W

**CVL076 Soils Testing Laboratory**  
3 lab hrs/wk, 1 cr.

Designed to acquaint the entry-level soils technician with the tests and test procedures used most often. **Prerequisite:** MTH081 or equivalent as determined by the instructor. Class fee \$10. W

**CVL078 Concrete and Concrete Testing**

2 class and 3 lab hrs/wk, 3 cr.

Includes concrete mix design and testing practices. Designed to enable the student to take the American Concrete Institute Concrete Field Technician Certification Exam. Includes construction site visits and field testing of concrete in order to relate structural design to field inspection for quality control. **Prerequisite:** MTH052 or MTH081. Class fee \$10. Sp

**CVL080 Applied Mechanics**  
3 class 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:** Concurrent enrollment in MTH082 or equivalent as determined by the instructor. Sp

**CVL082 Strength of Materials**  
4 class hrs/wk, 4 cr.

A study of the stresses and strains which affect materials subjected to tensile, compressive, and shearing forces. Covers stress and deformation, engineering materials and



their properties, thin-wall pressure vessels, torsion, centroids and moment of inertia of areas, shear and moment in beams, and combined stresses and columns. **Prerequisite:** MTH082, CVL080, or consent of instructor. F

### **CVL084 Soil Mechanics and Foundations**

3 class hrs/wk, 3 cr.

Covers soil classification and acquaints students with many problems concerning soil and use of soil in construction. Includes soil classification systems, soil characteristics, and soil reports. Various types of foundations and their requirements will also be studied. **Prerequisite:** CVL082, MTH081, and CVL087. Class fee \$5. Sp

### **CVL087 Hydraulics**

4 class hrs/wk, 4 cr.

Application of principles of fluid mechanics related to static and dynamic forces of liquids. Covers pipe and open channel flow, including siphons, weirs, flumes, and dams. **Prerequisite:** CVL080 and MTH082, or consent of instructor. F

### **CVL088 Environmental and Sanitary Engineering**

3 class hrs/wk, 3 cr.

Major aspects of air, water, and land pollution. Includes causes, effects on the environment, methods of prevention and treatment. Includes domestic and industrial water supply, water storage, treatment, distribution, waste collection, storage treatment, and disposal. **Prerequisite:** MTH082 and CVL087. W

### **CVL090 Timber Construction and Design**

3 class hrs/wk, 3 cr.

Fundamentals of wood and construction. Beams, columns, and connections are analyzed and designed using parameters of the Uniform Building Code, the National Design Specifications, and the Recommended Practice for Structural Design by the National Forest Products Association. **Prerequisite:** MTH082 or equivalent as determined by the instructor, and CVL082. W

### **CVL091 Steel Construction and Design**

3 class hrs/wk, 3 cr.

Fundamentals of steel design and construction. Beams, columns, and connections are analyzed and designed using parameters of the Uniform Building Code and the American Institute of Steel Construction. **Prerequisite:** MTH082 or CVL082. W

### **CVL092 Reinforced Concrete Design and Construction**

3 class hrs/wk, 3 cr.

Covers reinforced concrete design and construction practices. Structural design calculations emphasize the Ultimate Strength Design Method and will include the fundamental concepts for rectangular beams, T-beams, slabs, columns, footings, and foundations. **Prerequisite:** MTH082 or equivalent as determined by the instructor, and CVL082. Class fee \$10. Sp

### **CVL280 Cooperative Work Experience**

see AUM280.

## **Dance**

see Physical Education

## **DEN**

### **Dental Assisting**

#### **DEN050 Dental Sciences I**

3 class hrs/wk, 3 cr.

Sciences associated with the practice of dentistry. Includes oral microbiology, oral pathology, sterilization, anesthesiology, dental office emergencies, pharmacology, and nutrition. **Prerequisite:** Enrollment in Dental Assisting program or consent of instructor. F

#### **DEN051 Introductory Concepts in Dental Assisting**

2 class and 2 lab hrs/wk, 3 cr.

Examines the dental assistant's role with emphasis on terminology, instruments and equipment, personal regimen, chairside techniques, and patient communication. Emphasizes the qualifications necessary for success in the dental assistant field. **Prerequisite:** Enrollment in Dental Assisting program or consent of instructor. F

#### **DEN052 Dental Anatomy and Physiology**

3 class and 3 lab hrs/wk, 4 cr.

An introduction to basic general and oral anatomy. Emphasizes the bodily physiological process, the oral cavity and associated structures, and anatomical terminology. Discusses the skeletal system; organ systems; head and neck anatomy; the musculature, nervous, and circulatory systems and their innervation; and the oral cavity's anatomical and functional structures. **Prerequisite:** Enrollment in the Dental Assisting program or consent of instructor. Class fee \$5. F

#### **DEN053 Dental Materials I**

2 class and 4 lab hrs/wk, 4 cr.

Introduces materials and laboratory equipment used in dental offices such as chemical and physical properties; manipulation; and uses of restorative materials, medications, impression materials, gypsum, and dental cements. Includes restorative and crown preparation procedures, and demonstrations and practice in using materials and instruments. **Prerequisite:** Enrollment in the Dental Assisting program. Class fee \$15. F

#### **DEN060 Dental Sciences II**

3 class and 3 lab hrs/wk, 4 cr.

Various fields of specialized dentistry recognized by the American Dental Association and the sciences associated with them. Includes operative dentistry, oral surgery, oral pathology, periodontics, pedodontics, endodontics, orthodontics, and public health dentistry. Role playing in simulated clinical situations. **Prerequisite:** Second-term standing in the Dental Assisting program. W

#### **DEN061 Dental Assisting Practicum I**

1 class and 7 lab hrs/wk, 3 cr.

Provides supervised clinical experience in basic chairside assisting procedures at the Oregon Health Sciences University School of Dentistry. Includes material manipulation, oral evacuation, instrument transfer, charting, and patient management. **Prerequisite:** Second-term standing in the Dental Assisting program. W

ing program and proof of current Level-C CPR card. Class fee \$5. W

#### **DEN062 Expanded Functions I**

2 class and 3 lab hrs/wk, 3 cr.

A presentation of the theory and practice of new procedural responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration, and practical application of topical anesthetic application, rubber dam placement and removal, alginate impressions, and bite registration. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. W

#### **DEN063 Dental Materials II**

2 class and 4 lab hrs/wk, 4 cr.

Introduces principles of laboratory procedures related to fixed and removable prosthetics. Includes working with laboratory equipment and demonstrations of additional laboratory techniques and materials. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. W

#### **DEN064 Dental Radiology I**

2 class and 3 lab hrs/wk, 4 cr.

Presents principles of dental radiology and legal aspects regarding use of radiation; terminology; radiation physics; machine operation and equipment use; biological effects of x-rays; principles of radiation; health, safety, and protection; anatomical landmarks; dental films; and darkroom processing techniques. Students practice film placement and exposure techniques on manikins. Exposed films are processed and evaluated. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. W

#### **DEN070 Dental Office Management**

2 class and 3 lab hrs/wk, 3 cr.

Includes business office procedures and techniques, written communications, typing, bookkeeping and banking, inventory control, office maintenance, equipment, and rapport with patients and other personnel. **Prerequisite:** Third-term standing in the Dental Assisting program. Sp

#### **DEN071 Dental Office Practicum II**

1 class and 16 lab hrs/wk, 6 cr.

Students practice and observe in an ethical dental office to help develop rapport with dental team members and patients. Students perform specified chairside procedures and reception tasks, apply skills in laboratory procedures, and expose and process patient x-rays as directed by dentist. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$5. Sp

#### **DEN072 Expanded Functions II**

2 class and 3 lab hrs/wk, 3 cr.

Continues DEN062. Includes discussion, demonstration, and practical application of preventive dentistry, coronal polish, topical fluoride amalgam polish, instrument sharpening, cement removal, and periodontal dressing removal. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$15. Sp

#### **DEN074 Dental Radiology II**

1 class and 3 lab hrs/wk, 2 cr.

Continues DEN064. Students take x-rays and process and evaluate exposed films. Students may take the Oregon Radiological Profi-

ciency Clinical examination upon completion of DEN064 and DEN074. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$15. Sp

**DEN080 Dental Assistant Seminar**  
2 class hrs/wk, 2 cr.

Prepares students for Dental Assisting National Board Certification Examination. Also incorporates information on writing resumes, completing job applications, and interviewing for jobs. **Prerequisite:** Fourth-term standing in the Dental Assisting program. Su

**DEN081 Dental Office Practicum III**  
1 class and 8 lab hrs/wk, 5 cr.

Provides observation, advanced clinical and laboratory practice, and business office management in an ethical general or specialty dental office. **Prerequisite:** Fourth-term standing in the Dental Assisting program. Class fee \$5. Su

**DRF**

**Drafting Technology**

**DRF050 Sketching**  
3 labs/wk, 1 cr.

Development of basic freehand technical sketching skills and techniques used in drafting and practical pictorial communication. F

**DRF051 Machine Drafting I**  
1 class and 6 lab hrs/wk, 3 cr.

Covers the fundamentals of mechanical drafting including geometric construction, multiview projection, isometric drawing, application of welding symbols, section views, auxiliary views, and dimensioning. Class fee \$5. F, W

**DRF053 Machine Drafting II**  
3 lab hrs/wk, 1 cr.

Drafting of machine parts with ink on film. Covers orthographic, section, and auxiliary views. **Prerequisite:** DRF051 or equivalent as determined by the instructor. Class fee, \$5. W

**DRF054 Drafting I**  
1 class and 3 lab hrs/wk, 2 cr.

Fundamentals of drafting and basic drawing techniques. Emphasizes use of drafting instruments, standard orthographic projections, layout procedures, ASA-approved lettering techniques, geometric construction, selection of views, sectional auxiliary views, and standard dimensioning practices, including metrics. Class fee \$5. F

**DRF055 Architectural Design**  
1 class and 6 lab hrs/wk, 3 cr.

Elements and principles of aesthetic design are studied and applied to assigned laboratory projects. **Prerequisite:** Concurrent enrollment in DRF075 or consent of instructor. Class fee \$5. Sp

**DRF056 Architectural Drafting**  
1 class and 6 lab hrs/wk, 3 cr.

Basic architectural drafting techniques and methods. Covers architectural lettering, layout, arrangements, symbols, and conventional construction methods used in residential or light commercial buildings. Incorporates some CAD. **Prerequisite:** DRF051, DRF054, DRF072; or consent of instructor. Class fee \$5. W

**DRF056A Architectural Drafting-A**  
3 lab hrs/wk, 1 cr.

Basic architectural drafting techniques and methods. Includes architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. Covers the first one-third of DRF056. **Prerequisite:** DRF051, DRF054, or consent of instructor. W

**DRF056B Architectural Drafting-B**  
3 lab hrs/wk, 1 cr.

Basic architectural drafting techniques and methods. Includes architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. Covers the second one-third of DRF056. **Prerequisite:** DRF056A. W

**DRF056C Architectural Drafting-C**  
1 class and 3 lab hrs/wk, 2 cr.

Basic architectural drafting techniques and methods. Includes architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. Covers the final one-third of DRF056. **Prerequisite:** DRF056B. W

**DRF059 Print Reading**

1 class and 3 lab hrs/wk, 2 cr.

Students study various drawings of residential and commercial construction. Includes symbol designations used in construction. Emphasizes construction methods, terminology, and reference sources. F

**DRF060 Advanced Print Reading**

1 class and 3 lab hrs/wk, 2 cr.

Reading and interpreting architectural plans and specifications of complex building construction. **Prerequisite:** DRF059 or consent of instructor. W

**DRF061 Technical Illustration I**

1 class and 6 lab hrs/wk, 3 cr.

Methods of pictorial drawing, exploded view drawings with pencil and ink shading, freehand, and template drawings. Introduces color and rendering techniques. **Prerequisite:** DRF051 and DRF053, or consent of instructor. Class fee \$5. Sp

**DRF063 Pattern Development**

8 lab hrs/wk, 3 cr.

Development of patterns for sheet metal and similar applications. Using principles of descriptive geometry by parallel line, radial line, triangulation, and simplified triangulation methods. **Prerequisite:** DRF053 and DRF074, or consent of instructor. Class fee \$5. Offered as needed.

**DRF065 Introduction to HP48**

Calculators

2 class hrs/wk, 2 cr.

Computation and presentation of technical data using the HP48 engineering calculator to solve typical problems in mechanical, civil, and tool design and related areas. **Prerequisite:** Concurrent enrollment in MTH065 or higher, or consent of instructor. F, W

**DRF066 Tool Design**

1 class and 6 lab hrs/wk, 3 cr.

Introduction to modern principles of tool design including gauging, locating, clamp-

ing, and fixture design. Covers modern high production techniques and tooling, limit dimensioning, and tolerancing. **Prerequisite:** DRF053 and MFG057, or consent of instructor. Class fee \$5. W

**DRF068 Geometric Tolerancing**

1 class hr/wk, 1 cr.

Studies geometric tolerancing related to product design, machine drafting, and production. Emphasizes the close relationship between geometric tolerancing, gauging, and quality control. **Prerequisite:** Concurrent enrollment in DRF053 or consent of instructor. W

**DRF070 CAD Pipe Systems**

1 class and 3 lab hrs/wk, 2 cr.

Covers schematic diagrams and pictorial layouts, orthographic projection with double line drawings, proper use of piping catalogs, and the development of a menu. All of the drafting in this course will be done on the computer using Intergraph MicroStation PC software. **Prerequisite:** DRF053 and DRF073, or consent of instructor. Class fee \$5. Sp, Su

**DRF071 Machine Design**

1 class and 6 lab hrs/wk, 3 cr.

Practical design situations related 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:** DRF053 and MFG053. Class fee \$5. F

**DRF072 Introduction to AutoCAD**

2 class and 3 lab hrs/wk, 3 cr.

Incorporates hands-on experience with AutoCAD, a PC-based computer-aided drafting program. Includes standard graphics commands for two-dimensional drawings. Class fee \$5. F, W, Sp, Su

**DRF073 Advanced AutoCAD**

2 class and 3 lab hrs/wk, 3 cr.

Advanced drafting applications using AutoCAD. Covers multiview, auxiliary, and section drawings. Includes menu customization and DOS applications. **Prerequisite:** DRF072 or consent of instructor. Class fee \$5. F, W, Sp, Su

**DRF074 Descriptive Geometry**

1 class and 6 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 geometric solution of vectors. **Prerequisite:** DRF053, MTH081, or consent of instructor. Class fee \$5. Sp

**DRF075 AutoCAD 3-D**

1 class and 3 lab hrs/wk, 2 cr.

Uses 3-D capabilities to generate three-dimensional models of mechanical parts. Covers advanced modeling extension (AME). Generation of 2-D projections using Profile operations. **Prerequisite:** DRF073 or consent of instructor. Class fee \$5. Sp

**DRF076 CAD Mechanical**

1 class and 3 lab hrs/wk, 2 cr.

Assembly and details of a simple machine on a CAD system. Includes precision dimensioning and tolerancing. **Prerequisite:** DRF051 and DRF072. Class fee, \$5. W

**DRF077 Introduction to MicroStation PC**

2 class and 3 lab hrs/wk, 3 cr.

Introduces the MicroStation PC drafting software. Covers the basic drawing, editing, and display commands. Contrasts operations to AutoCAD. **Prerequisite:** DRF051 and DRF072. W

**DRF078 AutoLISP Programming**

2 class and 3 lab hrs/wk, 3 cr.

Features and instructions of the AutoLISP language. Development of custom functions for AutoCAD. Emphasizes program design using structured problem solving and programming techniques. Includes coverage of DOS commands. **Prerequisite:** DRF073 and MTH082. F

**DRF079 CAD Electronics**

2 class and 3 lab hrs/wk, 3 cr.

How computer-aided drafting/design relates to electronics industries. Emphasizes schematics, wiring diagrams, block and flow diagrams, PC board layout, I.C. applications, and graphic drawings. **Prerequisite:** DRF090 and ELE060, or DRF091 and ELT053. Class fee \$5. Sp

**DRF081 Mapping and Platting**

1 class and 6 lab hrs/wk, 3 cr.

Introduces the basic components of maps, subdivisions, and plats. Includes an introduction to aerial photo interpretation. **Prerequisite:** DRF053 or consent of instructor. Class fee \$5. Sp

**DRF082 Civil Drafting-Softdesk**

1 class and 6 lab hrs/wk, 3 cr.

Introduces projects that would be drawn in a civil engineering office using computers and civil engineering software. Stresses mathematics, survey skills, and the use of a calculator. **Prerequisite:** DRF053 or consent of instructor. Class fee \$5. F

**DRF083 Project Development**

1 class and 6 lab hrs/wk, 3 cr.

Brings together methods of applying mathematics, survey knowledge, and drafting skills. Covers subdivision designing, location of structures on plots, construction of contour lines, and building set-back lines. Students obtain data from the field and relate that data to the design of the project. **Prerequisite:** DRF054 and DRF082 or consent of instructor. Sp

**DRF084 GIS Applications Lab**

3 lab hrs/wk, 1 cr.

Uses ArcView software to view geographic relationships. Study of GIS basic concepts. Covers physical, climatic, and social attributes of various regions of the world. **Prerequisite:** DRF073 or consent of instructor. Class fee, \$5. F

**DRF085 Geographic Information Systems (GIS)**

1 class and 6 lab hrs/wk, 3 cr.

Uses PC ARC/INFO software in Geographic Information Systems (GIS) applications. Studies GIS basic concepts and covers ARC/INFO commands and operations. **Prerequisite:** DRF073 or consent of instructor. Class fee, \$5. F

**DRF086 Power Transmission Design**

3 class hrs/wk, 3 cr.

Covers power transmission systems. Includes hydraulics, pneumatics, electric motors, chains, sprockets, V-belts, bearings, and speed reducers. Emphasizes analysis of system requirements, sizing of machine elements, and selection of components from industrial catalogs. **Prerequisite:** MTH082, CVL080, or consent of instructor. F

**DRF087 Flexible Manufacturing Systems**

2 class and 3 lab hrs/wk, 3 cr.

An introduction to industrial control circuits, their use, and design. Hydraulic, pneumatic, and electronic circuits will be designed to control direction, speed, and sequence of operations. Covers digital design, fluid components, Boolean algebra, combinatorial logic, sequential logic and electronic components. Applies theories by using an industrial robot and programmable controllers. **Prerequisite:** ELE060 or consent of instructor. Sp

**DRF089 Structural Drafting**

1 class and 6 lab hrs/wk, 3 cr.

Practice in producing working drawings using computers, software, board drafting and standard drafting equipment. Builds on an already-established knowledge of AutoCAD software. The steel manual will be used as a reference. **Prerequisite:** DRF073 or consent of instructor. Class fee \$5. W

**DRF090 Electronic Drafting**

1 class and 6 lab hrs/wk, 3 cr.

Stresses schematics and wiring diagrams. Includes block and flow diagrams, microcomputer board layout, charts, and graphs. **Prerequisite:** Second-year standing in the Drafting Technology program or consent of instructor. Class fee \$5. W

**DRF091 Basic CAD for Electronics**

1 class and 3 lab hrs/wk, 2 cr.

Introduces the use of computer hardware and software in the field of electronic drafting. All projects will be done with the aid of a computer and peripheral equipment. Covers schematic drawings, wiring diagrams, block diagrams, and packaging drawings in addition to basic CAD operations. Class fee \$5. F, W

**DRF093 Technical Software Applications**

2 class and 3 lab hrs/wk, 3 cr.

Engineering applications of purchased software packages. How to use spreadsheets to design structural members and as an aid in generating contours and graphs. **Prerequisite:** CVL050 or CVL054. Sp

**DRF095A,B,C Special Projects in Drafting and Design**

Variable hours/1-3 credits

Student and instructor identify drafting project or problem and jointly draw up a contract. The contract sets forth a proposal to complete the project or solve the problem. Identifies objectives, procedures, and equipment needed, together with key checkpoints for student-instructor conferences. This course is intended for, but not limited to, second year drafting or mechanical design students as an elective. Potential areas of consideration include community development

projects, computer programming and applications, machine design, mapping, civil engineering drafting, or any drafting-related field. Provides consideration and encouragement to an interdisciplinary team of students working on a common problem. **Prerequisite:** Second-year standing in the Drafting Technology program or consent of instructor. F, W, Sp

**DRF280 Cooperative Work Experience**

see AUM280.

**EC**

**Economics**

**EC200 Introduction to Economics**

3 class hrs/wk, 3 cr.

A study of the concepts involving scarcity and choice, supply and demand, government spending and taxation, national income accounting, business cycles, unemployment, inflation, financial markets, and the evolution of economic thought. F, W

**EC201 Introduction to Microeconomics**

3 class hrs/wk, 3 cr.

Study of the concepts involving price elasticity, production costs, the competitive firm, monopoly, imperfect competition, market power and antitrust, de-regulation of business, the labor market, and rent, interest, and profit. It is recommended that students take MTH095 prior to this course. F, W, Sp

**EC202 Introduction to Macroeconomics**

3 class hrs/wk, 3 cr.

Study of the concepts involving aggregate spending, fiscal policy, the national debt, the Federal Reserve, monetary policy, economic growth, global macroeconomics, international trade and development, and environmental protection. It is recommended that students take EC201 and MTH095 prior to this course. Sp

**EC203 Applications to Economic Issues**

3 class hrs/wk, 3 cr.

Emphasizes economic issues such as underdeveloped countries, economic growth, pollution, and comparative economic systems. It is recommended that students take EC201 and MTH095 prior to this course. Sp

**ECE**

**Early Childhood Education**

see also Education, Human Development and Family Studies

**ECE068A Observing Preschool Experiences**

1 class hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on child development. **Prerequisite:** Consent of instructor. Course may be repeated for a maximum of two credits. F

**ECE068B Observing Preschool Experiences**

1 class hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on child guidance.

**Prerequisite:** Consent of instructor. Course may be repeated for a maximum of two credits. W

### **ECE068C Observing Preschool Experiences**

1 class hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on the classroom environment and curriculum. **Prerequisite:** Consent of instructor. Course may be repeated for a maximum of two credits. Sp

### **ECE086 Family Day Care I (Basic)**

1 class hr/wk, 1 cr.

Provides the caregiver with basic information on managing a family day care home. Includes practical suggestions for working with parents, keeping business records, providing healthy and safe environments for children, and establishing a home business. F, W, Sp, Su

### **ECE087 Family Day Care II**

(Advanced)

1 class hr/wk, 1 cr.

Continues information on managing a family day care home. Focuses on environments and activities and how children grow and learn. Covers children of different ages, cultures, and abilities. **Prerequisite:** ECE086. Offered as needed.

### **ECE150 Introduction and Observation in Early Childhood Education**

3 class hrs/wk, 3 cr.

Focuses on the history of early childhood education and the value and use of objective observations as a teaching tool. Includes lecture-discussions and observations. F

### **ECE151 Observing and Guiding Behavior**

3 class hrs/wk, 3 cr.

Continuation of ECE150. Emphasizes the role of the teacher and techniques of guiding, recording, and reporting. **Prerequisite:** ECE150 or consent of instructor. W

### **ECE152 Creative Activities**

2 class and 2 lab hrs/wk, 3 cr.

Focuses on understanding and implementing a developmental approach to creative activities for the young child. Involves hands-on experience with a wide variety of activities, discussion of presentation, and methods of evaluation. Includes art activities, use of natural materials, cooking experiences, puppet-making, and the development of new art. Class fee \$10. W

### **ECE153 Music and Movement for Young Children**

3 class hrs/wk, 3 cr.

How to make music a pleasurable medium of expression. Why and how to provide music and movement activities for young children. Covers the value of music for preschool children, simple music theory and terminology, roles of teachers, and use of spontaneous and planned activities. Class fee \$5. Sp

### **ECE154 Children's Literature and Literacy**

3 class hrs/wk, 3 cr.

Surveys children's literature along with presenting methods for using and evaluating such literature. Students will read children's

books, evaluate these, and have story groups with children. Explores how children develop literacy. Sp

### **ECE155 Child Nutrition**

2 class hrs/wk, 2 cr.

Introductory course in human nutrition and health with emphasis on the nutritional needs of the young child. Includes practical application in the day care setting and planning snacks and meals for preschool children. W

### **ECE161 Infant/Toddler Practicum**

2 class and 6 lab hrs/wk, 4 cr.

Experience in working with infants and toddlers in a laboratory and seminar setting and assisting with supervision of the various daily activities. **Prerequisite:** HDFS249. Class fee \$5. F, W, Sp

### **ECE162 Early Childhood Educator Orientation**

1 class and 3 lab hrs/wk, 2 cr.

Roles and responsibilities of the early childhood educator. Experience in working with young children in an organized setting and assisting with supervision of the various daily activities in a preschool program. **Prerequisite:** ECE151. Class fee \$5. F, W, Sp

### **ECE163 Preschool Practicum**

2 class and 6 lab hrs/wk, 4 cr.

Continuation of ECE161. Provides more experience in working with young children in a laboratory preschool setting and assisting with supervision of the various activities in a preschool program. Includes planning, executing, and evaluating curriculum materials appropriate for young children. **Prerequisite:** Grade C or higher in HDFS225, HDFS249, ECE062, ECE151, and ECE162. Class fee \$5. F, W, Sp

### **ECE251 Environments for Young Children**

3 class hrs/wk, 3 cr.

Planning, implementing, and evaluating environments for preschool children. Includes selecting children's equipment and furniture and arranging rooms and outdoor areas to facilitate play, as well as "scrounging" for materials usable in the preschool environment. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. F

### **ECE261 Student Teaching I, Early Childhood Education**

2 class and 12 lab hrs/wk, 6 cr.

Supervised teaching of young children in a laboratory setting. **Prerequisite:** Grade C or higher in ECE163, second-year standing in the Early Childhood Education program, or consent of instructor. Class fee \$5. F, W, Sp

### **ECE262 Student Teaching II, Early Childhood Education**

2 class and 12 lab hrs/wk, 6 cr.

Supervised teaching of young children in a preschool laboratory. **Prerequisite:** Grade C or higher in ECE261 or consent of instructor. Class fee \$10. F, W, Sp

### **ECE280 Cooperative Work Experience**

see AUM280.

### **ECE295 Administration of Early Childhood Programs**

3 class hrs/wk, 3 cr.

Covers finances and budget, sources of income, selection and purchase of materials and equipment, and standards (local, state, federal) and regulatory agencies in regard to health, nutrition, and safety. Computer simulations and software will be used to handle administrative functions. **Prerequisite:** Second-year standing in Early Childhood Education program or consent of instructor. Sp

## **ED**

## **Education**

### **ED051 Teaching Basic Reading and Writing to Older Non-Readers**

1 class and 2 lab hrs/wk, 2 cr.

Designed to train volunteer tutors in the Laubach method of basic language instruction. Introduces writing simple stories using a controlled vocabulary. Develops skill in conducting tutored teaching sequences using Laubach method. Offered as needed.

### **ED101 Introductory Observation and Experience**

2 class and 3 lab hrs/wk, 3 cr.

An introduction to the role and work of instructional assistants. Covers occupational opportunities, career ladders, and other training models. Provides experience with educational settings and opportunities to examine the attitudes and work habits which influence job effectiveness and satisfaction. F

### **ED102 Practicum**

1 class and 6 lab hrs/wk, 3 cr.

Field experience in a variety of classroom activities directly related to assisting and supervising children in school settings. Allows students to apply knowledge, methods, and skills gained from education courses. Seminars cover classroom experience, problem-solving techniques, and materials. **Prerequisite:** ED101 or equivalent as determined by the instructor. F, W, Sp

### **ED103 Advanced Practicum**

1 class and 15 lab hrs/wk, 6 cr.

Field experience in a variety of classroom settings closely paralleling duties regularly assigned to instructional assistants in a school. Allows students to apply in-depth knowledge, methods, and skills gained from education courses. Seminars cover classroom experience and problem-solving techniques. **Prerequisite:** ED102. F, W, Sp

### **ED110 Psychology of Learning**

3 class hrs/wk, 3 cr.

Teaching techniques based on modern theories of behavior, motivation, and human development. F

### **ED123 Classroom Techniques in Reading and Language**

3 class hrs/wk, 3 cr.

Tutoring theory and techniques in reading and the language arts. How to implement reading programs, tutor individuals and groups, assess progress, and maintain records under the direction of the teacher. W

**ED124 Classroom Techniques in Mathematics and Science**

3 class hrs/wk, 3 cr.

Second of two courses on basic tutoring theory and techniques. Covers tutoring in mathematics and science. Sp

**ED125 Techniques for Tutoring Adults**

1 class and 4 lab hrs/wk, 3 cr.

Prepares tutors to work with students primarily in professional and technical areas. Offered as needed.

**ED131 Teaching Techniques**

3 class hrs/wk, 3 cr.

Instructional and evaluation techniques commonly used by instructional assistants. W

**ED133 Instructional Media and Materials**

1 class hr/wk, 1 cr.

Designed to train students to prepare and use the instructional media commonly found in public schools. Covers the importance of instructional media in the learning process and the function and use of instructional media centers in schools. Prerequisite: Admission to Instructional Assistant program or consent of instructor. W

**ED179 Literature for Preschool Children: Jump Over the Moon**

3 class hrs/wk, 3 cr.

A telecourse about the history and diversity of children's literature. Each program includes a variety of recommended works to be read and suggests criteria for selecting and evaluating other books. In addition to viewing the television programs, students will read pertinent articles and complete related assignments, with guidance from an instructor. F, W, Sp

**ED201 American Sign Language-Beginning I**

3 class hrs/wk, 3 cr.

An introduction to American Sign Language and the culture of deaf people. Emphasizes receptive skills and some expressive skills. F, W, Sp, Su

**ED202 American Sign Language-Beginning II**

3 class hrs/wk, 3 cr.

A continuation of ED201. Emphasizes improving receptive and expressive skills. Prerequisite: ED201 or equivalent as determined by the instructor. F, W, Sp, Su

**ED204 American Sign Language-Beginning III**

3 class hrs/wk, 3 cr.

Continuation of ED202. Stresses increased understanding of the American Sign Language and deaf culture. Emphasizes receptive and expressive skills. Prerequisite: ED201, ED202, or equivalent as determined by the instructor. Sp

**ED205A Tutoring Principles and Practices**

1 class and 2 lab hrs/wk, 2 cr.

Principles and practices of tutoring basic reading, writing, and English as a Second Language skills to adult learners. Following completion of course basics, additional options provide instruction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers learning styles

and tutoring with the aid of a computer. Offered as needed.

**ED205B Tutoring Principles and Practices**

1 class and 4 lab hrs/wk, 3 cr.

Principles and practices of tutoring basic reading, writing, and English as a Second Language skills to adult learners. Following completion of course basics, additional options provide instruction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers learning styles and tutoring with the aid of a computer. Offered as needed.

**ED208 Tutoring Techniques for Elementary Physical Education**

3 class hrs/wk, 3 cr.

Presents physical education goals and objectives, tutoring and assessment of physical skills, class organization and management, working with students with special needs, and equipment repair and maintenance. Offered as needed.

**ED209B Practicum: Introductory Observation and Experience (LDC)**

3 class hrs/wk, 3 cr.

A one-term introduction to education for students exploring education as a career. W, Sp

**ED209C Professional-Technical Practicum I**

1.5 class hrs and 4.5 lab hrs/wk, 6 cr.

Prepares students to teach professional-technical education in a public school setting. Students will assess, plan, and implement a five-day (four periods a day) unit of instruction at the practicum placement site. Seminar experiences will support STFR-development. Prerequisite: ED209B. W

**ED209D Professional-Technical Practicum II**

2 class hrs and 7 lab hrs/wk, 9 cr.

Prepares students to teach professional-technical education programs in a public school setting. Students will assess, plan, and implement all instructional programs for a period of four weeks (four periods a day) at the practicum placement site. Seminar experiences will support full-time teaching experience. Prerequisite: ED209C.

**ED212 Schools and Society**

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 organization, financing, and operation of local school districts. F, Sp

**ED213 Advanced Instructional Techniques in Reading**

3 class hrs/wk, 3 cr.

Designed to prepare students to use a variety of instructional strategies which build upon the foundations of reading developed in ED123. Compares and contrasts current instructional strategies and explores the interactive nature of language, reading, writing, and spelling. Prerequisite: ED123. Offered as needed.

**ED214 Advanced Instructional Techniques in Mathematics and Science**

3 class hrs/wk, 3 cr.

Designed to prepare students to use a variety of instructional strategies built upon the foundations of mathematics taught in ED124. Explores manipulative mathematics across the curriculum as well as additional areas of math instruction including operations with rational numbers, probability, geometry, measurement, time, and money. Prerequisite: ED124. Offered as needed.

**ED217 Comprehensive Classroom Management**

3 class hrs/wk, 3 cr.

Comprehensive classroom management theory and its application to emotion, education, management techniques, and problem solving for unproductive student behaviors. W; Offered as needed.

**ED221 Practicum: Specialized Education**

1 class and 15 lab hrs/wk, 6 cr.

Classroom experience with children of specialized populations. Seminars on classroom experiences, problem solving, and special teaching techniques. Prerequisite: ED103. F, W, Sp

**ED222 Advanced Specialized Practicum I**

1 class hr and 15 lab hrs/wk, 6 cr.

Classroom experience with children of specialized populations which closely parallels duties regularly assigned to instructional assistants. Allows students to apply knowledge, methods, and skills gained from education courses. Seminars cover classroom experience, problem solving, and special teaching techniques. Prerequisite: ED221. F, W, Sp

**ED223 Advanced Specialized Practicum II**

1 class hr and 15 lab hrs/wk, 6 cr.

Classroom experience with children of specialized populations which closely parallels duties regularly assigned to instructional assistants. Allows students to apply knowledge, methods, and skills gained from education courses. Seminars cover classroom experiences, problem solving, and special teaching techniques. Prerequisite: ED221. F, W, Sp

**ED235 Instructional Technology**

3 class hrs/wk, 3 cr.

Introduces students to current technology available in education. Presents the tools to evaluate, select, and implement appropriate technology in the instructional setting. Sp

**ED251 Overview of Students with Special Needs**

3 class hrs/wk, 3 cr.

Introductory course covering disabilities and medical conditions that teachers in the public and private sector must be able to recognize and understand including learning disabilities, mental retardation, severe emotional disturbances, speech and language impairments, visual impairments, hearing impairments, physical disabilities and other health impairments, autism, traumatic brain injuries, Tourette syndrome, and attention deficit disorder. Although not a disability or medical condition, the needs of at-risk youth will be covered also. F

### **ED253 Current Issues in Special Education**

3 class hrs/wk, 3 cr.

Designed to provide students interested in special education an opportunity to explore in depth current issues in special education. Students will be exposed to current philosophical frameworks, legislative changes, emerging conditions, and technological advances. **Prerequisite:** ED251 or consent of instructor. F

### **ED257 Second Language Teaching Techniques**

3 class hrs/wk, 3 cr.

Covers philosophy, activities, materials, and various techniques used to teach English as a Second Language. W

### **ED258 Multicultural Education**

3 class hrs/wk, 3 cr.

Covers philosophy, activities, and materials used in developing a culturally-sensitive multicultural classroom and curriculum. F; Offered as needed.

### **ED259 Bilingual Methodology**

3 class hrs/wk, 3 cr.

Covers philosophy, techniques, activities, and materials used in bilingual/bicultural education programs. Examines the philosophy, rationale, and legal implications of bilingual/bicultural programs and management and use of English and Spanish reading materials in a bilingual classroom. Sp

### **ED268 Educating the Mildly and Severely Handicapped**

3 class hrs/wk, 3 cr.

Covers theories and techniques for working with students with disabilities. Studies services and funding provided for students with mild and severe disabilities. **Prerequisite:** ED251 or consent of instructor. W

### **ED269 Strategies for Learning Disabled Students**

3 class hrs/wk, 3 cr.

Identifies specific learning disabilities. Discusses eligibility criteria, assessment techniques, and learning strategies. **Prerequisite:** ED251 or consent of instructor. Sp

### **ED292 Occupational Analysis, Curriculum, and Evaluation**

3 class hrs/wk, 3 cr.

Course provides students with the opportunity to analyze their professional-technical specialty area in order to develop curriculum and evaluation strategies for professional-technical programs. Includes community surveys, occupational advisory committees, occupational analysis, program goals and objectives, and evaluation. **Prerequisite:** ED209B, ED212, or consent of instructor. Sp

## **ELE and ELT Electronics**

### **ELE050 Electronic Concepts I**

3 class and 4 lab hrs/wk, 4 cr.

First course in a three-term sequence. Covers electrical and atomic theory applicable to the field of electronics. Introduces DC and AC theory, test equipment use, schematic reading, and circuit construction. **Prerequisite:** MTH065, MTH070, high school algebra, or consent of instructor. Class fee \$16. F, W

### **ELE051 Electronic Concepts II**

3 class and 4 lab hrs/wk, 4 cr.

Second course in a three-term sequence. Covers electrical and atomic theory applicable to the field of electronics. Stresses reactive circuit theory and the theorems used for circuit analysis. **Prerequisite:** ELE050 and concurrent enrollment in Trigonometry, or consent of instructor. Class fee \$16. W, Sp

### **ELE052 Electronic Concepts III**

3 class and 3 lab hrs/wk, 4 cr.

Continuation of ELE050 and ELE051. Covers electric circuit analysis and atomic theory applicable to passive circuits. Expands the concepts covered in ELE050 and ELE051. **Prerequisite:** ELE051 and Trigonometry. Class fee \$12. Sp, Su

### **ELE060 Electronics Fundamentals for Nonmajors**

3 class and 2 lab hrs/wk, 4 cr.

Introduces the fundamental theories, circuits, and devices used in electronics. Covers direct and alternating current theory, test equipment, semiconductor devices, motors, and generators. Emphasizes practical concepts in both lectures and laboratories. Suitable for those desiring a general knowledge of electronics or exploring electronics as a career. **Prerequisite:** MTH065, MTH070, or high school algebra. Class fee \$8. F, W, Su

### **ELE061/ELE061M Electric Circuits**

3 class and 4 lab hrs/wk, 4 cr.

Covers electrical and atomic theory applicable to the field of electronics. Introduces DC and AC theory, test equipment usage, schematic reading, and circuit construction. ELE061 and ELE061M are equivalent courses. **Prerequisite:** MTH065, MTH070, high school algebra, or consent of instructor. Class fee \$16. F

### **ELE062/ELE062M Industrial Electronics**

3 class and 3 lab hrs/wk, 4 cr.

Introduces and explains semiconductor devices, common transducers, direct and alternating current, motor and generator theory, single and three-phase power, and commonly used control circuits. ELE062 and ELE062M are equivalent courses. **Prerequisite:** ELE061, ELE061M, or consent of instructor. Class fee \$12 each course. W

### **ELE063/ELE063M Industrial Computer Concepts**

3 class and 3 lab hrs/wk, 4 cr.

Explains computer system theory and its application to industrial control, data acquisition, and data communications. Studies both hardware and software concepts. ELE063 and ELE063M are equivalent courses. **Prerequisite:** ELE061, ELE061M, consent of instructor. Class fee \$12 each course. Sp

### **ELT054 Transistor Fundamentals**

3 class and 6 lab hrs/wk, 5 cr.

Provides an introduction to semiconductor physics and covers the fundamental principles of diodes and bipolar transistors. Analyzes the diode in clipper and clamper circuits. Introduces the transistor both as a switching device and as a linear amplifier. **Prerequisite:** Concurrent enrollment in ELE051. Class fee \$16. W, Sp

### **ELT055 Semiconductor Devices**

2 class and 3 lab hrs/wk, 3 cr.

Survey of operating principles of solid-state devices such as unijunction transistor, special diodes, thyristors (triacs, SCRs, etc.), and photoelectric devices. **Prerequisite:** ELT054 or consent of instructor. Class fee \$12. Sp, Su

### **ELT058 Electronics Orientation**

2 lab hrs/wk, 1 cr.

Introductory course in the field of electronics. Covers career opportunities, basic vocabulary, soldering, static awareness, tool identification, safety, first aid, hardware, and chemicals used in electronics. Class fee \$4. F, W

### **ELT061 Electronic Problems I**

2 lab hrs/wk, 1 cr.

Introduction to electronic problem solving. Emphasizes engineering calculations, scientific notation, formula manipulation, and use of calculators in solving electronics problems. **Prerequisite:** Enrollment in the Electronics Technologies program and concurrent enrollment in MTH081, or consent of instructor. F, W

### **ELT062 Electronic Problems II**

2 lab hrs/wk, 1 cr.

Covers the presentation of technical data and computations. Includes procedures for dimensional analysis, recognition and use of unit systems, and preparation and use of graphs, vectors, and logarithms/Db. Covers problems that are representative and applicable throughout the electronic curriculum. **Prerequisite:** ELT061. W, Sp

### **ELT064 Pulse Circuit Fundamentals**

2 class and 3 lab hrs/wk, 3 cr.

Introduces pulse techniques. Includes theory and operation of discrete switching circuits. **Prerequisite:** ELT054 or consent of instructor. Class fee \$12. Sp, Su

### **ELT065 Electronic Circuit Analysis**

2 class and 6 lab hrs/wk, 4 cr.

Covers solid state amplifiers, oscillators, power supplies, circuit design, and troubleshooting. **Prerequisite:** ELT054. Class fee \$16. F

### **ELT066 Digital Fundamentals**

3 class and 2 lab hrs/wk, 4 cr.

Introduces digital logic theories. Includes number systems and conversions, Boolean algebra, simplification theorems, combinational logic, and an introduction into sequential circuits. **Prerequisite:** ELE050 or consent of instructor. Class fee \$8. W, Sp

### **ELT067 Digital Circuit Applications**

2 class and 3 lab hrs/wk, 3 cr.

Continuation of ELT066. Covers principles of Boolean algebra and digital ICs and their application. Laboratory oriented to give students experience with sequential logic elements such as flip-flops, counters, registers, and arithmetic logic units. **Prerequisite:** ELT066. Class fee \$12. F

### **ELT068 Microcomputer Systems**

3 class and 6 lab hrs/wk, 5 cr.

Basics of microcomputer hardware and software. Covers interfacing techniques and protocols. **Prerequisite:** ELT066, ELT067, and a high-level programming language, or consent of instructor. Class fee \$24. W



**ELT070 Video Display Systems**

3 class and 6 lab hrs/wk, 5 cr.

Theories of operation and the purpose of various components in video systems are studied. Covers trouble shooting of analog systems. **Prerequisite:** ELT065 and ELT072, or equivalent as determined by the instructor. Class fee \$24. Sp

**ELT071 Linear IC Fundamentals**

3 class and 3 lab hrs/wk, 4 cr.

Introduces linear integrated circuit amplifiers. Emphasizes device parameters and basic circuit operating characteristics. Various linear integrated circuit amplifying devices are compared and evaluated through laboratory experiments. **Prerequisite:** ELE051 and ELT054. Class fee \$12. Sp, Su

**ELT072 Linear IC Applications**

2 class and 3 lab hrs/wk, 3 cr.

A design and applications course using the integrated circuit amplifier and special function IC devices to study circuits related to industrial applications. Applies and evaluates selected circuit designs in the laboratory. **Prerequisite:** ELT065 and ELT071. Class fee \$12. W

**ELT074 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:** Fifth term standing in the Electronics Technologies program or consent of instructor. Offered as needed.

**ELT075 Advanced Industrial Electronics**

3 class and 3 lab hrs/wk, 4 cr.

Principles and concepts of electronic and electrical control and sensing devices used in industry. Covers electric motors, control circuits, servos, and measurement transducers. **Prerequisite:** ELT054, ELT055, ELT072, or consent of instructor. Class fee \$12. Sp

**ELT076 Antennas and Transmission Lines**

2 class hrs/wk, 2 cr.

Covers the practical and theoretical aspects of basic transmission lines and antennas. Covers the characteristics and properties of open-wire, coaxial, and special purpose transmission lines, plus those of vertical and horizontal antennas. Also covers the coupling of source, transmission lines, and antennas. **Prerequisite:** ELT065 and ELT067. W

**ELT077 Telecommunications**

2 class and 3 lab hrs/wk, 3 cr.

Studies communications theory and systems. Laboratory experiments help develop practical knowledge and reinforce theoretical concepts. **Prerequisite:** Concurrent enrollment in ELT076. Class fee \$12. W

**ELT079 Introduction to Hydraulics/Pneumatics**

2 class and 3 lab hrs/wk, 3 cr.

Theory, operation, and design of basic hydraulic and pneumatic control systems and their components. **Prerequisite:** MTH081. Class fee, \$12. Offered as needed.

**ELT090 Computer Peripherals**

3 class and 3 lab hrs/wk, 4 cr.

A study of computer peripherals including disks, printers, plotters, etc. Covers the theories of operation and concepts of interfacing

software and hardware. Lab sessions emphasize installation and troubleshooting techniques. **Prerequisite:** Electronics experience. Class fee \$12. W

**ELT091 Programming Concepts I**

3 class and 2 lab hrs/wk, 4 cr.

An introduction to computer programming and computer operating systems using the C language. Emphasizes documentation and structure. **Prerequisite:** MTH081 or consent of instructor. Class fee \$8. F

**ELT092 Programming Concepts II**

3 class and 2 lab hrs/wk, 4 cr.

A continuation of ELT091. Refines structured programming techniques and applies them to more complex data structures. Emphasizes system analysis, programming techniques, and documentation. **Prerequisite:** ELT091. Class fee \$8. Sp

**ELT093 Advanced Data Communication**

3 class and 6 lab hrs/wk, 5 cr.

Covers theories and concepts of information exchange between computers and peripherals. Lab sessions emphasize installation, maintenance, operation, and theory of operation of data communication networks. **Prerequisite:** Second-year standing in the Computer Electronics Technology program and CS278, or consent of instructor. Class fee \$12. Sp

**ELT094 Computer Operating Systems**

3 class hrs/wk, 3 cr.

A study of the fundamentals of microcomputer and minicomputer operating systems. **Prerequisite:** ELT066, CS101, or consent of instructor. W

**ELT097 Advanced Computer Architecture**

3 class and 3 lab hrs/wk, 4 cr.

For students with a solid foundation in digital logic, microprocessors, and programming. Explains advanced computer system theory. Lab sessions emphasize system installation and troubleshooting of both hardware and software. **Prerequisite:** ELT068 or consent of instructor. Class fee \$24. Sp

**ELT098 Microcomputer Hardware Concepts**

3 class and 2 lab hrs/wk, 4 cr.

Covers the basics of microcomputer hardware, including how software interfaces with hardware. Stresses system troubleshooting and maintenance. No past experience in electronics is required. **Prerequisite:** Experience with microcomputer software. Class fee \$8. Offered as needed.

**ELT280 Cooperative Work Experience**

see AUM280.

**EMT****Emergency Medical Technology****EMT051 Emergency Medical Technician Basic, Part 1**

3 class and 2 lab hrs/wk, 4 cr.

Skills development in recognition of symptoms of illness and injuries, and in proper emergency care procedures. Includes profi-

ciency tests and evaluation sessions. Must meet standards as set by the Oregon Health Division for certification which includes examination of health, driving, and criminal record. Class fee \$7. F

**EMT052 Emergency Medical Technician Basic, Part 2**

3 class and 3 lab hrs/wk, 4 cr.

Continuation of EMT051. **Prerequisite:** EMT051 and concurrent enrollment in EMT280A. Class fee \$5. W

**EMT065 Emergency Medical Technician Intermediate, Part 1**

4 class and 2 lab hrs/wk, 5 cr.

Discussion, demonstration, and practical application of EMT roles and responsibilities, patient assessment, airway management, oxygen and ventilation therapy, shock treatment, intravenous therapy, intraosseous therapy, ECG monitoring, defibrillation, pharmacology, and field protocols. **Prerequisite:** Current Oregon EMT Basic certification and a score of 80% or better on pretest. Class fee, \$25. Offered as needed.

**EMT066 Emergency Medical Technician Intermediate, Part 2**

4 class and 2 lab hrs/wk, 5 cr.

A continuation of EMT065. Students successfully completing Part 2 will be recommended to the Oregon Health Division for the certification process. **Prerequisite:** EMT065. Class fee, \$25. Offered as needed.

**EMT069 EMT Rescue**

2 class and 4 lab hrs/wk, 3 cr.

Elementary procedures of rescue practices, systems, components, support, and control of rescue operations including ladder procedures and basic rescue tools. Introduction to techniques and tools of patient extrication, emphasizing application to traffic accidents, as required for paramedic certification. **Prerequisite:** EMT051 and EMT052, or current Oregon EMT Basic certification. Sp

**EMT070 Emergency Communication and Patient Transportation**

2 class and 3 lab hrs/wk, 3 cr.

Ambulance operation, laws, maintenance, and safety; emergency response driving and route planning; communication systems, radio types, HEAR system, codes, and correct techniques. Class fee \$5. Sp

**EMT075 Introduction to Emergency Medical Service**

4 class hrs/wk, 4 cr.

Covers role and responsibilities of the paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, and stress management. F

**EMT080 Emergency Medical Technology 3, Part 1**

4 class and 3 lab hrs/wk, 5 cr.

Designed to meet EMT 3 certification competencies including handling emergencies of a cardiovascular and/or respiratory nature. Through application of patient assessment, airway management, electrocardiogram interpretation, intravenous fluid and drugs, and electric counter-shock, patients are assessed and managed according to currently accepted protocols. **Prerequisite:** EMT081 and BI233 or concurrent enrollment, and

current Oregon EMT 1 or EMT 2 certification. Class fee \$15. Sp

**EMT081 Emergency Medical Technology 3, Part 1 Clinical**  
6 lab hrs/wk, 2 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** EMT080 or concurrent enrollment. Class fee \$15. Sp

**EMT082 Emergency Medical Technology 3, Part 2**  
4 class and 3 lab hrs/wk, 5 cr.

Continuation of EMT080. Designed to meet EMT 3 certification competencies, including handling emergencies of a cardiovascular, respiratory, or general medical nature. Through application of patient assessment, airway management, EKG interpretation, electric counter-shock, and intravenous fluids and drugs, patients are assessed and managed according to currently accepted protocols. **Prerequisite:** EMT080, EMT081, EMT083 and EMT280B or concurrent enrollment, and current Oregon EMT 2 certification. Class fee \$15. F

**EMT083 Emergency Medical Technology 3, Part 2 Clinical**  
9 lab hrs/wk, 3 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** EMT082 or concurrent enrollment. Class fee \$15. F

**EMT084 Emergency Medical Technology 4, Part 1**  
4 class and 3 lab hrs/wk, 5 cr.

Designed to meet EMT 4 certification competencies including handling emergencies of a pediatric, geriatric, obstetric, and gynecologic nature. Currently accepted protocols and procedures are applied to patients presenting signs and symptoms consistent with emergencies in the above categories. **Prerequisite:** EMT082, EMT083, or EMT085 and EMT280B or concurrent enrollment, and current Oregon EMT 2 or 3 certification. Class fee \$15. W

**EMT085 Emergency Medical Technology 4, Part 1 Clinical**  
9 lab hrs/wk, 3 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** EMT082, EMT083, and EMT084 or concurrent enrollment. Class fee \$15. W

**EMT086 Emergency Medical Technology 4, Part 2**  
4 class and 3 lab hrs/wk, 5 cr.

Designed to meet EMT 4 certification competencies, including neurological, psychiatric, and traumatic emergency procedures. Students apply principles of assessment and management to a variety of ill or injured patients. **Prerequisite:** EMT084, EMT085, EMT087 and EMT280B or concurrent enrollment, and current Oregon EMT 2 or 3 certification. Class fee \$15. Sp

rent enrollment, and current Oregon EMT 2 or 3 certification. Class fee \$15. Sp

**EMT087 Emergency Medical Technology 4, Part 2 Clinical**  
6 lab hrs/wk, 2 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** EMT086 or concurrent enrollment. Class fee \$15. Sp

**EMT090 Emergency Medical Technician Paramedic, Part 1**  
7 class and 3 lab hrs/wk, 8 cr.

Discussion, demonstration, and practical application of medical terminology, patient assessment, airway management, ventilation therapy, respiratory emergencies, shock treatment, parenteral drug and fluid administration, pharmacology, and cardiology. **Prerequisite:** BI231, BI232, BI233, current Oregon Basic or Intermediate certification, and concurrent enrollment in EMT091. Class fee, \$15. F

**EMT091 Emergency Medical Technician Paramedic, Part 1 Clinical**  
6 lab hrs/wk, 2 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** Concurrent enrollment in EMT090. Class fee, \$15. F

**EMT092 Emergency Medical Technician Paramedic, Part 2**  
7 class and 3 lab hrs/wk, 8 cr.

Builds on EMT090. Covers pharmacology, cardiology, endocrinology, the nervous system, gastrointestinal system, genitourinary system, toxicology, drug and alcohol abuse, environmental exposure, infectious diseases, geriatrics, pediatrics, obstetrics/gynecology, neonatal management, and behavioral emergencies. **Prerequisite:** EMT090, EMT091, and concurrent enrollment in EMT093 and EMT280B. Class fee, \$15. W

**EMT093 Emergency Medical Technician Paramedic, Part 2 Clinical**  
9 lab hrs/wk, 3 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** Concurrent enrollment in EMT092. Class fee, \$15. W

**EMT094 Emergency Medical Technician Paramedic, Part 3**  
3 class and 3 lab hrs/wk, 4 cr.

Continuation of EMT092. Offers specialty certification courses such as Advanced Cardiac Life Support (ACLS), Pediatric Pre-hospital Advanced Life Support (PHTLS), and Pediatric Advanced Life Support (PALS). Culminates with oral board examination based on local field protocols. **Prerequisite:** EMT092, EMT093, EMT280B, and concurrent enrollment in EMT095 and EMT280D. Class fee, \$15. Sp

**EMT095 Emergency Medical Technician Paramedic, Part 3 Clinical**  
9 lab hrs/wk, 3 cr.

Clinical experience in direct patient care. The patients to whom the students are exposed have disease and injury conditions comparable to those the student will experience in the pre-hospital care situation. **Prerequisite:** EMT092, EMT093, and concurrent enrollment in EMT094 and EMT280D. Class fee, \$15. Sp

**EMT280 Cooperative Work Experience**  
see AUM280.

**ENG**  
**English**

**ENG101, 102, 103 Introduction to English Literature**  
3 class hrs/wk, 3 cr. each

ENG101 covers major literary works from Anglo-Saxon times to the Renaissance in England. Relates literary trends to their own cultural context and ours. ENG102 covers major works from the late Renaissance to the Romantic movement. ENG103 covers major works from the Romantics to modern British fiction. ENG101:F; ENG102:W; ENG103:Sp

**ENG104 Introduction to Fiction**  
3 class hrs/wk, 3 cr.

An analysis of fiction literature by reading works in English and in translation. Introduces the short story and novel, basic literary concepts, and terminology. F, W, Sp, Su

**ENG105 Introduction to 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. F, W, Sp, Su

**ENG106 Introduction to Poetry**  
3 class hrs/wk, 3 cr.

Analysis of poetry by reading works in English and in translation. Introduces literary concepts and terminology for poetry, and explores types, elements, and structures of poetry. F, W, Sp, Su

**ENG107 Introduction to World Literature**  
3 class hrs/wk, 3 cr.

The Ancient World through the Middle Ages. Includes study of histories, stories, poems, and plays of the Western world primarily, and of selected literature of Middle Eastern and Far Eastern cultures. F

**ENG108 Introduction to World Literature**  
3 class hrs/wk, 3 cr.

The Renaissance through the Romantic Revolt, 1450-1850. Includes study of stories, novels, poems, and plays of the Western world primarily, and of selected literature of Far Eastern cultures. W

**ENG109 Introduction to World Literature**

3 class hrs/wk, 3 cr.

1850 - Present. Includes study of stories, novels, poems and plays of the Western European tradition and of South and Central America, the Far East, and the Mideast. Sp

**ENG116 College Vocabulary**

3 class hrs/wk, 3 cr.

A study of affixes, root words, derived forms, loan words, etymologies, and word definitions to increase basic English vocabulary. **Prerequisite:** Score of eighth-grade level vocabulary or above on diagnostic test. Offered as needed.

**ENG201 Introduction to Shakespeare**

3 class hrs/wk, 3 cr.

A study of selected Shakespearean tragedies emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to explore these plays and to provide background on the nature of tragedy. F

**ENG202 Introduction to Shakespeare**

3 class hrs/wk, 3 cr.

A survey of selected Shakespearean comedies, emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to provide background on the nature of comedy. W

**ENG203 Introduction to Shakespeare**

3 class hrs/wk, 3 cr.

A survey of selected Shakespearean history plays, emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to provide background on the nature of historical drama. Sp

**ENG253 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Colonial, New Republic, and Romantic literature from 1607 to 1850. Literary devices and styles in the writings of Anne Bradstreet, Jonathan Edwards, Thomas Paine, Washington Irving, Nathaniel Hawthorne, Edgar Allan Poe, and Herman Melville. Promotes appreciation of literature. F

**ENG254 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Transcendental, Realistic, and Naturalistic literature from 1850 to 1914. Includes writings of Ralph Waldo Emerson, Henry Thoreau, Walt Whitman, Emily Dickinson, Sarah Jewett, Henry James, and Hamlin Garland. Promotes appreciation of literature. W

**ENG255 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Discusses the relevancy of literature to the human condition from 1914 to the present. Includes writings of F. Scott Fitzgerald, Ernest Hemingway, Robert Frost, T.S. Eliot, Katherine Porter, Flannery O'Connor, Ralph Ellison, and Sylvia Plath. Promotes appreciation of literature. Sp

**ENG260 Introduction to Women Writers**

3 class hrs/wk, 3 cr.

Focuses on achievements and perspectives of women writers through analysis of their literary works. W

**ENG261 Introduction to Science Fiction**

3 class hrs/wk, 3 cr.

Oral and written discussion of ideas, implications, and artistic devices found in various works dealing with the future, social engineering, adventure, and fantasy. Sp

**ENG262 The American Western**

3 class hrs/wk, 3 cr.

Emphasizes appreciation of classic and modern cowboy short stories and novels, as well as myths about the West, nature, and heroic human potential. W

**ENG263 Introduction to Detective Fiction**

3 class hrs/wk, 3 cr.

An historical study from early stories by Poe and Doyle through various schools of American and British writings. F

**ENG298A-C Independent Study: English**

1-3 credits

Faculty-supervised independent study in an area of student interest. Offered as needed.

**ENGR Engineering**

see also General Engineering

**ENGR201 Electrical Fundamentals I**

3 class and 2 lab hrs/wk, 4 cr.

Studies basic electrical circuit theory. Covers voltage and current relationships and fundamental methods of circuit analysis. Defines electrical circuit parameters such as resistance, inductance, and capacitance. Studies basic DC, AC, and natural responses of circuits. **Prerequisite:** MTH252. Class fee \$10. F

**ENGR202 Electrical Fundamentals II**

3 class and 2 lab hrs/wk, 4 cr.

Studies the Fourier-Series representation of periodic time-varying functions, sinusoidal steady-state analysis, basic operation of three-phase circuits, electric circuits which contain mutually coupled coils, functions of transformers in circuits, characteristics of resonant circuits, and use of operational amplifiers to perform various functions in circuits with periodic inputs. **Prerequisite:** MTH252, ENGR201, and concurrent enrollment in MTH256. Class fee \$10. W

**ENGR203 Electric Control Fundamentals**

3 class and 2 lab hrs/wk, 4 cr.

Studies LaPlace Transform and its use in electrical control theory including the bode diagram. Includes analysis of two-port circuits, Boolean algebra, and basic logic gates. **Prerequisite:** MTH252, MTH256, and ENGR201. Class fee \$10. Offered as needed.

**ENGR211 Statics**

3 class and 2 lab hrs/wk, 4 cr.

An analysis of forces induced in structures and machines by various types of loading. **Prerequisite:** MTH251. F

**ENGR212 Dynamics**

3 class and 2 lab hrs/wk, 4 cr.

Kinematics, Newton's laws of motion, work energy, and impulse-momentum relationships applied to engineering systems. **Prerequisite:** ENGR211, MTH252, and PH211. W

**ENGR213 Strength of Materials**

3 class and 2 lab hrs/wk, 4 cr.

Covers properties of structural materials and analysis of stress and deformation in axially loaded members, circular shafts, and beams, and in statically indeterminate systems containing these components. **Prerequisite:** ENGR211 and MTH201. Sp

**ENL**

**English as a Non-Native Language**

**ENL010 English as a Second Language-Speaking IV**

4 class hrs/wk, 4 cr.

Designed for advanced non-native speakers of English. Focuses on improvement of conversation and listening skills and cultural understanding. Students may use the language lab in addition to scheduled classes. **Prerequisite:** STEL test or consent of instructor. Class fee \$2. F, W, Sp

**ENL012 Reading IV**

5 class hrs/wk, 5 cr.

Designed for non-native speakers of English. Focuses on reading comprehension and vocabulary development with an emphasis on preparation for college credit classes. Students may use the language lab in addition to scheduled classes. **Prerequisite:** Completion of intake procedure, score of 30-40 on STEL test and more than 50% on the Advanced Reading test or consent of instructor, and concurrent enrollment in ENL015. Class fee \$2. F, W, Sp

**ENL015 English as a Second Language-Writing IV**

5 class hrs/wk, 5 cr.

A writing course for non-native English speakers with emphasis on the written skills needed for communication, including sentence structure, punctuation, and paragraph organization. Students may use the language lab in addition to scheduled classes. **Prerequisite:** Completion of intake procedures, score of 30-40 percent on the Advanced Reading test or consent of instructor, and concurrent enrollment in ENL012. Class fee \$2. F, W, Sp

**ENL110 English as a Non-Native Language: Speaking and U.S. Culture**

4 class hrs/wk, 4 cr.

Designed for non-native speakers of English. Focuses on improving English oral skills and knowledge of current U.S. culture. **Prerequisite:** A score of 33 or above on the STEL test or consent of instructor. Class fee \$2. F, Sp

**ENL111 English as a Non-Native Language II**

4 class hrs/wk, 4 cr.

Designed for non-native speakers in English. Focuses on advanced English grammar, with a contextual focus on American culture and current topics of interest. **Prerequisite:** Completion of intake procedure and a score of 38-

42 on the STEL test, or consent of instructor. Class fee \$2. F, W

### ENL112 English Non-Native Language: Writing

4 class hrs/wk, 4 cr.

Comprehensive introductory writing course designed for non-native speakers of English. Introduces the writing process, organization, a variety of expository writing techniques and styles, and the development of the research paper. **Prerequisite:** ENL111 or a score of 42 or above on the STEL test, or consent of instructor. Class fee \$2. W, Sp

### ES

### Emergency Services

#### ES071 Work Place Safety Skills

4 class and 12 lab hrs, 1 cr.

Combines first aid, CPR, and hazardous materials awareness to meet minimum federal and state occupational safety requirements. Students completing the course will receive American Red Cross first aid certification. Meets OSHA requirements. Class fee \$7. F, W, Sp, Su

### FA

### Film Arts

#### 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 Understanding Movies

2 class and 3 lab hrs/wk, 3 cr.

History, technique, and art of film. In-class film viewing and discussion. How to evaluate a variety of stylistic approaches. Class fee \$18. F

#### FA256 Understanding Movies: The Great Film Directors

2 class and 3 lab hrs/wk, 3 cr.

An analysis of films from the standpoint of the director-creator. Studies works of one or two directors in an effort to understand and critique individual films as the works of artists, especially within the context of a body of work expressing a particular and unique view of the world. Class fee \$18. W

#### FA257 Understanding Movies: Themes and Genres

2 class and 3 lab hrs/wk, 3 cr.

An examination of a number of films representing a single genre (Westerns, comedies, etc.) or expressing common themes. Focuses on various directors and their diverse styles, techniques, and personal expressions. Class fee \$18. Sp

### FE

### Field Experiences

#### FE205 Job Search Techniques

1 class hr/wk, 1 cr.

Designed to help students find and apply for the job they want upon graduation. Includes examining values and motivation; preparing for the job search process; developing and writing applications, cover letters, and resumes; sources of information about jobs through field surveys; preparing for the inter-

view; finding the hidden job market; and discovering job requirements and what the employer is looking for in an employee. F, W, Sp

#### FE280 Cooperative Work Experience

see AUM280.

### FN

### Foods/Nutrition

see also Hospitality Systems

#### FN199 Nutrition Basics

2 class hrs/wk, 2 cr.

Application of basic concepts of nutrition and health to menu planning, food purchasing, food preparation, and food consumption. Sp

#### FN225 Nutrition

4 class hrs/wk, 4 cr.

The study of nutrients and their ingestion, digestion, absorption, transport, metabolism, interaction, storage, and excretion. Course includes the study of the environment and of human behavior as it relates to these processes. F, W, Sp

### FR

### French

#### FR101, 102, 103 First Year French, Terms I, II, III

4 class hrs/wk, 4 cr.

An introduction to the grammar and vocabulary of the French language. Emphasizes use of common French expressions with a basic understanding of grammatical principles. Covers some French history and culture. **Prerequisite:** FR102: FR101, one year of high-school-level French, or consent of instructor. FR103: FR101, FR102, one year of high-school-level French, or consent of instructor. Class fee \$2 each. FR101: F; 102: W; 103: Sp

#### FR150 First Year French, Accelerated Term 1

6 class hrs/wk, 6 cr.

An introduction to the grammar and vocabulary of the French language. Emphasizes the use of common French expressions with a basic understanding of grammatical principles. Includes some history and culture of France. This course covers the same content as FR101 and the first half of FR102. Class fee \$2. W

#### FR151 First Year French, Accelerated Term 2

6 class hrs/wk, 6 cr.

Continued study of the grammar and vocabulary of the French language. Emphasizes the use of common French expressions with a basic understanding of grammatical principles. Includes French customs, culture, living conditions, and history. This course covers the same content as the second half of FR102 and FR103. **Prerequisite:** FR150 or equivalent as determined by the instructor. Class fee \$2. Sp

#### FR201, 202, 203 Second Year French, Terms I, II, III

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:** FR201: one year of college French, two years of high-school-level French, or consent of instructor. FR202: FR201, three years of high-school-level French, or consent of instructor. FR203: FR202, three years of high-school-level French, or consent of instructor. Class fee \$2 each. FR201: F; 202: W; 203: Sp

### FRP

### Fire Protection

#### FRP050 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, responsibilities of fire departments in a community, organization and function of fire protection agencies and allied organizations, sources of professional literature, survey of professional career opportunities and requirements, and development of resume.

#### FRP051, 052, 053; 061, 062, 063 Fire Incident 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, basic hose practices and lays, use of protective breathing apparatus, response, district maps, phantom box areas, communication procedures, and fire apparatus driving practices. Meets Oregon Fire Standards and Accreditation Board requirements for Firefighter I. **Prerequisite:** FRP052: FRP051. FRP053: FRP052. FRP061: FRP053. FRP062: FRP061. FRP063: FRP062. Class fee \$15 each.

#### FRP054 Water Supply Operations

3 class hrs/wk, 3 cr.

Covers water supply operations in fire service, including pre-fire planning operations, water quantity calculations, water source options, delivery systems and options, and hydraulic calculations. Designed to meet the competencies as set forth by the Fire Standards and Accreditation Board in Firefighter II, Apparatus Operator I and II. **Prerequisite:** MTH070, FRP052, or consent of instructor.

#### FRP055 Elementary Science for Firefighters

3 class and 2 lab hrs/wk, 4 cr.

Practical general science. Covers matter, laws of motion and force, work and machines, mechanics of liquids, magnets and magnetism, electricity, atomic energy, and radiation. Laboratory time provides help in clarifying the principles and procedures covered in class. **Prerequisite:** MTH065 or equivalent as determined by the instructor, or consent of instructor. Class fee \$5.

#### FRP056 Fire Service Rescue Practices

2 class and 4 lab hrs/wk, 4 cr.

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:** FRP051 and FRP052, or EMT069. Class fee \$5.

**FRP057 Fire Science****3 class and 2 lab hrs/wk, 4 cr.**

Physical and chemical properties of substances, acids and bases, salts and solutions, weights and measurements, metals, and application of chemistry to fire problems. Laboratory time provides clarifying demonstrations and experiments. **Prerequisite:** FRP055 or consent of instructor. Class fee \$5.

**FRP058 Fire Pump Construction and Operation****2 class 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 fire ground hydraulic calculations. **Prerequisite:** FRP051, FRP052, or consent of instructor.

**FRP059 Major Emergency Strategy and Tactics****3 class hrs/wk, 3 cr.**

Studies several types of major emergencies and principles relating to incident priorities, resource management, and tactical operations. **Prerequisite:** FRP050, FRP053, FRP070, or consent of instructor.

**FRP060 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, and property owners; fire safety; reporting fire prevention activities; drills; policies; public relations; and DEQ regulations. Emphasizes "company inspections."

FRP061, 062, 063. See FRP051, etc.

**FRP061H, 062H, 063H Fire Incident Related Experience Honors****9 lab hrs/wk, 3 cr.**

Provides the student officer with practice in supervision of a shift of firefighters during a 24-hour period. Covers assisting staff with training cadet firefighters and apparatus operators during drill sessions and supervising and directing cadet crews during emergency responses and operations. Students taking this course will act as a liaison to staff in regard to F.I.R.E. and complete special projects and assignments given by staff. **Prerequisite:** FRP053 and consent of instructor. Class fee \$15.

**FRP064 Hazardous Materials Operations****3 class hrs/wk, 3 cr.**

Provides knowledge and skills necessary to safely respond to and manage the defensive operations involved in a chemical emergency. **Prerequisite:** Concurrent enrollment in FRP050.

**FRP066 Building Construction for Fire Suppression****3 class hrs/wk, 3 cr.**

Fire problems inherent in 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.

**FRP067 Hazardous Materials Regulations****3 class hrs/wk, 3 cr.**

Understanding the laws and regulations concerning hazardous materials planning and reporting requirements. **Prerequisite:** Consent of instructor. Offered as needed.

**FRP069 Fire Department Leadership****3 class hrs/wk, 3 cr.**

Explains the unique aspects of a company officer's job, basic functions of management and principles of supervision, and self-analysis to become a better supervisor. Covers leadership concepts, types of supervisors, attitudes, cooperation, individual differences, motivation, communication, discipline, grievances, evaluating performance, planning, organizing, and making decisions. **Prerequisite:** FRP050 or consent of instructor.

**FRP070 Fire Fighting Tactics and Strategy****3 class hrs/wk, 3 cr.**

Covers the fire command system, rescue, offensive and defensive fire attack, property conservation, staging and apparatus placement, sectoring and company functions, communications, and command procedures.

**FRP071 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, and ventilating systems.

**FRP072 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.

**FRP073 Firefighters' Law****2 class hrs/wk, 2 cr.**

Firefighters' legal responsibilities in driving, inspection, alarms and communications, and other fire protection activities. Firefighters' rights, duties, liabilities, and participation in legal activities including state and local fire marshal laws relating to fire protection.

**FRP074 Fire Investigation****3 class and 2 lab hrs/wk, 3 cr.**

Burning characteristics of combustibles, interpretation of clues, burn patterns leading to points of origin, identification of incendiary indications, sources of ignition and ignited materials, and preservation of fire scene and evidence.

**FRP075 Aircraft Crash/Fire Rescue****1 class and 3 lab hrs/for 4 weeks, 1 cr.**

Pre-planning activities for on- and off-airport emergencies. Approach, positioning, rescue procedures, and application of control techniques.

**FRP077 Fire Service Instructor Training****12 class and 10 lab hrs/for 1 week, 2 cr.**

The fire service instructor and his job, including learning principles, teaching procedures (preparing course outlines and lesson plans, managing a classroom, and evaluation techniques), and training aids and devices.

**FRP079 Wildland Urban Interface****2 class hrs/wk, 2 cr.**

Studies causes and prevention of natural cover fires, ground cover fire behavior, standard firefighting orders, urban interface problems, fire suppression methods, and fire-ground management.

**FRP080 Hazardous Materials for Inspectors****3 class hrs/wk, 3 cr.**

How to handle inspections involving hazardous materials. Covers the requirements for handling, storing, and reporting on the various hazardous materials. **Prerequisite:** Consent of instructor. Offered as needed.

**FRP081 Fire Prevention Inspection****3 class hrs/wk, 3 cr.**

Methods of contemporary fire prevention inspection practices. Includes preparation, pre-approach information, written inspection notices, relations with owners and occupants, and compliances. **Prerequisite:** FRP060, FRP066, FRP072, or consent of instructor. Offered as needed.

**FRP082 Evidence Photography for Fire and Arson Investigators****3 class hrs/wk, 3 cr.**

How to improve quality and efficiency level of evidence photography and use a broad spectrum of photographic knowledge to further the science of forensic photography. **Prerequisite:** Consent of instructor. Class fee \$15. Offered as needed.

**FRP085 Industrial Fire Protection****3 class hrs/wk, 3 cr.**

Specific concerns and safeguards related to business and industrial fire protection organization and development, fire prevention programs, fire brigade organization, cooperation between public fire departments and private fire brigades, industrial fire hazards, and prevention for industrial plants. **Prerequisite:** Second-year standing in fire protection or building inspection curriculum or consent of instructor. Offered as needed.

**FRP086 Advanced Detection and Protection Systems****3 class hrs/wk, 3 cr.**

Examines and evaluates specialized extinguishing systems and their suppression agents and principles. Covers household warning systems, fire detection and alarm systems, protective signaling systems, explosion systems, and thermal smoke and flame detection systems. **Prerequisite:** FRP071 or consent of instructor. Offered as needed.

**FRP087 Fire Insurance Fundamentals****3 class hrs/wk, 3 cr.**

The relationship of fire defenses and fire losses to insurance rates, basic insurance principles, fire loss experience and loss ratio applying the ISO grading schedule and state regulations of fire insurance. Offered as needed.

**FRP088 Fire Problem Analysis****1 class and 2 lab hrs/wk, 3 cr.**

Provides training in various analysis and planning processes to determine specific public fire safety education needs. Requires 16 class hours plus 30 field project hours. **Prerequisite:** Participation as paid or volunteer member of local or regional fire service or consent of instructor. Offered as needed.

**FRP280 Cooperative Work Experience**

see AUM280.

**FRT****Forest Resources Technology****FRT051 Introduction to Natural Resources****3 class hrs/wk, 3 cr.**

An orientation to and overview of natural resources in the United States. Includes how forests and man are interdependent; the role of forests in building our country; the distribution and character of our forests; the process of reforestation; and the importance of plants, wildlife, and watersheds. Topics currently in the media will be discussed as well as current perspectives in forestry. Class fee \$5. F

**FRT052 Leadership Seminar****1 class hr/wk, 1 cr.**

Includes group and individual research and sharing of information valuable to the student for both summer, seasonal, and permanent employment in national resources-related work. Resource people from the community will make presentations. Students will have the opportunity to lead discussions individually or as a panel. This course may be repeated for a maximum of six credits. F, W, Sp

**FRT053 Computer Applications/Natural Resources****2 class and 1 lab hrs/wk, 3 cr.**

Gives the student experience using handheld calculators, MS/DOS computers, and electronic data recorders. Class fee \$2. F

**FRT055 Elementary Forest Surveying****2 class and 3 lab hrs/wk, 3 cr.**

Basic forest surveying emphasizing the use of equipment to collect field data for mapping and drawing maps using this data. Class fee \$5. F

**FRT061 Western Oregon Tree and Shrub Identification****2 class and 3 lab hrs/wk, 3 cr.**

Identification of 26 species of conifers and 49 species of hardwoods and shrubs that are native to Western Oregon. Use of the Dichotomous Genus Key to identify species during frequent field trips. Students will learn both common and scientific names of species. Class fee \$5. Sp

**FRT063 Forestry Photo Interpretation****2 class and 3 lab hrs/wk, 3 cr.**

Designed to introduce the student to the basic principles of photogrammetry and photo interpretation, with particular emphasis on the uses of vertical aerial photographs in forest re-

source management. **Prerequisite:** Concurrent enrollment in MTH052. Class fee \$5. W

**FRT065 Forest Resource Protection****3 class and 3 lab hrs/wk, 4 cr.**

The study of forest fires, diseases, insects, and animal influences on trees and forests. A discussion of basic prevention and suppression of wildfires and use of fire in controlled situations. Covers damage descriptions and damage-control techniques for diseases, insects, and animals of Oregon. Class fee \$10. W

**FRT071A Forest Resource Inventory I-Lecture****3 class hrs/wk, 3 cr.**

Measurement and appraisal of individual trees, stands, and forest sites for volume and value. Emphasizes theory and office procedures for 100 percent, strip, and fixed plot cruises. **Prerequisite:** MTH052 or higher, FRT055, FRT061 and concurrent enrollment in FRT071B, or consent of instructor. Sp

**FRT071B Forest Resource Inventory I-Lab****4 lab hrs/wk, 2 cr.**

Care and use of forestry instruments used in timber cruising and field mapping. Measurements and appraisal of individual trees, stands, and forest sites. Emphasizes field mapping and field plot cruising. **Prerequisite:** Concurrent enrollment in FRT071A. Class fee, \$10. Sp

**FRT072A Forest Resources Inventory II-Lecture****3 class hrs/wk, 3 cr.**

Second of two forest inventory courses. Covers variable-plot and 3-P cruising methods in detail. Introduces stand inventory methods, growth and yield, and the theory and principles of log scaling. **Prerequisite:** FRT071A, FRT053, and concurrent enrollment in MTH053 or MTH095. F

**FRT072B Forest Resources Inventory II-Lab****4 lab hrs/wk, 2 cr.**

Second of two forest inventory courses. Covers the field procedures of variable-plot and 3-P cruising methods. Also introduces stand inventory methods, growth and yield, surveys and the field procedures for log scaling. **Prerequisite:** FRT071A, FRT071B, FRT053, and concurrent enrollment in FRT072A. Class fee, \$10. F

**FRT075 Forestry Reports and Contracts****3 class hrs/wk, 3 cr.**

Principles and specifics of preparing maps and writing memos, letters, and technical forest resources reports. Special knowledge and skills necessary to successfully execute a legal contract involving forest resources. **Prerequisite:** COM051 or equivalent as determined by the instructor, FRT061, FRT065, and FRT071. W

**FRT077 Wilderness Survival****2 class and 3 lab hrs/wk, 3 cr.**

A study of various survival techniques and applications designed to assist a person who becomes disoriented in the wilderness. Includes situation assessment and problem solving through the implementation of classroom scenarios and field practice. Class fee \$5. Sp, Su

**FRT081 Natural Resource Management I****3 class and 3 lab hrs/wk, 4 cr.**

A study of tree habits, forest ecology, and silvicultural practices in the management of forest lands in the Pacific Northwest. **Prerequisite:** FRT061, FRT065, and FRT071. Class fee \$10. F

**FRT082 Natural Resource Management II****3 class and 3 lab hrs/wk, 4 cr.**

An introduction to outdoor recreation and watershed management. Explores the needs and demands of the American public for recreational opportunities and good watershed management. **Prerequisite:** FRT081. Class fee \$10. Sp

**FRT085 Electronic Surveying and Mapping****3 class and 6 lab hrs/wk, 5 cr.**

Studies distance and direction measurement, using theodolites, electronic distance measuring (EDM), and global positioning system (GPS). The student will do traversing, simple circular curve, and associated office computations. Incorporates hands-on experience with AutoCAD PC-based computer-aided drafting program for map making. Students will transfer data, supplement the map with additional data, and print out a final map. **Prerequisite:** CVL060AB, MTH053, and DRF072. Class fee \$5. W

**FRT086 Methods of Supervision****3 class hrs/wk, 3 cr.**

An introduction to the techniques of supervision. Covers important aspects of supervision such as leadership, planning, communication, motivation, organization, problem solving, work methods, and training. Examines managerial practices which promote an understanding of the work environment. Sp

**FRT280 Cooperative Work Experience**

see AUM280.

**FS****Food Service**

see also Hospitality Systems Management

**FS055 Dining Room Management****2 class hrs/wk, 2 cr.**

Introduction to restaurant operation of a dining room. Provides background and experience in layout aspects of service procedures. Discusses effective service improvement strategies. F, Sp

**FS060 Basic 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 food operations, institutions, and industrial catering. F

**FS061 Sanitation and Safety****2 class hrs/wk, 2 cr.**

Food service sanitation and environmental health, bacteriology and food contamination, personal hygiene and safety practices, and legal regulations of federal and state agencies pertaining to restaurant sanitation and USDA requirements. F



### **FS070 Purchasing and Stores Control**

3 class hrs/wk, 3 cr.

Techniques of buying for large-scale food operations. Compares food quality, establishes food specifications using federal and state grade standards, and studies receiving stock and issuing controls. W

### **FS071 Beverage Management**

2 class hrs/wk, 2 cr.

An introduction to hospitality beverages. Stresses industry standards and practices, health codes, governmental regulations and server rights and responsibilities, as well as customer standards and expectations. F

### **FS072 Food Service Facilities Design**

3 class hrs/wk, 3 cr.

Application of design to institutional and restaurant food service facilities. Includes principles of layout design laws, regulations concerning food service operations, and set-up of lounge operations. Design methods and techniques cover fast food to full-service operations. Features speakers from various governmental agencies which regulate construction and operation of food service facilities. W

### **FS073 Hospitality Systems Management**

3 class hrs/wk, 3 cr.

An in-depth study of methods and techniques employed in restaurants to accomplish effective and efficient operations. Covers organizational analysis, site studies, laws and regulations, performance based on objectives, planning, and decision making. Uses computer program CRASE (Cornell Restaurant Administration Simulation Exercise) which emulates the "real world" situations. CRASE offers students an opportunity to explore the factors that affect restaurant sales and profits. W

### **FS088 Pantry Techniques for Schools and Institutions**

15 class and 25 lab hrs/for 1 wk, 2 cr.

Supervised preparation of sandwiches, salads, and salad dressings in a commercial kitchen. Includes procedures for proper storage of fruits and vegetables. Covers professional techniques for garnishing, vegetable carving, and salad and sandwich bar presentation; safety and sanitation regulations; and calculation of food costs. Class fee \$153. Su

### **FS090, 091, 092 Dietary Manager I, II, III**

3 class and 5 lab hrs/wk, 5 cr.

Three-course sequence covering essential requirements of the Dietary Managers Association and state and federal regulations establishing qualifications of dietetic supervisors. Class fee \$20 each. FS090: F; FS091: W; FS092: Sp

### **FS099 Bartending**

2 class and 1 lab hr/wk, 2 cr.

Introduction to bar operation. Emphasizes economic values, preparation and dispensation of alcoholic beverages, purchasing, ethics, and management. Stresses legal responsibilities, awareness of abuses, safety, and sanitation. Provides training for entry-level employment and supplemental training for those currently employed. May interest home bartenders. Class fee \$20. Offered as needed.

### **FS280 Cooperative Work Experience**

see AUM280.

## **G**

### **Geology**

#### **G142 The Geology of Pacific Northwest Volcanoes, Mountains, and Glaciers**

3 class and 2 lab hrs/wk, 4 cr.

Studies the nature and origin of Northwest mountains and mountain ranges. Includes volcanoes, mountain building, and glacial sculpture. Class fee \$8. Offered as needed.

#### **G143 Pacific Northwest Rocks and Minerals**

3 class and 2 lab hrs/wk, 4 cr.

Studies identification, occurrence, and origin of common Northwest rocks and minerals and properties of precious, semiprecious, and ornamental stones including rocks and minerals which are economically important. Class fee \$8. Offered as needed.

#### **G144 The Geology of Pacific Northwest Rivers, Streams and Deserts**

3 class and 2 lab hrs/wk, 4 cr.

Studies the geomorphology of Pacific Northwest rivers, lakes, and deserts, especially those in Oregon. Also studies the ancient landscapes and environments as indicated by fossils. Class fee \$8. Offered as needed.

#### **G160A-E Regional Geologic Field Studies**

2 class and 3 lab hrs/wk, 3 cr. each

Introductory geologic field study of specific Northwest regions. Includes an evening orientation session prior to a weekend of field study with a follow-up evening seminar. Trip worksheets, field diary, and term paper are required. A: Crater Lake Story B: Oregon Coastal Landforms C: The John Day Country and Thundereggs/Agates D: Origin of the Columbia Gorge E: Oregon Moon Country-Bend area. Class fee \$16 each. Offered as needed.

#### **G201 Geology**

3 class and 3 lab hrs/wk, 4 cr.

A systematic study of the nature and origin of common rocks and minerals. Identification techniques applied in laboratory and on field trips. Class fee \$12. F

#### **G202 Geology**

3 class and 3 lab hrs/wk, 4 cr.

A broad non-quantitative, descriptive survey of geologic landforms. Map interpretation activities applied in laboratory and on field trips. Class fee \$12. W

#### **G203 Geology**

3 class and 3 lab hrs/wk, 4 cr.

Earth's history interpreted through geophysics and plate tectonics. Couples paleontologic laboratory work with field trips. Class fee \$12. Sp

## **GE**

### **General Engineering**

see also Engineering

#### **GE101 Engineering Orientation**

1 class and 2 lab hrs/wk, 2 cr.

An introduction to the engineering profession. Examines disciplines, principles, ethics, and practice. Includes creative and logical problem solving. Covers the use of handheld calculators. Prerequisite: MTH111. F

#### **GE102 Engineering Computations**

2 class and 2 lab hrs/wk, 3 cr.

Acquaints engineering students with the use and operation of the microcomputer. Programs will be developed and used by students to solve typical engineering problems. Structured programming techniques will be emphasized. Prerequisite: MTH111. W

#### **GE103 Engineering Computations**

2 class and 2 lab hrs/wk, 3 cr.

Systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing, and data base operations using spreadsheet software. Prerequisite: GE102 or another FORTRAN programming course. Sp

#### **GE115 Graphics**

6 lab hrs/wk, 3 cr.

Graphic communication, multiview and pictorial representation, graphical analysis and solutions, and introduction to computer-aided drafting. Class fee \$10. F

## **GEOG**

### **Geography**

#### **GEOG105 Introductory Geography**

3 class hrs/wk, 3 cr.

An introduction to the physical elements of geography and the environment in which we live. Focuses on the planet Earth's geodesy, hydrography, landforms, atmosphere, vegetation, and soils. F

#### **GEOG106 Introductory Geography**

3 class hrs/wk, 3 cr.

Introduces cultural elements of geography including human population, agriculture, political patterns, language, religion, folk culture, popular culture, ethnic culture, urban landscapes, and industry and transportation. W

#### **GEOG107 Introductory Geography**

3 class hrs/wk, 3 cr.

An introduction to historical evolution of cultures in the context of people-land relations. Focus is on culture areas, diffusion, and ecology in the past. Special emphasis on cultural landscapes in East Africa, South Asia, the Middle East, Mediterranean Europe, Northwest Europe, and the United States within specific periods of time. Sp

#### **GEOG201 World Regional Geography-The Developed World**

3 class hrs/wk, 3 cr.

Introduces human elements of geography in technically advanced societies. Discusses regional populations, environments, ways-of-life, and place-name location studies in Europe, North America, the Soviet Union, Japan, and modern Oceania. Offered as needed.

**GEOG202 World Regional Geography-The Developing World**  
3 class hrs/wk, 3 cr.

Introduces the human elements of geography in emerging countries. Discusses regional populations, environments, ways-of-life, and place-name location studies in Latin America, China, Monsoon Asia, the Middle East, and Africa. Offered as needed.

**GER**

**German**

**GER101, 102, 103 First Year German, Terms I, II, III**  
4 class hrs/wk, 4 cr.

Introduction to understanding, speaking, reading, and writing the German language, and to the culture of German-speaking countries. Emphasis on developing listening and speaking skills. A variety of activities and audio-visual materials are used to practice these skills. **Prerequisite:** GER102: GER101 or equivalent as determined by the instructor. GER103: GER102 or equivalent as determined by the instructor. Class fee \$2 each. GER101: F; 102: W; 103: Sp

**GER150 First Year German, Accelerated Term 1**  
6 class hrs/wk, 6 cr.

This course covers the same content as GER101 and the first half of GER102. Class fee \$2. W

**GER151 First Year German, Accelerated Term 2**  
6 class hrs/wk, 6 cr.

Continuation of GER150. This course covers the same content as the second half of GER102 and GER103. **Prerequisite:** GER150 or equivalent as determined by the instructor. Class fee \$2. Sp

**GER199 Special Studies: German Conversation Workshop**

9 class and 3 lab hrs for 1 day, 1 cr.

An intensive workshop in conversational German which provides total language immersion in a non-classroom setting. **Prerequisite:** GER102 or equivalent as determined by the instructor.

**GER201, 202, 203 Second Year German, Terms I, II, III**  
4 class hrs/wk, 4 cr.

Continues to develop skills needed to understand, speak, read, and write German. Reviews and continues grammar study, and incorporates German culture through readings and discussion. Focuses on oral expression and improving conversational skills. **Prerequisite:** GER201, GER202, and GER203: First-year German or equivalent as determined by the instructor. Class fee \$2 each. GER201: F; 202: W; 203: Sp

**GS**

**General Sciences**

**GS104 Physical Science**  
3 class and 3 lab hrs/wk, 4 cr.

An integrated study of forces and motions in the physical world. Class fee \$12. F

**GS105 Physical Science**  
3 class and 3 lab hrs/wk, 4 cr.

A broad, nonquantitative, descriptive survey of chemical principles which are relevant to everyday life. Class fee \$12. W

**GS106 Physical Science**  
3 class and 3 lab hrs/wk, 4 cr.

Introduces various branches of earth sciences. Includes basic terminology, fundamental processes, and respective interrelations. Class fee \$12. Sp

**GS120 Rudiments of Meteorology**  
3 class hrs/wk, 3 cr.

A descriptive treatment of contents of the atmosphere, cloud and precipitation types, weather instruments, thunderstorms, cyclones, hurricanes, air masses, fronts, and weather forecasting. Offered as needed.

**GS141 Earth, Our Planet**  
3 class and 3 lab hrs/wk, 4 cr.

A telecourse which investigates geoscience topics by introducing students to internationally-recognized experts who share their theories, models, and opinions. On-location film footage will take students to places and events they might not otherwise see. Includes video viewing, written worksheet lessons, at-home quizzes, topical outside reading summaries, and an on-campus exam. F

**GS142 Earth Revealed**  
3 class and 3 lab hrs/wk, 4 cr.

A telecourse which introduces geology, the science of Earth, and the study of the restless planet on which we live. A textbook, study packet, and lab component are closely integrated with the video components. W

**GS143 The Earth's Oceans**  
3 class and 3 lab hrs/wk, 4 cr.

A telecourse which focuses on the marine environment as a unique feature of planet Earth. Includes video viewing, written worksheet lessons, at-home quizzes, topical outside reading summaries, and an on-campus exam. Sp

**Health Care Support Services**

see Allied Health, Medical Assisting

**HD**

**Human Development**

**HD100 Orientation to Chemeketa: Successful Entry into College**  
11 class hrs/wk for 1 wk, 1 cr.

Acquaints new students with success strategies and the procedures, policies, and culture with which they will be dealing while pursuing their academic goals at Chemeketa. Includes lectures, campus tours, guest speakers, group activities, and group discussions. F, W, Sp, Su

**HD112 Study Skills**

3 class hrs/wk, 3 cr.  
Designed to develop practical and efficient study strategies in order to succeed in college. Includes note-taking, listening, textbook study reading, time management, improving objective and essay test-taking skills, reducing test anxiety, increasing concentra-

tion, and improving memory. An orientation to campus resources and a discussion of different learning styles also included. **Prerequisite:** Reading placement test score of 34 or consent of instructor. F, W, Sp

**HD200 Applied Learning Strategies**  
3 class hrs/wk, 3 cr.

In conjunction with a linked course, helps students strengthen their study, reading, and vocabulary skills. Emphasizes the development of higher-level critical thinking skills. **Prerequisite:** Enrollment in linked course or consent of instructor. Offered as needed.

**HD220 Life Skills Seminar I**  
3 class hrs/wk, 3 cr.

Seminar includes personal development, career planning, skills and strategies for learning, support systems and networking, and exploration of non-traditional training. F, W, Sp, Su

**HD221 Life Skills Seminar II**  
3 class hrs/wk, 3 cr.

Seminar includes personal development, resource management, job search techniques, placement strategies, understanding the working world, resolving work/school/family conflicts, goal setting, and action plan development. F, W, Sp, Su

**HDFS**

**Human Development and Family Studies**

**HDF045 Parenting for Family Literacy**

3 class and 3 lab hrs/wk, 4 cr.

Presents information on a variety of parenting topics including child development, health and nutrition, family communication, child guidance and problem solving, school-family relationships, family crisis coping skills, and others. Course may be repeated each term parent and child are jointly enrolled. F, W, Sp

**HDF050 Parent/Infant**  
1 class hr/wk, 1 cr.

Covers infants' growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with infants. Parents and children attend class together. F, W, S

**HDF051 Parent/Toddler**  
1 class hr/wk, 1 cr.

Covers toddlers' growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with toddlers. Parents and children attend class together. F, W, Sp

**HDF052 Parent/Preschooler**  
1 class hr/wk, 1 cr.

Covers preschoolers' growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with preschoolers. Parents and children attend class together. F, W, Sp

**HDF065 Parenting and Cooperative Child Care**

1 class and 3 lab hrs/wk, 2 cr.

Emphasizes working with young children by active participation in the campus Cooperative Child Care Center. Covers child development and basic guidance techniques by

working with and observing children. Selected topics related to parent education will be presented at required parent seminars. Course may be repeated without limitation of credits. F, W, Sp

#### **HDFS222 Family Relationships**

3 class hrs/wk, 3 cr.

Examines communication patterns and relationships between adults, adults and children, and within intimate personal relations (marriage, families, and couple relations). Emphasis is placed on understanding the role of the family and its consequent role in the development of the individual. F

#### **HDFS225 Prenatal, Infant and Toddler Development**

3 class hrs/wk, 3 cr.

Basic principles of growth and development, prenatal through age two years. Emphasizes physical, intellectual, emotional, and social development. F

#### **HDFS226 A Time to Grow**

3 class hrs/wk, 3 cr.

Designed to look at children, ages birth through adolescence, from a developmental perspective, reflecting how children change as a result of age and experience. Looks at the interplay of biology and experience as well as the child's current stage of development. F, Sp

#### **HDFS229 Development in Middle Childhood**

3 class hrs/wk, 3 cr.

Study of growth and development in six-through 12-year-old children. Emphasis placed on physical, intellectual, emotional, and social growth of the school-aged child. Sp

#### **HDFS242 Managing Roles Across the Life Span**

1 class hr/wk, 1 cr.

Presents information on balancing the demands of school, work, and family. Covers the work-family lifestyle, handling stress, communication skills, and time and money management. F, W, Sp

#### **HDFS247 Preschool Child Development**

3 class hrs/wk, 3 cr.

Covers the principles of development as they apply to the young child, primarily ages 2-1/2 through five. Emphasizes physical, intellectual, emotional, and social growth in children. W

#### **HDFS248 Learning Experiences for Young Children**

4 class hrs/wk, 4 cr.

Focuses on planning and implementing preschool curriculum based on development theory. Involves weekly lectures and experiences covering presentation, development, analysis, and evaluation of materials and concepts which facilitate development of the whole child (physical, social, emotional, and cognitive development). **Prerequisite:** HDFS225 and HDFS247. Class fee \$5. Sp

#### **HDFS249 Introduction to Working with Infants and Toddlers**

3 class hrs/wk, 3 cr.

Assists practitioners in child development centers and home settings working with infants and toddlers. Focuses on understanding, facilitating, and respecting the development of children. F

#### **HDFS250 The Developmental Kindergarten**

3 class hrs/wk, 3 cr.

How kindergarten children learn. Covers development, planning, and implementation of curricula, evaluation of materials and methods, study of current educational issues, and ways to help children make a transition to elementary school. **Prerequisite:** HDFS225, HDFS247, and second-year standing in Early Childhood Education program, or consent of instructor. Offered as needed.

#### **HDFS257 Home, School and Community**

3 class hrs/wk, 3 cr.

Designed to help future teachers and child care workers recognize and understand their unique position as resource coordinator and facilitator for parents. In addition to lectures and reading, the course requires active participation in discussion, oral and written exercises, parent interviews and simulated conferences, parent education programs, community resources, and other activities designed to help the student integrate skills to become more effective in working with families. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. W

#### **HDFS260 Child Abuse and Neglect**

3 class hrs/wk, 3 cr.

Problems of child abuse. For persons interested in child care, teaching, and other areas. Includes causes of abuse, the abused child, abusive parents, the role of teachers, areas of treatment, education, and local organizations that assist abused children and abusive parents. Offered as needed.

#### **HDFS285 Professional Issues in Early Childhood Education**

3 class hrs/wk, 3 cr.

Prepares early childhood educators to fill many professional roles that require knowledge of ethics, conflict resolution, and advocacy. Also covers how to influence governmental processes and develop an anti-biased professional attitude. Includes historical perspectives relating to early childhood education. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. F

### **HE**

#### **Health Education**

see also Health Care Support Services

#### **HE151 Alcohol and Other Drugs**

3 class hrs/wk, 3 cr.

Presents basic information concerning alcohol and other drugs. Covers mental, physical, emotional, and environmental aspects of alcohol and other drugs. Focuses on a "decision-making" approach to drug use and abuse. F, W, Sp, Su

#### **HE199F, G, H Health and Wholeness**

1-3 class hrs/wk, 1-3 cr.

Preventive health care focusing on students' awareness of their personal involvement in developing wellness. Offered as needed.

#### **HE204 Nutrition, Weight Control, and Physical Fitness**

3 class hrs/wk, 3 cr.

Methods of maintaining or improving fitness by considering diets and dieting, obesity, types of exercise, physical testing, cardiovascular fitness, and nutritional concepts. F, W, Sp, Su

#### **HE209 Human Sexuality**

3 class hrs/wk, 3 cr.

Covers mental, physical, and social aspects of human sexuality. Emphasizes development of a decision-making model that enables a person to make personal choices. Class discussion is vital. F, W, Sp, Su

#### **HE222 Consumer's Guide to Health**

3 class hrs/wk, 3 cr.

Looks at health resources available to consumers: medical doctors, naturopaths, chiropractors, types of insurance, drugs, hospitals, nutrition, and other alternatives. Explores how to choose and use a care provider, and how to stay as healthy as possible. Sp

#### **HE250 Personal Health**

3 class hrs/wk, 3 cr.

Covers mental, physical, emotional, and environmental health issues. Emphasizes development of stress management techniques and decision-making skills. F, W, Sp, Su

#### **HE260 Emergency Medical Care-First Responder**

2 class hrs and 2 lab hrs/wk, 3 cr.

Training in emergency medical care skills administered by those arriving first at scenes of traffic accidents or other incidents. Includes airway care, respiratory and cardiopulmonary resuscitation, patient assessment, care for bleeding, shock, injuries, and other medical emergencies. Class fee \$5. Offered as needed.

#### **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. Class fee \$5. F, W, Sp, Su

#### **HE262 Cardiopulmonary Resuscitation Instruction**

2 lab hrs/wk, 2 cr.

Reviews theory and application of basic life support, instructional materials, and methods of use in CPR courses. Successful completion provides instructor certification or recertification by the Oregon Heart Association. **Prerequisite:** Certification in CPR by the Oregon Heart Association. Class fee \$5. 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. Sp

#### **HE268 Pharmacodynamics in Health Care**

3 class hrs/wk, 3 cr.

Facts and principles required for safe administration of medicines in caring for patients.

Provides comprehensive base for clinical application. F, W, Sp

## **HPE**

### **Health and Physical Education**

see also Physical Education

#### **HPE295 Health and Fitness for Life** 3 class hrs/wk, 3 cr.

Provides information on the effects of exercise on the human body. F, W, Sp

## **High School Completion**

see Page 30.

## **Home Economics**

see Clothing/Textiles, Foods/Nutrition, and Human Development and Family Studies

## **HRTM**

### **Hotel, Restaurant, and Tourism Management**

#### **HRTM104 Introduction to Travel and Tourism**

3 class hrs/wk, 3 cr.

An overview of systems, major components, and organization of the travel and tourism industry. Studies role and structure of major tourism organizations and public and private tourism agencies. Explores career opportunities. Orientation to the HRTM program. F

#### **HRTM105 Introduction to the Foodservice Industry**

3 class hrs/wk, 3 cr.

An overview of the foodservice industry's structure, size, and scope; managerial problems and practices; and structure and organization within individual firms. Explores career opportunities. W

#### **HRTM106 Introduction to the Lodging Industry**

3 class hrs/wk, 3 cr.

An overview of the lodging industry's structure, size, and scope; managerial problems and practices; and structure and organization within individual firms. Studies front office procedures and explores career opportunities. Sp

#### **HRTM199 Special Studies: Hospitality, Tourism, and Recreation for the Educator**

4 class hrs/wk, 4 cr.

Provides an overview of the major visitor industry segments including food and beverage; travel and tourism; lodging, leisure and recreation; and meeting and event planning. Course will assist educators in teaching the new Oregon Department of Education program in Hospitality, Tourism, and Recreation. Class fee \$146. Su

## **HS**

### **Human Services**

#### **HS101 Alcohol Use, Misuse, and Addiction**

3 class hrs/wk, 3 cr.

Presents basic information concerning alcohol, particularly in relation to physiological effects of alcohol on the human body. Information focuses on a holistic approach to alcohol problems. F, W, Sp, Su

#### **HS102 Drug Use, Misuse, and Addiction**

3 class hrs/wk, 3 cr.

Examines drugs and their effects. Groups drugs according to the ways they enter persons' lives. Includes additives in food, prescription drugs, chemicals in air and water, and the physiological and psychological effects these drugs have on the lives of users and possible implications for the treatment and prevention of drug problems. W

#### **HS140 Handling the Violent Client**

1 class hr/wk, 1 cr.

An introduction to the recognition, prevention, and control of aggressive behavior. Stresses prevention of violence through early intervention and includes information on pre-aggression warning signs, as well as practice in defusing aggression and the use of physical defense responses. Sp

#### **HS150 Personal Effectiveness for Human Service Workers**

3 class hrs/wk, 3 cr.

An introduction to the elements of personal effectiveness. Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, problem solving, learning strategies, and conflict management. **Prerequisite:** Enrollment in the Human Services program. F, W

#### **HS151 Human Potential Seminar**

3 class hrs/wk, 3 cr.

Assists participants in becoming more self-determining, self-motivating, self-affirming, and empathetic toward others. How to identify personal strengths and explore their use in meeting life goals. F, W, Sp

#### **HS152 Stress Management**

1 class hr/wk, 1 cr.

Introduces stress management, relaxation techniques, and their impact on health and well-being. Covers a variety of major relaxation techniques and emphasizes the development of a personalized stress management plan. Class fee \$2. F, W, Sp

#### **HS153 Introduction to Residential Youth Care**

3 class hrs/wk, 3 cr.

Training for child care workers, foster parents, and persons interested in working in residential child care facilities. Includes developmental planning, developmental needs, separation, the cottage, discipline, groups, and job settings. W

#### **HS154 Community Resources**

3 class hrs/wk, 3 cr.

Explores the history and values of community resources for people with specific disadvantages or disabilities. Acquaints students with local social service agencies and organizations and how to refer clients to them.

**Prerequisite:** Enrollment in the Human Services program. F, W

#### **HS155 Interviewing Theory and Techniques**

3 class hrs/wk, 3 cr.

Theoretical background and specific interviewing techniques. Practice in interviewing situations and peer and professional observation and feedback. **Prerequisite:** HS150. Sp

#### **HS160 Addictive Behaviors**

3 class hrs/wk, 3 cr.

Covers the knowledge and skills needed to assist clients affected by addictive lifestyles. Through lecture, discussion, and activities students learn to identify the disease process of dependency, understand the connection between values and behavior, and develop goals for life changes. F

#### **HS161 Dysfunctional Relationships**

3 class hrs/wk, 3 cr.

Covers the knowledge and skills needed to assist clients affected by addictions and dysfunctional relationships. Through lecture, discussion, and activities students learn how support systems are developed, boundaries are identified and established, and how to change behaviors leading to co-dependence. W

#### **HS162 Relapse Prevention**

3 class hrs/wk, 3 cr.

Provides the knowledge and skills to assist clients in recovery from addictive lifestyles and relationships. Students learn to develop healthy relationships with themselves and others and to help clients experience balanced living by design. Sp

#### **HS165 Activity Director Training/Long-Term Care**

3 class hrs/wk, 3 cr.

Meets training requirements of activity directors in long-term care facilities. Focuses on therapeutic activities and appropriate use of people and material resources in meeting patient needs and to promote continual growth and development of long-term care residents. W and Offered as needed.

#### **HS168 Mental Health and Aging**

3 class hrs/wk, 3 cr.

Presents issues in mental health and aging from both normal aging and psycho-pathological points of view. Focuses on understanding psychological problems of old age, including specific organic functional disorders. Explores approaches to assessment, diagnosis, treatment, and health promotion. Offered as needed.

#### **HS170 Introduction to Practicum**

3 class hrs/wk, 3 cr.

Provides the background and specific skills needed to select and succeed in a Human Services practicum placement. Designed to be taken during the first term of the Human Services program. A prerequisite for Human Services courses HS291-296A,G,S. **Prerequisite:** Enrollment in the Human Services program. F, W

#### **HS199E Dreikurs' Principle**

1 class hrs/wk, 1 cr.

Provides a basic understanding of Dreikursian principles of child guidance. Acquaints students with unique concepts of social interests, purposeful behavior, and encouragement of human relationships and with the

principles for improving relationships. Offered as needed.

### **HS199I Women in Treatment**

2 class hrs/wk, 2 cr.

Introduction to separate, gender-specific, treatment for addicted women. Covers how women's treatment needs differ from historically male-oriented treatment. **Prerequisite:** HS101, HS150, HS170, or consent of instructor. **F,W**

### **HS199J Dual Diagnosis Clients in Treatment**

1 class hr/wk, 1 cr.

Covers basic information about simultaneous diagnosis of addiction and chronic mental illness in the same patient/client. Stresses the importance of assessing and treating both areas equally. **Prerequisite:** HS101, HS150, HS170, or consent of instructor. **W**

### **HS199R Peer-Assistance Training**

3 class hrs/wk, 3 cr.

Helps students develop techniques for dealing with a variety of personal and social problems that may affect their community college peers. Students serve as resource persons in their respective departments. **Prerequisite:** Departmental nomination or consent of instructor. **F, W, Sp**

### **HS199Y Strategies to Promote Positive Youth Development**

3 class hrs/wk, 3 cr.

Designed to help Human Services students learn how to "empower" young people. The course is structured as if students are a foundation that has recently decided to focus its allocation practices in the areas of promoting youth participation in community problem-solving activities. **W**

### **HS201 Family Addiction**

3 class hrs/wk, 3 cr.

Chemical dependency and how it affects a family. Focuses on family dynamics and treatment for alcoholic/addictive families. **Prerequisite:** HS101. **Sp**

### **HS202 Counseling the Chemically Dependent Client I**

3 class hrs/wk, 3 cr.

Designed to assist students in developing skills for assessing and counseling chemically-dependent clients in individual sessions. **Prerequisite:** HS101, HS150, and HS155. **F**

### **HS203 Counseling the Chemically Dependent Client II**

3 class hrs/wk, 3 cr.

Assists students in increasing their skills in group counseling with chemically-dependent clients. **Prerequisite:** HS101, HS150, HS155, and HS202. **W**

### **HS204 Counseling the Chemically Dependent Client III**

3 class hrs/wk, 3 cr.

Assists advanced students in expanding their skills in working with chemically-dependent clients. Includes information about the possibilities for wellness and wholeness for chemically-dependent persons. **Prerequisite:** HS101, HS150, HS155, HS202, and HS203. **Sp**

### **HS205 Youth Addiction**

3 class hrs/wk, 3 cr.

Assists students in working with chemically-dependent youth. Includes prevention, intervention, assessment, and continuing recovery techniques for individuals and groups. **Prerequisite:** HS101. **Sp**

### **HS206 The Addicted Criminal**

3 class hrs/wk, 3 cr.

Assists students in developing skills with chemically-dependent clients who are convicted criminals. Includes information on recognizing, confronting, and surviving an addicted criminal. **Prerequisite:** HS101. **Offered as needed.**

### **HS207 Adult Children of Alcoholics/Addicts**

1 class hr/wk, 1 cr.

Explores the relationship between growing up in a chemically-dependent or dysfunctional family and problems which surface in adulthood. Includes discussion of family dynamics, denial, relationships, work, social skills, and feelings. **Sp**

### **HS208 Alcoholics, Drugs and Sexuality**

1 class hr/wk, 1 cr.

Examines the relationship between chemical dependency, sexuality, and co-dependency. Physiological, psychological, and social factors which impact the sexuality of the alcoholic will be examined. Sexual dysfunction in the female and male alcoholic and the general treatment of each will be outlined. **Prerequisite:** HS101. **Offered as needed.**

### **HS215 Conflict Management**

3 class hrs/wk, 3 cr.

Explores the sources and dynamics of conflict in interpersonal, family, and work settings. Participants will develop an awareness of their own style in conflict situations and learn effective strategies for resolving conflict. **Offered as needed.**

### **HS220 Aging and Society**

3 class hrs/wk, 3 cr.

Introduces the field of social gerontology and explores the relationships between the aging individual and society. First of a three-course sequence emphasizing the social, biological, and psychological aspects of aging. This course may, however, stand alone for those seeking an introduction to the field of gerontology. **F**

### **HS221 Physical Aging**

3 class hrs/wk, 3 cr.

Surveys the physical aspects and theories of aging, changes in body systems, and effects of lifestyle on the aging process. Second of a three-course sequence emphasizing the social, biological, and psychological aspects of aging. **W**

### **HS222 Aging and Behavior**

3 class hrs/wk, 3 cr.

Presents information about behavioral responses in the normal aging process, including coping, cognition and memory, personality, and adjustment. Emphasizes healthy adaptation to aging and promotion of ego integrity in old age. Also covers the description, diagnosis, assessment, and treatment of common organic and functional mental disorders. Third of a three-course sequence em-

phasizing the social, biological, and psychological aspects of aging. **Sp**

### **HS230 Physical, Sexual and Emotional Abuse**

3 class hrs/wk, 3 cr.

An overview of the effects of physical, sexual, and emotional abuse on individuals and families. Explores cultural and political implications of abuse and provides a basic working knowledge of the issues related to abuse. **W**

### **HS231 Treatment of Sexual Abuse Victims and Offenders**

3 class hrs/wk, 3 cr.

Provides basic understanding of sexual abuse dynamics, responses, and treatment intervention techniques for the victim as well as the offender. Presents a basic working knowledge of the issues involved in treating abuse victims and offenders. **Sp**

### **HS260 Group Dynamics**

3 class hrs/wk, 3 cr.

Provides students with theory and skills applicable to small group dynamics. Focuses on group formation, development of norms, conflicts and controversy, and performance and evaluation. **Prerequisite:** HS150. **W, Sp**

### **HS262 Misuse and Abuse of Alcohol and Drugs Among the Elderly**

1 class hr/wk, 1 cr.

Addresses problems of drug and alcohol misuse and abuse among older adults. Focuses on prescription drugs, over-the-counter drugs, and alcohol used either alone or in combination. **Prerequisite:** HS101. **Offered as needed.**

### **HS265 Casework Interviewing**

3 class hrs/wk, 3 cr.

Provides training in the casework interviewing skills needed for human services work. Includes interviewing, problem solving, assessment, and case management. **Prerequisite:** HS150, HS155, and HS291-296 or concurrent enrollment. **F**

### **HS266 Case Management**

3 class hrs/wk, 3 cr.

Provides theory and practice in human services casework and interviewing. Includes interviewing for treatment, problem solving, and crisis intervention. Presents information on prevention, cultural diversity, and case management. **Prerequisite:** HS150, HS155, and HS265. **W**

### **HS267 Systems Strategies**

3 class hrs/wk, 3 cr.

Provides students with the intervention strategies needed for human service work. Includes theory and practice in family, group, and community intervention strategies. **Prerequisite:** HS150, HS155, HS265, or HS202. **Sp**

### **HS291-296A,G,S**

#### **Practicum-Human Service**

9-24 lab hrs/wk, 3-8 cr.

On-site clinical and community experience with human service organizations plus seminars on integrating field and classroom experiences. **Prerequisite:** HS150, HS170, and staff referral. **F, W, Sp (Su as needed)**

**HS298A-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. Offered as needed.

## **HSM**

### **Hospitality Systems Management**

see also Food Service

#### **HSM080 Introduction to the Hospitality Industry**

3 class hrs/wk, 3 cr.

Defines hospitality industry as a single, interrelated industry composed of food, travel and tourism, lodging, and recreation resource management. Assesses the impact of North America's rapidly changing demographics and lifestyle on the hospitality industry. Career opportunities will be discussed. F

#### **HSM081 Meeting, Planning and Convention Management**

3 class hrs/wk, 3 cr.

Introduction to the meetings industry, promotional activities, negotiating for meeting services, convention market salesmanship, customer service, and convention servicing. W

#### **HSM082 Marketing for the Hospitality Industry**

3 class hrs/wk, 3 cr.

Introduces marketing concepts and techniques in the hospitality industry. Covers the variety of products, services, and sales conditions within the industry. Through field study, students analyze industry marketing strategies. Sp

#### **HSM083 Hotel, Restaurant, and Travel Law**

3 class hrs/wk, 3 cr.

Introduces marketing concepts and techniques in the hospitality industry. Covers the array of products, services, and sales conditions within the industry. Through field study, students analyze industry marketing strategies. W

#### **HSM084 Feeding and Housing the Homeless**

3 class hrs/wk, 3 cr.

Uses food service and lodging techniques in the management of facilities serving the homeless. Class fee \$15. F, Sp

#### **HSM086 Leisure in America**

3 class hrs/wk, 3 cr.

An overview of the role of leisure in America. Examines factors influencing leisure; the relationship of leisure to demographics, personality development, health, and values; and the changing lifestyles in American society. F

#### **HSM087 Foundations in Resource Recreation Management**

3 class hrs/wk, 3 cr.

Concepts involved in recreation resource management. Explores principles in planning and implementing programs in recreation and leisure. W

## **HST**

### **History**

#### **HST110, 111, 112 History of World Civilization**

3 class hrs/wk, 3 cr.

Cultural, social, economic, and political development of world civilizations. HST110: from ancient times to 1500 A.D.; HST111: from 1500 to 1914; HST112: the Twentieth Century. HST110: F, W; HST111: W; HST112: Sp

#### **HST157 History of the Middle East and North Africa**

3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in the Middle East and Africa. Offered as needed.

#### **HST158 History of Latin America**

3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in Latin America. Offered as needed.

#### **HST159 History of Asia**

3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in Asia. Offered as needed.

#### **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 the present. HST201: F, W; 202: W; 203: Sp

#### **HST257 Introduction to Ethnic History-Native American**

3 class hrs/wk, 3 cr.

Focuses on the Native American as a minority group in United States history. Studies Native American culture, heritage, humor, self-consciousness, and outlook. An understanding of the history of the Native Americans will enable the student to be more aware of the Native American's role in American history. Offered as needed.

#### **HST258 Introduction to Ethnic History-African American**

3 class hrs/wk, 3 cr.

Examines the history of African Americans and the struggle of America's largest minority group to secure meaningful first-class citizenship. The story of African Americans is an integral part of the American past, and must be examined within the context of that past. The course, therefore, focuses on the decisions, for good and evil, that determined public policy regarding Americans of African descent. Offered as needed.

#### **HST259 Introduction to Ethnic History-Hispanic American**

3 class hrs/wk, 3 cr.

Traces and analyzes various aspects of Hispanic-American life and society. Focuses on racial, cultural, educational, economic, and political development of the Hispanic American in the United States. Offered as needed.

## **HUM**

### **Humanities**

#### **HUM100 Introduction to the Humanities**

3 class hrs/wk, 3 cr.

An overview of film, literature, music, painting, sculpture, and architecture. Concentrates on subject matter, form, content, and audience participation. Offered as needed.

#### **HUM199A Special Studies: Cultural and Racial Issues in the US**

6 class hrs/wk, 6 cr.

An analysis of the relations between minority and majority racial and ethnic groups considering European antecedents to racism, patterns of immigration, and systems of stratification. Combines historical, sociological, and literary perspectives. Offered as needed.

## **J**

### **Journalism**

#### **J215 Publications 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. Course may be repeated for a maximum of 12 credits. F, W, Sp

#### **J216 Newswriting**

3 class hrs/wk, 3 cr.

Gathering and processing news. Includes lead format, straight news style, and some feature writing. Considerable time devoted to writing. Prerequisite: Knowledge of typing. F

#### **J224 Introduction to Journalism**

3 class hrs/wk, 3 cr.

Survey of communication media with emphasis on historical, social, technological, and economic considerations in mass media in the United States. Examines important current legal and ethical dilemmas facing journalists. Recommended for journalism majors; open to others. F, Sp

#### **J225 Advertising/Public Relations**

3 class hrs/wk, 3 cr.

Communications and production aspects of advertising and public relations. Criticism and analysis combined with assignments in copywriting, design, and market strategy. W

#### **J226 Layout/Production**

3 class hrs/wk, 3 cr.

Newspaper management in relation to production and editing procedures. Includes printing processes, typography, page design, style, photo editing, and headline writing. Sp

## **JPN**

### **Japanese**

#### **JPN101 First Year Japanese, Term I**

4 class hrs/wk, 4 cr.

Develops skills in reading, writing, speaking, and understanding basic Japanese language. Introduces Japanese culture. Class fee \$2. F



**JPN102 First Year Japanese, Term II**  
4 class hrs/wk, 4 cr.

Continues development of Japanese grammar, speaking, and listening skills. **Prerequisite:** JPN101 or equivalent as determined by the instructor. Class fee \$2. W

**JPN103 First Year Japanese, Term III**  
4 class hrs/wk, 4 cr.

Expands basic literacy and conversational skills. Includes an introduction to polite versus plain speech forms and genderlects. Explores Japanese culture through everyday social situations. **Prerequisite:** JPN102 or equivalent as determined by the instructor. Class fee \$2. Sp

**JPN201 Second Year Japanese, Term I**  
4 class hrs/wk, 4 cr.

Develops skills in writing and reading (including kanji) and in improving conversational Japanese. Introduces the culture in relationship to the language. **Prerequisite:** First year Japanese or equivalent as determined by the instructor. Class fee \$2. F

**JPN202 Second Year Japanese, Term II**  
4 class hrs/wk, 4 cr.

Improves basic literacy skills (including enlarged kanji) and conversational Japanese vocabulary and written composition. **Prerequisite:** JPN201 or equivalent as determined by the instructor. Class fee \$2. W

**JPN203 Second Year Japanese, Term III**  
4 class hrs/wk, 4 cr.

Improves language skills in using kanji and in fluency of conversation. **Prerequisite:** JPN202 or equivalent as determined by the instructor. Class fee \$2. Sp

**Job Search**

see Field Experience

**Literature**

see English

**Management**

see Business Administration

**Mechanical Design**

see Drafting Technology

**MED**

**Medical Assisting**

see also Allied Health

**MED011 Health Care Skills**

2 lab hrs/wk, 1 cr.

Provides individual and small group tutoring for students in Health Information Technician or Medical Transcriptionist programs. Helps students develop competence, confidence, and expediency in processing health care information. **Prerequisite:** Enrollment in Health Information Technician or Medical Transcriptionist programs and MED061. F

**MED051 Medical Terminology I**

3 class hrs/wk, 3 cr.

Analysis of anatomical terms, roots, prefixes, and suffixes and Greek and Latin verbs and adjectives in building a medical vocabulary. Examines representative anatomical structures, diseases, operations, tumors, and descriptive terms through analysis of words. F, W, Sp

**MED052 Medical Terminology II**

3 class hrs/wk, 3 cr.

Continuation of MED051. **Prerequisite:** MED051. F, W, Sp

**MED053 Medical Terminology III**

3 class hrs/wk, 3 cr.

Language development in medicine, pharmacology, oncology, radiology, nuclear medicine, medical laboratory, and psychiatry. **Prerequisite:** MED051 and MED052. Sp

**MED054 Medical Office Procedures**

3 class and 3 lab hrs/wk, 4 cr.

Procedures and principles used in medical offices in administrative duties, marketing, establishment of patient records, employee manuals, office inventory, written communication, insurance processing, banking, telephone communication, office equipment, and research services. **Prerequisite:** OAI21 and MED055. Class fee \$10. W

**MED055 Medical Law and Ethics**

3 class hrs/wk, 3 cr.

Survey of the manner in which the law and codes of ethics affect the practice of medicine and health care. F, W, Sp

**MED056 Medical Assisting, Basic Procedures**

3 class and 3 lab hrs/wk, 4 cr.

Survey of requirements and qualities for success as a medical assistant. Techniques, methods, and procedures include assisting physician with examinations, medical and surgical aseptic procedures, observing vital signs, care of equipment, supplies, patient teaching principles and considerations, and legal and ethical implications in a medical caregiving setting. **Prerequisite:** High school graduate or equivalent as determined by the instructor and enrollment in the Medical Assisting program. Class fee \$20. F

**MED057 Medical Assisting, Advanced Procedures**

4 class and 3 lab hrs/wk, 5 cr.

Survey of advanced laboratory knowledge and skills required of the medical assistant. Covers pharmacology, diet therapy, electrocardiography, hematology, urinalysis, bacteriology, radiology, physical therapy, patient teaching, office emergencies, and legal and ethical implications of treatments. Includes individual and small group laboratory experience. **Prerequisite:** Second-term standing in the Medical Assisting program with a grade C or higher in all required courses. Class fee \$20. W

**MED060 Medical Transcription**

2 class and 2 lab hrs/wk, 3 cr.

Introduction to techniques of transcribing from recorded voice to typewriter. Operation of a transcriber and transcribing mailable copy with speed and efficiency. Includes transcribing letters, case histories, pathological reports, and other medical reports. **Prerequisite:** MED051, Basic knowledge of typ-

ing techniques, and touch typing ability of 40 words per minute. Class fee \$10. W

**MED061 Health Information Systems Procedures I**

2 class and 4 lab hrs/wk, 4 cr.

Knowledge, skills, and practice required of ward clerks and employees in 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. **Prerequisite:** High school completion or GED and enrollment in the Health Care Support Services program. Class fee \$5. F

**MED062 Health Information Systems Procedures II**

3 class and 4 lab hrs/wk, 5 cr.

Health information systems and necessary skills for health clerical functions. Includes health care delivery systems, health information, medical records, and health record processing (medical transcription) of various medical reports. Entry level skills for health record and medical transcriptionist students and additional skills required for ward clerks. **Prerequisite:** MED061 and enrollment in Health Records Technician program. Class fee \$5. W

**MED064 Introduction to Medical Science**

3 class hrs/wk, 3 cr.

A survey of disease conditions, types of treatment, and medical surgical specialties. **Prerequisite:** MED051, MED052. F, Sp

**MED065 Introduction to Medical Coding Systems**

3 class hrs/wk, 3 cr.

Covers basic differences between nomenclature and classification systems. Includes basic introduction to ICD9-CM for reimbursement and format of coding manual. Fundamental application of coding of conditions and procedures. **Prerequisite:** MED051, MED052, or consent of instructor. W, Sp

**MED066 Medical Reimbursement Management**

3 class hrs/wk, 3 cr.

Introduces basic medical and insurance terminology and abbreviations and use of Current Procedural Terminology (CPT) and Relative Value Studies (RVS). Covers reimbursement protocol for Unemployment Compensation Disability, Worker's Compensation, federal Medicare, Medicaid, Blue Cross/Blue Shield, Champus, and cross reference reimbursement with health maintenance organizations. **Prerequisite:** MED051, MED052, MED064, or consent of instructor. W

**MED070 Advanced Medical Transcription I**

1 class and 4 lab hrs/wk, 3 cr.

Transcription of advanced medical dictation, using proofreading and editing skills, while meeting progressively more demanding accuracy and productivity standards. Encompasses transcription assignments in specialty areas including timed tests and vocabulary and spelling tests in specialty areas of internal medicine, neurology, neurosurgery, obstetrics/gynecology, urology, nephrology,

and cardiology. **Prerequisite:** MED051, MED052, MED060, enrollment in the Medical Transcriptionist program, and touch typing ability of 45 words per minute or proficiency in WordPerfect at an intermediate level. Class fee, \$10. Sp

### **MED071 Advanced Medical Transcription II**

1 class and 4 lab hrs/wk, 3 cr.  
Continuation of MED070. Includes transcription of comprehensive dictation in medical specialty areas including radiology, pathology, and cardiology using American Association of Medical Transcriptionist course tapes. **Prerequisite:** MED051, MED052, MED060, MED070, enrollment in Medical Transcriptionist program, and touch typing ability of 55 words per minute. Class fee, \$10. F

### **MED072 Advanced Medical Transcription III**

1 class and 4 lab hrs/wk, 3 cr.  
Continuation of MED071. Includes transcription of 20 advanced tapes in all fields. **Prerequisite:** MED051, MED052, MED060, MED070, MED071, enrollment in the Medical Transcriptionist program, and touch typing ability of 65 words per minute or proficiency in WordPerfect at an intermediate level. Class fee, \$10. W

### **MED073 Medical Transcription Seminar**

1 class hr/wk, 1 cr.  
Designed to assist the student in relating classroom theory to practical experience and to discuss self-evaluations of work environment experiences. **Prerequisite:** Concurrent enrollment in MED280. Sp

### **MED075A,B,C Professional Development**

1 class hr/wk, 1 cr. each  
Designed to develop student leadership qualities, provide opportunities for student community participation, and provide a setting for student development through health occupations student organizations. F, W, Sp

### **MED077 Health Information Systems Office Practice**

16 lab hrs/wk, 6 cr.  
Practice in clinical situations of health information methods and techniques. **Prerequisite:** Third-term standing in the Health Information Technician program with a grade C or higher in all required courses in the first two terms of the program. Class fee, \$5. Sp

### **MED078 Medical Practice Seminar**

1 class hr/wk, 1 cr.  
Study of relationship of clinical practicum in medical office settings with theoretical course content. Applies to career and personal goals. **Prerequisite:** Concurrent enrollment in MED079 or MED077. Sp

### **MED079 Medical Office Practice**

16 lab hrs/wk, 6 cr.  
Practice of medical assisting methods, procedures, and techniques in clinical situations. **Prerequisite:** Third-term standing in the Medical Assisting program with a grade C or higher in all required courses in the first two terms of the program. Current standard first aid card and level "C" CPR card on file with the instructor. Class fee, \$12. Sp

### **MED080 Health Service Organizational Structure**

3 class hrs/wk, 3 cr.  
The organization, delivery, and financing of health care in the United States. Explores the relationship of human resources, facilities, financial controls, and legal aspects. F, Sp

### **MED081 Introduction to Medical Services Science**

3 class hrs/wk, 3 cr.  
Introductory course on health care institutions' organizational structures and management needs, medical practice, management techniques, and Medical staff bylaws. **Prerequisite:** Enrollment in the Health Care Support Services program. F

### **MED082 Advanced Medical Services Science**

3 class hrs/wk, 3 cr.  
Covers medical staff office functions, the credentialing process, and accreditation. Introduces effective teaching techniques. **Prerequisite:** MED080 and MED081. W

### **MED083 Introduction to Health Care Monitoring Systems**

3 class hrs/wk, 3 cr.  
Surveys present activities and future trends of health care monitoring systems in traditional and alternative health care settings. **Prerequisite:** Enrollment in the Health Care Support Services program. Sp

### **MED085 Health Services Externship**

16 lab hrs/wk, 6 cr.  
Practice of health care support services in a health care delivery setting. **Prerequisite:** MED082, MED083, concurrent enrollment in MED086, consent of instructor, and grade C or higher in all required courses. Class fee \$12. Sp

### **MED086 Health Services Seminar**

1 class hrs/wk, 1 cr.  
Students relate the practical experience of their health services externships with health services theory. Applies to career and personal goals. **Prerequisite:** Concurrent enrollment in MED085. Sp

### **MED088 Medical Assisting Certification Exam Review**

2 class hrs/wk, 2 cr.  
Reviews essential components of the Medical Assistant curriculum in preparation for the Medical Assistant Certification examination. Covers knowledge and skills in the clinical and administrative areas, law and ethics, terminology, anatomy and physiology, pathology, and human relations. **Prerequisite:** Completion of accredited Medical Assisting program, or two years' part-time experience or one year full-time experience as a medical office assistant. Su

### **MED221 Introduction to Health Services**

3 class hrs/wk, 3 cr.  
Provides an overview of the nation's health system. Includes use of health services, history of the health care system, and hospitals and other health service providers and their relationship to the system as a whole. Explores the financial, legal, political, and ethical aspects of the health care system in the United States. F

### **MED222 Health Services Management I**

3 class hrs/wk, 3 cr.  
Introduces the student to management functions, concepts, and principles as well as managerial roles in the context of the health services organization and the health services delivery system. F

### **MED223 Health Services Management II**

3 class hrs/wk, 3 cr.  
Continuation of MED222. Emphasizes the area of human resource management in health services organizations. Explores the concepts of motivation, leadership, communication, dynamics of change, personnel administration, labor relations, and new trends within the context of the health service organization and delivery system in the United States. **Prerequisite:** MED222. W

### **MED280 Cooperative Work Experience**

see AUM280.

## **MFG**

## **Manufacturing Technologies**

### **MFG050 Introduction to Manufacturing**

3 class and 9 lab hrs/1 wk, 1 cr.  
A survey of manufacturing trades and employment prospects for high school students and other interested individuals. Class fee \$10. Su

### **MFG053 Manufacturing Processes**

2 class and 3 lab hrs/wk, 3 cr.  
Designed to provide basic knowledge of various manufacturing processes and materials. Includes processes involving machine tools, tooling, work holding, measuring, inspection, fabrication, forging, casting, and manufacturing procedures. Positive interaction skills and industry-accepted work ethics will be integrated throughout the course. Class fee \$16. F

### **MFG054 Geometric Tolerancing Lab**

3 lab hrs/wk, 1 cr.  
Application of geometric concepts and practices to practical surface plate and coordinate measuring machine setups and evaluation procedures. Emphasis placed on the correct interpretation of geometric dimension engineering drawings and recognition of the correct setup method and procedure necessary to manufacture and inspect parts according to functional requirements. **Prerequisite:** Concurrent enrollment in DRF068 or MFG069, or consent of instructor. W

### **MFG056 Machining Fundamentals I**

2 class and 3 lab hrs/wk, 3 cr.  
Introduces basic machine tool operations including layout, bench work, drilling, measuring, inspection, pedestal grinding, and power saws. Class fee \$20. F

### **MFG057 Machining Fundamentals II**

2 class and 3 lab hrs/wk, 3 cr.  
Continuation of MFG056. Includes intermediate drilling, turning, milling, and grinding machine setup and operations. **Prerequisite:**

MFG056 or consent of instructor. Class fee \$20. F

**MFG060 Introduction to Manufacturing-Special Needs**

3 class and 9 lab hrs/wk, 1 cr.  
Survey of the manufacturing field for special service groups. An overview of manufacturing employment opportunities. Designed for counselors, handicapped persons, and rehabilitation advisors. Class fee \$10. Su

**MFG063 Manufacturing Print Reading and Sketching**

3 class and 3 lab hrs/wk, 4 cr.  
Instruction and skill development in blueprint reading, sketching, basic drawing techniques, and geometric constructions. Class fee \$5. F

**MFG064 Manufacturing Fundamentals**

3 class and 6 lab hrs/wk, 5 cr.  
Basic manufacturing operations emphasizing benchwork processes. Introduces fundamental principles, setup, and operation of basic machine tools including power saws, bench and pedestal grinders, drilling machines, turning machines, milling machines, and application of the *Machinery's Handbook*. Class fee \$30. F

**MFG065 Tool and Work Holding Methods**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces turning and vertical milling operations. Emphasizes work and tool holding methods. Includes continued knowledge and skill development in material removal areas. **Prerequisite:** MFG064 or consent of instructor. Class fee \$30. W

**MFG066 Material Cutting/Removal Methods**

3 class and 6 lab hrs/wk, 5 cr.  
Emphasis on the setup and operation of material cutting methods. Includes continued knowledge and skill development in the areas of turning milling and an introduction to surface grinding. **Prerequisite:** MFG056 and MFG057, or MFG065, or consent of instructor. Class fee \$30. Sp

**MFG068 Manufacturing Measuring, Inspection and Quality Control**

2 class and 4 lab hrs/wk, 3 cr.  
Instruction and skill development in the selection and application of tools for linear English and metric measuring, inspection, testing, and quality control. Methods and procedures include statistical applications and accepted care and storage of related tools and equipment. Class fee \$10. F

**MFG069 QC Applications/CMM Operation**

3 class and 3 lab hrs/wk, 4 cr.  
Use of QC tools such as X-bar and R-charts, pareto charts, histograms, and cause-and-effect diagrams. Process capability studies will be conducted using real parts manufactured by the students in this class. Emphasizes hands-on operation of the coordinate measuring machine and how it is applied in meeting the demands of quality in today's manufacturing environment. **Prerequisite:** MFG068, DRF068, or consent of instructor. Class fee \$10. W

**MFG070 Total Quality Manufacturing**

3 class and 3 lab hrs/wk, 4 cr.  
Total quality manufacturing's (TQM) origin, function, and application in today's working environment. Explores quality planning and systems, problem solving, management systems, data collection, continuous quality improvement, people, and teams. Statistical Process Control (SPC) concepts and practical applications are applied to give the student a working knowledge of TQM tools. **Prerequisite:** DRF068, MFG068, MFG069, or consent of instructor. Class fee, \$5. Sp

**MFG071 CAD for CAM**

2 class and 3 lab hrs/wk, 3 cr.  
Incorporates hands-on experience with the AutoCAD PC-based computer-aided drafting program. Includes necessary factors for successful CAD/CAM integration to meet CNC manufacturing requirements. Class fee \$5. F

**MFG076 Manufacturing Materials and Cutting Tools**

3 class and 6 lab hrs/wk, 5 cr.  
Provides knowledge and skill development in the selection and application of work materials and cutting tools. Includes manufacturing machine tools and nontraditional methods used in removing material to produce machined parts. **Prerequisite:** MFG066 or consent of instructor. Class fee \$20. Sp

**MFG079 Industrial Systems**

2 class and 4 lab hrs/wk, 3 cr.  
An introduction to the application of power methods used by industry in relation to the basic laws of physics. Particular emphasis is placed on the general types of mechanical, hydraulic, pneumatic, and electrical equipment used; the purpose of the components; the maintenance requirements of the equipment; and terminology. **Prerequisite:** Consent of program chair. Class fee \$15. W

**MFG080 Introduction to Manufacturing-Non-Traditional**

3 class and 3 lab hrs/wk, 4 cr.  
Provides knowledge and understanding of the origin of total quality manufacturing (TQM) and application in today's working environment. Covers quality systems, problem solving, quality planning, management systems, data collection, continuous quality improvement, people and teams. Statistical process control (SPC) concepts and practical applications are applied to give the student a working knowledge of TQM tools. **Prerequisite:** DRF068, MFG068, MFG069, or consent of instructor. Class fee \$10. Offered as needed.

**MFG081 Manufacturing Processing Planning**

3 class and 6 lab hrs/wk, 5 cr.  
Advanced instruction in the use of machine tools to emphasize manufacturing process planning procedures. Automated processes included in tracer and CNC operations. **Prerequisite:** MFG066 or consent of instructor. Class fee \$30. F

**MFG082 Manufacturing Production/Assembly Methods**

3 class and 6 lab hrs/wk, 5 cr.  
Emphasizes production and assembly methods in parts manufacturing. Advanced instruction in horizontal and vertical milling.

Includes setup, operation, tool selection and application, proper feed calculation and speed, and depth of cuts in the production of parts. Also includes applications with CNC machinery. **Prerequisite:** MFG081 or consent of instructor. Class fee \$30. W

**MFG083 Manufacturing Production Control**

3 class and 6 lab hrs/wk, 5 cr.  
Advanced job application emphasizing quality of finished products, time study, general estimating, and production of a completed product. Includes collection of data that applies to manufacturing economics and costs compared to estimates. **Prerequisite:** MFG082 or consent of instructor. Class fee \$30. Sp

**MFG084 Fundamentals of Production and Inventory Management**

2 class hrs/wk, 2 cr.  
An introduction to the purpose and function of a manufacturing planning and control system, and how it relates to the operation of a manufacturing company. Offered as needed.

**MFG088 Fluid Power Systems**

3 class and 4 lab hrs/wk, 4 cr.  
Fundamental principles of hydraulic and pneumatic systems. Includes the selection, installation, and maintenance of hydraulic and pneumatic circuit systems, including circuits with electrical controls. **Prerequisite:** Consent of instructor. Class fee \$10. Offered as needed.

**MFG092 Introduction to Computers in Manufacturing**

2 class and 3 lab hrs/wk, 3 cr.  
Provides knowledge and understanding of microcomputer hardware and software systems used in today's manufacturing environment. Includes hands-on experience with DOS and UNIX operating system structure and commands; the basics of word processing, spreadsheet, and database software; shop floor data collection; and graphics databases, as they relate to industry. Class fee \$5. F

**MFG093 CNC Machine Tool Operations**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces students to computer numerical control (CNC) terminology, applications, and operations in manufacturing. **Prerequisite:** Consent of instructor. Class fee \$15. W

**MFG094 Manufacturing Programming**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces CNC programming techniques as they apply to machine tools in manufacturing. **Prerequisite:** MFG093 or consent of instructor. Class fee \$10. F

**MFG095 CAM Applications**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces Computer Aided Manufacturing (CAM). **Prerequisite:** DRF073, or MFG071, or consent of instructor. Class fee \$20. W

**MFG096 CAD-CAM Integrations**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces transfer of CAD-generated two- and three-dimensional drawings to a CAM system. **Prerequisite:** MFG095. Class fee \$20. Sp

**MFG097 Interaction Skills**

2 class and 3 lab hrs/wk, 3 cr.

Interpersonal relationships and responsibilities of labor and management. Includes study of education and training; personal safety, security, and well-being; organization of work environment; public and community involvements; communication; interpersonal relations; economics and productivity; career planning and job search; work habits and attitudes; teamwork; company image; and reputation. Class fee \$2. Offered as needed.

**MFG280 Cooperative Work Experience**

see AUM280.

**MS****Multidisciplinary Studies****MS251 The Art of Discovery**

3 class hrs/wk, 3 cr.

Focuses on classical Greek culture, including its science, philosophy, religion, art, and architecture. Considers their impact upon life patterns and scientific and humanistic thoughts of the day. F

**MS252 The Art of Discovery**

3 class hrs/wk, 3 cr.

Focuses on the Renaissance: the philosophy, scientific discoveries, religious upheavals, art, architecture, and theater. Explores how these patterns affect modern-day thinking. W

**MS253 The Art of Discovery**

3 class hrs/wk, 3 cr.

Focuses on the early 20th century: the philosophies, scientific discoveries, religious developments, art, architecture, and theater. Discusses interrelationships and "the unfinished business of the 20th century." Sp

**MS259 Death and Dying**

3 class hrs/wk, 3 cr.

How modern attitudes toward death and dying are formed. Discussion of rituals, literature, religion, philosophy, the hospice movement, medicolegal issues, and personal attitudes and values. Offered as needed.

**MTH****Mathematics****MTH007 Whole Numbers**

3 class hrs/4 wks, 1 cr.

Fundamental mathematics: addition, subtraction, multiplication, and division of whole numbers. Includes story problems with whole numbers. **Prerequisite:** College placement test score or instructor placement test. F, W, Sp, Su

**MTH008 Fractions**

3 class hrs/4 wks, 1 cr.

Fundamental mathematics: addition, subtraction, multiplication, and division of fractions. Includes story problems with fractions. **Prerequisite:** College placement test score or instructor placement test. F, W, Sp, Su

**MTH009 Decimals, Proportions and Percents**

3 class hrs/4 wks, 1 cr.

Covers addition, subtraction, multiplication, and division of decimals, percentages, and proportions. Includes story problems with

decimals, percentages, and proportions. **Prerequisite:** College placement test score or instructor placement test. F, W, Sp, Su

**MTH051 Basic Mathematics**

3 class hrs/wk, 3 cr.

Includes fundamentals of addition, subtraction, multiplication, and division in problems involving use of whole numbers, fractions, decimals, percentages, and geometric measurements. Emphasizes analysis and solution of word problems. **Prerequisite:** Proficiency in whole number operations. F, W, Sp, Su

**MTH052 Introduction to Algebra and Geometry**

3 class hrs/wk, 3 cr.

Introduces basic algebraic and geometric techniques and applications. Includes signed numbers, elements of algebra, simple equations and formulas, angles, perimeters, and areas of common polygons. **Prerequisite:** Grade C or higher in MTH051 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH053 Introduction to Trigonometry with Geometry**

3 class hrs/wk, 3 cr.

Introduces basic trigonometric and geometric techniques beyond those covered in MTH052 as well as applications of these techniques. Covers similar triangles, circles, surface areas, and volumes of common geometric solids, and right and oblique triangle trigonometry. **Prerequisite:** Grade C or higher in MTH052 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH061 Business Math**

3 class hrs/wk, 3 cr.

Applies arithmetic to the world of business and commerce with emphasis on percentage problems. Applies to payroll, retailing, interest, and real estate. **Prerequisite:** Grade C or higher in MTH051 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH062 Applied Business Math**

3 class hrs/wk, 3 cr.

Applies arithmetic to the world of business and commerce. Includes applications from the fields of depreciation, notes, compound interest and annuities, stocks and bonds, insurance, and financial statements. **Prerequisite:** Grade C or higher in MTH061 or equivalent as determined by the instructor. F, W, Sp

**MTH065 Introductory Algebra**

4 class hrs/wk, 4 cr.

Meets entry-level requirements of MTH081 and requirements for students who need non-transfer algebra course. Helps students to overcome lack of study skills or fear of algebra and to gain a strong, fundamental background in beginning algebra. Covers algebraic and arithmetic operations with real numbers, linear equations with applications, ratio and proportions, and scientific notation. Introduces rational expressions and equations. **Prerequisite:** Grade C or higher in MTH051 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH070 Elementary Algebra**

4 class hrs/wk, 4 cr.

Emphasis on properties and definitions of real numbers, solving linear and quadratic

equations, polynomial arithmetic and factoring, rational expressions and equations, inequalities, exponents, one- and two-dimensional graphing, and solving linear 2x2 systems. **Prerequisite:** Grade C or higher in MTH051 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH075 Applied Geometry**

1 class hr/wk, 1 cr.

Individualized course which students may start and complete at any time during a term. Covers basic concepts of points, lines, planes, angles, triangles, congruence of triangles, different polygons, similarity from an intuitive point of view and problems involving these concepts. **Prerequisite:** Grade C or higher in MTH070 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH076 Applied Geometry**

1 class hr/wk, 1 cr.

Individualized course which students may start and complete any time during a term. Covers basic concepts of perimeter, circumference, arc length, areas of polygons and circles, surface area of solids, volume of various solids, and problems involving these figures. **Prerequisite:** Grade C or higher in MTH070 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH077 Applied Geometry**

1 class hr/wk, 1 cr.

Individualized course which students may start and complete at any time during a term. Covers 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:** Grade C or higher in MTH070 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH078 Applied Trigonometry**

1 class hr/wk, 1 cr.

Individualized course which students may start and complete at any time during a term. Covers trigonometry definitions and various applications of triangles and trigonometric ratios. **Prerequisite:** Grade C or higher in MTH070, MTH075, and MTH076 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH079 Applied Trigonometry**

1 class hr/wk, 1 cr.

Individualized course which students may start and complete at any time during a term. Covers solution of oblique triangles, radian measurement, vectors, and trigonometry ratios of all angles. **Prerequisite:** Grade C or higher in MTH078 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH081 Technical Mathematics I**

4 class hrs/wk, 4 cr.

First course of a three-term sequence. Designed to train technicians to work in technical fields and engineering, drafting, mechanical design, and electronics. Covers fundamental algebra concepts, graphing, ratio and proportion, basic right-angle trigonometry, solution of linear equations, work problems, factoring, and operations with algebraic expressions. **Prerequisite:** Grade C or higher in MTH065 or equivalent as determined by the instructor. F, W

**MTH082 Technical Mathematics II**  
4 class hrs/wk, 4 cr.

Second term in a sequence. Covers mathematical skills necessary for technicians in civil-structural engineering, mechanical design, or electronics. Includes trigonometric functions, oblique triangle solutions and applications, exponents and radicals, logarithms, solution of logarithm equations, trigonometric identities, solution of trigonometric equations, vectors, complex numbers, and graphs of trigonometric functions. **Prerequisite:** Grade C or higher in MTH081. W, Sp

**MTH083 Technical Mathematics III**  
4 class hrs/wk, 4 cr.

Third term in a sequence. For technicians in civil-structural engineering, mechanical design, or electronics. Includes analytic geometry, differentiation, integration, and their applications plus differentiation and integration of transcendental functions. **Prerequisite:** MTH082 or equivalent as determined by the instructor. Sp

**MTH095 Intermediate Algebra**  
4 class hrs/wk, 4 cr.

Covers fundamental properties of algebra with real numbers, linear equations in one and two variables, linear inequalities factoring, rational expressions and equations, systems of equations and inequalities, exponents, radical expressions and equations, quadratic equations and inequalities, absolute value expressions and equations, and applications. **Prerequisite:** Grade C or higher in MTH070 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH105 Introduction to Contemporary Mathematics**  
4 class hrs/wk, 4 cr.

Surveys the application of mathematics as a problem-solving tool in the real world. Includes business, consumer, ecology, and city planning applications using probability, statistics, geometry, graph theory, linear programming, and game theory. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. F, W, Sp

**MTH111 College Algebra**  
5 class hrs/wk, 5 cr.

Study of polynomial, rational, exponential and logarithmic functions, equations, and inequalities of various degrees; complex numbers; matrices and determinants; sequences and series; conic sections with transformations; and algebra of matrices using a graphing calculator. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH95 or equivalent. F, W, Sp, Su

**MTH112 Trigonometry**  
5 class hrs/wk, 5 cr.

A pre-calculus course with emphasis on circular, trigonometric functions. Includes triangle application, vector arithmetic, polar coordinates, rotation of conics, and trigonometric form of complex numbers. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH111 and MTH075 or equivalent as determined by the instructor. F, W, Sp, Su

**MTH211 Foundations of Elementary Mathematics**  
3 class hrs/wk, 3 cr.

First course of a three-term sequence for liberal arts students, especially prospective elementary teachers. Emphasizes problem solv-

ing and basic concepts about whole numbers, integers, sets, and number theory. Uses manipulatives to deepen understanding. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. F

**MTH212 Foundations of Elementary Mathematics**  
3 class hrs/wk, 3 cr.

Second term of liberal arts mathematics sequence. Covers basic concepts about rational and real numbers and consumer mathematics. Uses computers and manipulatives. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. W

**MTH213 Foundations of Elementary Mathematics**

Third term of liberal arts mathematics sequence. Covers topics in geometry. Uses computers and manipulatives. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. Sp

**MTH241 Elementary Calculus**  
4 class hrs/wk, 4 cr.

A one-term terminal course with an intuitive approach to differential and integral calculus. Emphasizes techniques of calculus in applied problem solving. The course is primarily for non-math majors. **Prerequisite:** Grade C or higher in MTH111 or equivalent as determined by the instructor. F, W, Sp

**MTH243 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:** Grade C or higher in MTH111 or equivalent as determined by the instructor. F, W, Sp

**MTH251 Differential Calculus**  
5 class hrs/wk, 5 cr.

First course of a four-term sequence. Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers theory of calculus, derivation of theorems and formulas and applications for sciences, engineering, and other fields. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH112 or equivalent as determined by the instructor. F, Sp, Su

**MTH252 Integral Calculus**  
5 class hrs/wk, 5 cr.

Continuation of MTH251. Covers applications of definite integral, logarithmic, exponential, trigonometric, and hyperbolic functions; techniques of integration and indeterminate forms; and functions defined in polar and parametric forms. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH251 or equivalent as determined by the instructor. F, W

**MTH253 Series Calculus and Linear Algebra**  
4 class hrs/wk, 4 cr.

Combines topics from linear algebra and infinite series. Includes a study of sequences and series with applications, vector and matrix manipulation as well as determinants. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH252 or equivalent as determined by the instructor. W

**MTH254 Vector Calculus I**  
4 class hrs/wk, 4 cr.

First of two courses in multivariable calculus. Includes coordinate systems, vectors, curves, and surfaces in three dimensions. **Prerequisite:** Grade C or higher in MTH252 or equivalent as determined by the instructor. Sp

**MTH255 Vector Calculus II**  
4 class hrs/wk, 4 cr.

Second course in multivariable calculus. Emphasizes vector fields and applications. **Prerequisite:** Grade C or higher in MTH254, or equivalent as determined by the instructor. Sp

**MTH256 Applied Differential Equations**  
4 class hrs/wk, 4 cr.

Covers solutions of linear and first order non-linear differential equations. Includes Laplace transforms and convolutions. **Prerequisite:** Grade C or higher in MTH254 or equivalent as determined by the instructor. F

**MUP and MUS**

**Music**

**MUP100 Piano**

1 class hr/wk, 1 cr.

Individual instruction in fundamentals of music theory incorporated into basic piano playing skills. Open to students of all levels and interests. Course may be repeated for a maximum of nine credits. F, W, Sp

**MUP101 Symphonic Band-First Year**  
3 lab hrs/wk, 1 cr.

Applied study and performance on musical instruments played in ensemble format, with some attention given to solo performances within a symphonic band setting. **Prerequisite:** Two years' instruction on an instrument and/or audition. Class fee \$12. F, Su

**MUP105 Jazz Ensemble**  
3 lab hrs/wk, 1 cr.

Applied study and performance on musical instruments played in solo or ensemble formats. **Prerequisite:** Two years' instruction on an instrument and/or audition. Class fee \$12. F, Su

**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 basic singing skills and music reading. Open to students of all levels and interests. May be repeated for a maximum of nine credits. F, W, Sp

**MUS134 Class Voice**  
4 lab hrs/wk, 2 cr.

Classroom instruction in vocal technique for persons with little or no previous vocal training. For both solo and ensemble singers, including music and non-music majors. **Prerequisite:** An interest to learn vocal music. Course may be repeated for a maximum of eight credits. Offered as needed.

**MUS197 Chorus**  
4 lab hrs/wk, 2 cr.

Rehearsal and performance of many types of styles of choral literature. **Prerequisite:** Consent of instructor and previous experience singing with school, civic, or church choirs is helpful but



not mandatory. Course may be repeated for a maximum of eight credits. F, W, Sp

### **MUS199 Fundamentals of Music**

3 class hrs/wk, 3 cr.

A systematic study of music. Examines the various parts and elements of music and the ways in which these elements combine and interrelate to form a musical composition. F, Sp

### **MUS201 Introduction to Music and Its Literature**

3 class hrs/wk, 3 cr.

A comprehensive study of music literature and history. How tones combine to create musical elements of melody, harmony, and rhythm, and how these relationships and organization of these elements apply to compositional styles and form. Combines a study of musical elements in art forms and ethnic musicology with writing melodic contours. F

### **MUS202 Introduction to Music and Its Literature**

3 class hrs/wk, 3 cr.

Deals with sociological and historical development of music from the Middle Ages through the Renaissance, Baroque, and Classical eras, concluding with the 19th century Romantic period. W

### **MUS203 Introduction to Music and Its Literature**

3 class hrs/wk, 3 cr.

Studies "new" music procedures and philosophies, beginning with Impressionism of the late 19th century and concluding with developments in electronic and popular music of the 1990s. Sp

## **NOR**

### **Norwegian**

#### **NOR101, 102, 103 First Year**

##### **Norwegian, Terms I, II, III**

4 class hrs/wk, 4 cr.

A grammatical foundation in formal and idiomatic Norwegian. Emphasizes speaking, reading, and writing. **Prerequisite:** NOR102: NOR101 or consent of instructor. NOR103: NOR102, one year high school Norwegian, or consent of instructor. Class fee \$2 each. Offered as needed.

## **NUR**

### **Nursing**

#### **NUR050 Obstetrical Nursing**

2 class 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. **Prerequisite:** RN license or enrollment in a nursing program. Offered as needed.

#### **NUR060 Nursing Success Strategies**

3 class hrs/wk, 3 cr.

Introduces basic skills that are built upon in the nursing curriculum. Includes a survey of the nursing profession, development of study skills, math for nursing, learning styles, coping strategies, attitude, motivation, and interpersonal process as related to

the nursing curriculum. **Prerequisite:** Consent of nursing director. Class fee \$5. F, W, Sp

### **NUR106 Nursing**

5 class and 12 lab hrs/wk, 9 cr.

Basic concepts and beginning skills for providing safe nursing care. Emphasis upon meeting basic human needs in physical and psychosocial areas. Theory and clinical experiences are integrated throughout the term. **Prerequisite:** Enrollment in the Nursing program. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$30. F

### **NUR108 Nursing**

5 class and 12 lab hrs/wk, 9 cr.

Presents concepts and skills that integrate growth and development with psychosocial coping responses to illness and conditions commonly encountered in children and adults. Content includes care of medical and surgical patients with emphasis on alterations related to simple conditions. **Prerequisite:** NUR106. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$30. W

### **NUR109 Nursing**

5 class and 15 lab hrs/wk, 10 cr.

Nursing care of medical and surgical patients with emphasis on alterations related to stable conditions. Concepts throughout the term integrate facts and principles from the biopsychosocial sciences. **Prerequisite:** NUR108. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$30. Sp

### **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 patient care, implementing those plans, and evaluating care. Offered as needed.

### **NUR206 Nursing**

5 class and 16 lab hrs/wk, 10 cr.

Nursing care of patients with alterations related to complex conditions. Includes techniques for communicating therapeutically with patients having severe disturbances. Presents education concepts to teach patients with stable conditions. **Prerequisite:** NUR109. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$20. F

### **NUR208 Nursing**

6 class and 13 lab hrs/wk, 10 cr.

Nursing care of patients with alterations related to complex and unstable conditions. Presents education concepts to teach patients with complex conditions. **Prereq-**

**uisite:** NUR206. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$20. W

### **NUR209 Nursing**

3 class and 16 lab hrs/wk, 8 cr.

Presents nursing management principles and leadership concepts. Focuses on the role of managing a nursing care team in the acute-care setting or an extended-care facility. The student will be applying the nursing process at the Associate Degree Nursing level to assist individuals in various stages of the life span with alterations related to simple, stable, complex, and unstable conditions. **Prerequisite:** NUR208. Registration must be completed, liability insurance purchased, immunizations documented, and TB test results obtained before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$5. Sp

### **NUR214 Introduction to Cancer Nursing**

1 class hr/wk, 1 cr.

Knowledge and skills useful in cancer prevention and diagnosis, and in treatment, rehabilitation, and long term care of patients. Attempts to create positive attitudes toward cancer and the care of cancer patients. Offered as needed.

### **NUR215 Physical Assessment for Nurses**

3 class and 3 lab hrs/wk, 4 cr.

Basic skills in health screening of adults. Includes health histories and screening examinations by inspection, palpation, percussion, and auscultation. **Prerequisite:** RN license or enrollment in a registered nursing program. Class fee \$10. Offered as needed.

### **NUR221 Nursing Administration in Long Term Care Facilities**

3 class hrs/wk, 3 cr.

Designed for RNs employed at or interested in jobs in long-term care facilities. Emphasizes application of supervisory principles. Offered as needed.

### **NUR250 Introduction to the Operating Room I**

3 class hrs/wk, 3 cr.

Fundamentals of nursing practice in an operating room. Focuses on roles of circulating and scrubbing nurses, sterilization concepts, patient support, surgical techniques, and instrumentation. **Prerequisite:** RN license or eligibility for licensure, or enrollment in an accredited nursing education program. Offered as needed.

### **NUR251 Introduction to the Operating Room II**

15 lab hrs/wk, 5 cr.

Fundamentals of nursing practices in an operating room. Focuses on roles of circulating and scrubbing nurses, sterilization, patient support, surgical techniques, and instrumentation. Practical experience included. **Prerequisite:** NUR250. Current CPR certification (Level C) is required. Class fee \$10. Offered as needed.



### NUR260 Decision Making in the Clinical Setting

2 class and 2 lab hrs/wk, 3 cr.

Focuses on the critical thinking skills necessary for appropriate determination of nursing implications (interventions) based on a thorough patient assessment of the acutely ill hospitalized patient. **Prerequisite:** RN license, or nursing degree with instructor approval. **Su; Offered as needed.**

### NUR268 Drug Therapy and Nursing Implications

3 class hrs/wk, 3 cr.

Knowledge and principles required for safe administration of medications in caring for patients. Provides comprehensive base for clinical application, with specific considerations for pediatrics, maternity, and geriatric patients. **Prerequisite:** LPN or RN license, medication aide certification, or enrollment in an accredited nursing program. **Su; Offered as needed.**

### NUR280 Cooperative Work Experience

see AUM280.

## OA

### Office Administration and Technology

#### OA051 Civil Service Exam Preparation

1 class and 4 lab hrs/wk, 3 cr.

Reviews English fundamentals, including punctuation with practical business applications. How to apply basic math procedures to business problems and business formulas, reconcile bank statements, and compute selling and purchasing invoices. Introduces property taxes, sales taxes, and budgeting. **Prerequisite:** OA084 and OA099A,B. **F, W, Sp, Su**

#### OA058A Shorthand Refresher I

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. **Offered as needed.**

#### OA058B 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 individual rates. Grades based on progress. **Offered as needed.**

#### OA061 Electronic Calculators

3 class hrs/wk for 7 weeks, 2 cr.

Use of electronic printing calculators to solve simple business and mathematical problems. **Prerequisite:** MTH051. **Class fee \$12. W, Sp**

#### OA061A Electronic Calculators A

2 lab hrs/wk, 1 cr.

Use of electronic calculators to solve mathematical problems. Includes development of speed and accuracy in touch operation of the calculator. **Class fee \$4. F, W, Sp, Su**

#### OA061B Electronic Calculators B

2 lab hrs/wk, 1 cr.

Continuation of OA061A. Covers percentages, simple interest, trade discounts, pay-

roll, and calculation of consumer installment payment schedules. Speed and accuracy development in touch operation of the calculator. **Prerequisite:** OA061A. **Class fee \$4. F, W, Sp, Su**

#### OA061C Electronic Calculators C

2 lab hrs/wk, 1 cr.

Continuation of OA061B. Emphasizes speed and accuracy in touch operation of electronic calculators and solving business math problems such as distributing amounts, paying invoices, calculating merchandise, and analyzing financial statements. **Prerequisite:** OA061B and MTH061. **Class fee \$4. Offered as needed.**

#### OA064 Time Management for Office Workers

1 class hr/wk, 1 cr.

Analysis of time-management needs and the implementation of time-management skills and tools for a productive office worker. Course includes a self-analysis of time-management skills. **Offered as needed.**

#### OA065P WordPerfect for Personal Use

1 class and 2 lab hrs/wk, 2 cr.

Basic word processing training using WordPerfect software to include simple correspondence, term papers, and other personal use projects. Credit towards a degree will not be granted if the student already has credit for OA066P. **Class fee \$8. F, W, Sp**

#### OA066 WordPerfect Graphics Features

1 class and 2 lab hrs/wk, 2 cr.

Covers document enhancement features of WordPerfect for use in creating letters, simple flyers, and brochures. **Prerequisite:** Ability to use the basic features of WordPerfect. Completion of CS101 or OA201P is helpful. **Class fee \$8. Offered as needed.**

#### OA067 Word Processor Operation

1 class and 3 lab hrs/wk, 2 cr.

Provides basic training on a Cathode Ray Tube (CRT) word processor. Covers concepts of word processing systems and equipment and their relationship to students' career goals. **Prerequisite:** Touch typing ability of 30 words per minute. **Class fee \$8. Offered as needed.**

#### OA072 AlphaHand II

3 class and 2 lab hrs/wk, 4 cr.

Continuation of OA114. Emphasis on AlphaHand speed development, transcription, and review. Continuation of review and reinforcement of basic grammar, spelling, and punctuation. **Prerequisite:** OA114 and OA121, or OA122. **Class fee \$12. Sp**

#### OA074 Introduction to the Law Office

3 class and 2 lab hrs/wk, 4 cr.

An introduction to the law office, including the use of computers and specialized software for time and billing, legal trust accounting, scheduling and management, legal office reports including statements, and other functions. Introduces court system, criteria for and functions of a notary public, legal terminology, and basic legal office procedures, including client relations. **Prerequisite:** OA084, OA116, OA122, and OA200. **Class fee, \$12. W**

#### OA075 Legal Office Procedures I

2 class and 2 lab hrs/wk, 3 cr.

An introduction to current law office procedures and practices. Includes maintaining professional relations with clients and employers, learning and using legal terminology, keying of court and non-court documents, keeping financial and other records, setting priorities, making decisions, using the computer and software for basic legal office procedures, and integrating previously-learned office skills. Good basic English skills are a necessity. **Prerequisite:** OA074, OA085, and OA201P. **Class fee, \$12. Sp**

#### OA076 Legal Office Procedures II

2 class and 2 lab hrs/wk, 3 cr.

Continuation of OA075 with special emphasis on court documents, integration of computer skills with legal office procedures, legal terminology, and employability skills. **Prerequisite:** OA075, OA085, OA123, OA201P, and touch typing ability of 50 words per minute. **Class fee \$12. F**

#### OA077 Legal Machine Transcription I

2 class and 2 lab hrs/wk, 3 cr.

Practice in keying various legal documents and forms from machine dictation, continuation of court documents, legal terminology, and advanced integration of computer skills. Emphasizes professional standards for work habits and document quality. **Prerequisite:** OA076 and OA225 (OA202P recommended). **Class fee \$12. W**

#### OA078 Legal Machine Transcription II

3 class hrs/wk, 3 cr.

A continuation of OA077 with emphasis on increased skill in typing and handling materials in producing legal documents. **Prerequisite:** OA077. **Class fee \$12. Offered as needed.**

#### OA080 Medical Machine Transcription

1 class and 4 lab hrs/wk, 3 cr.

Typing from a transcribing machine to increase speed, accuracy, and understanding of medical case histories, clinical reports, and medical correspondence. **Prerequisite:** OA225ABC, MED051, and touch typing ability of 40 words per minute. **Class fee \$12. F, Sp**

#### OA084 Business English I

3 class hrs/wk, 3 cr.

Emphasizes basic English skills, including dictionary use, spelling, parts of speech, and grammar. Study of and practice in writing clear, concise, and effective sentences. **F, W, Sp, Su**

#### OA085 Business English II

3 class hrs/wk, 3 cr.

Continuation of OA084. Emphasizes improving punctuation, grammar, and spelling skills and writing clear and concise paragraphs. Introduction to memo and letter writing. Study of a short formal report, including letter of transmittal. **Prerequisite:** OA084 or equivalent as determined by the instructor. **F, W, Sp**

#### OA086 Personal and Professional Development

3 class hrs/wk, 3 cr.

Helps students become aware of their personal strengths. Concentrates on helping students develop salable personal skills. Em-

phasizes traits businesses accept and appreciate in their employees. Sp

#### **OA089 Filing**

4 class hrs/wk for 5 weeks, 2 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 other documents. W, Sp

#### **OA089A Filing A**

1 class hr/wk, 1 cr.

Basic principles used in the systematic planning of the classification, arrangement, and filing of alphabetic correspondence and the requisition, charge, and follow-up controls. F, W, Sp, Su

#### **OA089B Filing B**

1 class hr/wk, 1 cr.

Presentation of various types of filing systems: color-coded, alphabetic, subject, numeric, and geographic. Emphasis on records control, transfer, storage, and retrieval; disposition of paper recorded; and special records filing. Prerequisite: OA089A. F, W, Sp, Su

#### **OA090 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 financial statements. Prerequisite: MTH051 or equivalent as determined by the instructor. F, W, Sp

#### **OA091 Computerized Bookkeeping and Payroll Procedures**

4 class hrs/wk, 4 cr.

Application of computerized accounting procedures. Covers chart of accounts, journal, general ledger, trial balance, income statement, and balance sheet. Also introduces receivables, payables, and depreciation. Examines federal and state laws which determine types of payroll records required. Provides practice computing and recording wages and salaries both manually and on computer. Preparation of quarterly reports for income and other taxes. Prerequisite: OA090, BA051, or BA211. Class fee \$12. W, Sp

#### **OA091A Computerized Bookkeeping**

2 class hrs/wk, 2 cr.

Introduces student to computerized accounting procedures for creating and updating charts of accounts, journals, general ledgers, trial balances, income statements, and balance sheets. Additional material is introduced on receivables, payables, and depreciation. Prerequisite: OA090, BA051, or BA211. Class fee \$6. Offered as needed.

#### **OA091B Payroll Procedures**

2 class hrs/wk, 2 cr.

Includes an examination of federal and state laws which determine types of payroll records required. Students practice computing and recording wages and salaries both manually and on computer and prepare quarterly reports for income and other taxes. Prerequisite: OA090, BA051, or BA211. Class fee \$6. Offered as needed.

#### **OA093 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. Offered as needed.

#### **OA098A CPS Office Technology Review**

3 class hrs for 4 weeks, 1 cr.

An overview including information on word processing, data processing, communications, and reprographics technology. Specifically oriented as a review for the Certified Professional Secretary (CPS) exam. Offered as needed.

#### **OA099 Proofreading/Editing**

3 class hrs/wk, 3 cr.

Effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. Prerequisite: OA121 and OA084. F, W, Sp, Su

#### **OA099A Proofreading/Editing A**

1 class hr/wk, 1 cr.

Introduces students to effective proofreading techniques. Emphasizes grammar, word division, spelling, abbreviations, and capitalization rules. Includes instruction in using office reference manuals. Prerequisite: OA121 or equivalent as determined by the instructor. F, W, Sp, Su

#### **OA099B Proofreading/Editing B**

1 class hr/wk, 1 cr.

Emphasizes punctuation, sentence structure, number expression, and use of reference manuals. Includes practical applications of subject matter. Prerequisite: OA099A, OA121, or equivalent as determined by the instructor. F, W, Sp, Su

#### **OA099C Proofreading/Editing C**

1 class hr/wk, 1 cr.

Emphasizes practical applications of grammar and punctuation. Includes editing and pre-transcription skills and includes use of reference manuals. Prerequisite: OA099B, OA121, or equivalent as determined by the instructor. F, W, Sp, Su

#### **OA101 Office Careers Survey**

1 class hr/wk, 1 cr.

An overview of the organization and climate of business and professional offices and an investigation of various job opportunities for persons with secretarial/clerical training. F, W, Sp, Su

#### **OA114 AlphaHand I**

3 class hrs and 2 lab hrs/wk, 4 cr.

A shorthand system based on the alphabet. Includes theory and practice in taking dictation and longhand transcription skills. Reinforcement of basic grammar, spelling, and punctuation is included. Useful as a vocational or personal skill. Prerequisite: OA122, OA084, or concurrent enrollment. Class fee \$12. W

#### **OA116 Office Procedures**

3 class hrs/wk, 3 cr.

An introduction to administrative support activities. Includes telephone use, development of effective listening skills, mailing and shipping services, preparation of financial records, plans for meetings and conferences, travel arrangements, scheduling appointments, meeting with the public, supervision and leadership, and employment opportunities. F, W, Sp, Su

#### **OA117 Executive Office Simulation**

2 class and 2 lab hrs/wk, 3 cr.

A simulated experience of working in an office with co-workers using several types of resources to produce a smooth work flow. Prerequisite: OA116, OA123, BA214, and OA210. Class fee \$12. W, Sp

#### **OA119 Exploring Office Desktop Publishing**

3 class hrs/wk, 3 cr.

An introduction to publication planning, typography, design principles, and the use of desktop publishing for preparation of office publications. Includes an overview of duplication methods and how to work with print shops. Prerequisite: Keyboarding (typing) by touch. Class fee, \$12. W, Sp

#### **OA121 Keyboarding**

2 class and 3 lab hrs/wk, 3 cr.

Basic touch keyboarding skills for standard microcomputer or typewriter keyboards. Emphasizes speed and accuracy, understanding the basic vocabulary of entering or retrieving information, and formatting business letters and reports. Class fee \$12. F, W, Sp, Su

#### **OA121A Keyboarding A**

2 lab hrs/wk, 1 cr.

First of a three-course sequence. Covers basic touch-keyboarding on standard microcomputers or typewriters. Class fee \$4. F, W, Sp, Su

#### **OA121B Keyboarding B**

2 lab hrs/wk, 1 cr.

Second of a three-course sequence. Emphasizes developing speed and accuracy in touch keyboarding. Introduces symbol keys and basic punctuation rules. Prerequisite: OA121A or consent of instructor. Class fee \$4. F, W, Sp, Su

#### **OA121C Keyboarding C**

2 lab hrs/wk, 1 cr.

Third of a three-course sequence. Continues development of speed and accuracy in touch keyboarding on microcomputers or typewriters. Also covers formatting business letters and envelopes and short reports with endnotes. Prerequisite: OA121A and OA121B, or consent of instructor. Class fee \$4. F, W, Sp, Su

#### **OA122 Keyboard Skillbuilding**

1 class and 4 lab hrs/wk, 3 cr.

Exercises to improve keyboarding proficiency, speed, and accuracy on microcomputers or typewriters. Prerequisite: Knowledge of the keyboard and touch typing ability of 25 words per minute minimum (30 recommended). Course may be repeated for a maximum of six credits. Class fee \$12. F, W, Sp

**OA122A,B,C Keyboard****Skillbuilding**

Variable 1-3 cr.

Prepares students for production typing. Provides practice in improving keyboarding proficiency, speed, and accuracy. **Prerequisite:** OA121 or consent of instructor. Class fee \$4 each. F, W, Sp

**OA123 Formatting**

2 class and 3 lab hrs/wk, 3 cr.

Formatting business documents such as business letters, envelopes, tables, memorandums, reports, and forms. Review of numbers. **Prerequisite:** OA122 and touch typing ability of 35 words per minute. Class fee \$12. W, Sp

**OA123A Formatting A**

2 lab hrs/wk, 1 cr.

First of a three-part course. Includes vertical and horizontal centering and formatting enumerations, and reviews the touch system alphabetic, numeric, and symbol keys. **Prerequisite:** OA122 and touch typing ability of 40 words per minute, or consent of instructor. Class fee \$4. F, W, Sp, Su

**OA123B Formatting B**

2 lab hrs/wk, 1 cr.

Second of a three-part course. Presents formats for business letters, tables, and reports. **Prerequisite:** OA123A. Class fee \$4. F, W, Sp, Su

**OA123C Formatting C**

2 lab hrs/wk, 1 cr.

Last of a three-part course. Covers format styles for business letters and envelopes, memorandums, business forms, financial statements, and reports. **Prerequisite:** OA123B. Class fee \$4. F, W, Sp, Su

**OA199D Introduction to PageMaker**

1 class hr/wk, 1 cr.

Hands-on instruction with Aldus PageMaker desktop publishing software using the microcomputer. Students practice publications in class. **Prerequisite:** Touch typing ability and experience with microcomputers. Class fee \$8. Offered as needed.

**OA200 Introduction to Information Processing**

3 class hrs/wk, 3 cr.

Information processing concepts and equipment. Covers computers and their applications in the automated office. Includes the operation of the microcomputer with word processing and other integrated software, and the dedicated word processor. **Prerequisite:** Touch typing ability of 30 words per minute. Class fee \$12. F, W, Sp, Su

**OA201D Word Processing Procedures I: Microsoft Word**

3 class hrs/wk, 3 cr.

Basic training in operation of Microsoft Word software. **Prerequisite:** Touch typing ability: 45 words per minute. Class fee \$12. Offered as needed.

**OA201P Word Processing Procedures I-WordPerfect**

3 class hrs/wk, 3 cr.

Basic training in the operation of WordPerfect software on IBM-compatible computers. **Prerequisite:** Touch typing ability: 45 words per minute. Class fee \$12. F, W, Sp, Su

**OA202P Word Processing Procedures II-WordPerfect**

3 class hrs/wk, 3 cr.

Intermediate WordPerfect training covering fonts; macro functions; subdirectories; and merge, tables, simple sort, outline, and paragraph numbering features. **Prerequisite:** OA201P or proficiency in basic WordPerfect skills and touch typing ability of 40 words per minute. Class fee \$12. F, W, Sp

**OA204P Advanced WordPerfect**

3 class hrs/wk, 3 cr.

Advanced WordPerfect training covering graphics, styles, math, columns, advanced macros, and advanced sort features. **Prerequisite:** OA202P or proficiency in intermediate WordPerfect skills and touch typing ability of 40 words per minute. Class fee \$12. F, W, Sp

**OA205 Desktop Publishing I-PageMaker**

3 class hrs/wk, 3 cr.

A hands-on microcomputer desktop publishing course using Aldus PageMaker. Includes microcomputer use, an overview of the printing process, typography and basic design, and the use of PageMaker software. **Prerequisite:** Touch typing ability of a minimum of 25 words per minute. Previous computer experience recommended. Class fee \$12. F, W, Sp

**OA206 Desktop Publishing II-PageMaker**

3 class hrs/wk, 3 cr.

Hands-on microcomputer desktop publishing course using Aldus PageMaker software. Includes review of PageMaker operation, additional basic design for desktop publishing, and the production of publications. **Prerequisite:** OA205 or equivalent as determined by the instructor. Class fee \$12. F, W, Sp

**OA210 Office Microcomputer Applications**

2 class and 2 lab hrs/wk, 3 cr.

Integrated software training using MicroSoft Works. Includes training in word processing, database, spread sheet, and graphics on the microcomputer. Application problems will consist of using the integrated programs in business-related projects. **Prerequisite:** OA200 and touch typing ability. Class fee \$12. F, W, Sp

**OA225A Machine Transcription IA**

2 lab hrs/wk, 1 cr.

An introduction to transcribing from recorded dictation. Includes how to operate a transcribing machine and techniques of efficient transcribing. Stresses development of accuracy and language arts skills. Students progress at their own rate. **Prerequisite:** OA121ABC or equivalent as determined by the instructor. English skills at minimum level of OA084 or OA051 recommended. Class fee \$4. F, Sp

**OA225B Machine Transcription IB**

2 lab hrs/wk, 1 cr.

Continuation of OA225A. Covers techniques of efficient transcription on a transcribing machine. Language arts skills and the development of accuracy are stressed. Students progress at their own rate of speed. **Prerequisite:** OA225A. Class fee \$4. F, Sp

**OA225C Machine Transcription IC**

2 lab hrs/wk, 1 cr.

Continuation of OA225B. **Prerequisite:** OA225A. Class fee \$4. F, Sp

**OA226A Machine Transcription II-A**

2 lab hrs/wk, 1 cr.

A continuation of OA225. How to produce a variety of business documents by using efficient transcribing methods. How to develop language arts skills and increase transcribing speed and accuracy to an on-the-job level. **Prerequisite:** OA225A,B,C or equivalent as determined by the instructor. Class fee \$4. F, Sp

**OA226B Machine Transcription II-B**

2 lab hrs/wk, 1 cr.

A continuation of OA226A. **Prerequisite:** OA226A or equivalent as determined by the instructor. Class fee \$4. F, Sp

**OA226C Machine Transcription II-C**

2 lab hrs/wk, 1 cr.

A continuation of OA226B. **Prerequisite:** OA226B or equivalent as determined by the instructor. Class fee \$4. Offered as needed.

**OA280 Cooperative Work Experience**

see AUM280.

**OC****Oceanography****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. Offered as needed.

**Photography**

see Art, Visual Communications

**PE****Physical Education****PE131 Introduction to Physical Education**

3 class hrs/wk, 3 cr.

Human movement as a scientific and humanistic field of study, including historical development, professional opportunities and qualifications, and leaders and major organizations in physical education and athletics. F

**PE180BN Basketball-Women's Varsity**

3 lab hrs/wk, 1 cr.

Fundamentals of basketball for women.

**PE180SB Softball-Women's Varsity**

5 lab hrs/wk, 1 cr.

Interscholastic competition for players selected during tryouts. Involves advanced methods of team play, game strategy, training and conditioning, and officiating.

**PE180SR Women's Softball-Advanced**

3 lab hrs/wk, 1 cr.

Fundamentals, rules, and strategy of softball. Helps women develop skills necessary for playing recreational and/or competitive softball. Class fee \$20.

**PE180TQ Track and Field Women's Varsity**

3 lab hrs/wk, 1 cr.

Intercollegiate varsity track and field competition for women.

**PE180VN Volleyball-Women's Varsity**

5 lab hrs/wk, 1 cr.

Interscholastic competition with tryouts for player selection. Involves advanced methods of team play, game strategy, training and conditioning, and officiating.

**PE185AD Back Care and Conditioning**

3 lab hrs/wk, 1 cr.

Uses physical exercises, education, and encouragement from a support group to improve unhealthy backs and maintain healthy backs. Special care will be given to begin exercise program slowly and make personal adjustments to prevent injury. Class fee \$20 each.

**PE185BE,BF,BG**

**Baseball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed to introduce the student to the fundamentals of baseball. Class fee, \$20.

**PE185BJ,BK,BL Basketball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Emphasis on fundamental skills, team play, and a knowledge of the sport. Class fee \$20 each.

**PE185BV,BW,BX Bowling-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Presents the fundamentals of bowling.

**PE185CA,CB,CC Conditioning-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Students will develop and execute conditioning programs designed to complement their individual interests, needs, and goals. Class fee \$20 each.

**PE185CD,CE,CF Correctives-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed to provide the setting, assistance and instruction for improving the fitness of those with a physical injury, or disability. Prerequisite: Completion of Health Information form by physician or registered therapist. Class fee \$20 each.

**PE185CM,CN,CP Cross Country Skiing-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Fundamental skills and techniques, types of equipment, first aid, orienteering, survival, leadership, and route finding.

**PE185DA,DB,DC Aerobics, Low Impact-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Fitness/step routine designed for cardiovascular and health benefits. Uses low-impact aerobic techniques to prevent jarring to weight-bearing parts of the body. Class fee \$20 each.

**PE185DE,DF,DG Dance, Folk-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Basic steps, skills, and training in dances reflecting cultural tradition such as Schottische and Polka. Class fee \$20 each.

**PE185DJ,DK,DL Dance Modern-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Presents a variety of modern dance styles. Introduces the concepts of space, time, and force and explores how each of these elements plays a part in movement and dance technique. Focuses on correct alignment as well as efficient and proper use of the body. Class fee \$20 each.

**PE185DM,DN,DO Aerobics-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr.

Designed to increase cardiovascular and muscular endurance through dance routines or step movements and to develop muscular strength and flexibility through stretching, isometric, and isotonic routines. Includes information on proper nutrition. Class fee \$20 each.

**PE185DR,DS,DT Dance, Social-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Basic dance steps of the fox trot, tango, rhumba, mambo, and current popular dances. Class fee \$20 each.

**PE185DV Square Dance Basic IPE185DW Square Dance Mainstream II**

3 lab hrs/wk, 1 cr.

Contemporary dances. Includes history, etiquette, and dances by International Association of Square Dance Callers. Prerequisite: PE185DW; PE185DV; PE185DX: PE185DV and PE185DW. Class fee \$20 each.

**PE185DY Dance/Tap, Beginning**

3 lab hrs/wk, 1 cr.

Presents tap dance techniques. Introduces basic tap steps and rhythmical combinations of tap steps in varying degrees of difficulty. Class fee \$20.

**PE185FD,FE,FF Soccer-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Covers the fundamentals of soccer and basic conditioning. Class fee \$20 each.

**PE185GJ,GK,GL Golf-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Basic fundamentals such as grip, stance, and mechanics of the swing. Use of irons, long irons, woods, and putters. Rules of the game, social etiquette, and actual playing of the game.

**PE185JA,JB,JC Dance, Jazz-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Development of basic warm-ups at the barre, stretching, isolations, and floor movement with emphasis on technique, alignment, and contemporary jazz style. Class fee \$20 each.

**PE185JJ,JK,JL Jogging-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Jogging to gain and maintain cardiovascular fitness. Class fee \$20 each.

**PE185KA,KB,KC Karate-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Development of the basic language and movements of martial arts. Class fee \$20 each.

**PE185LA,LB,LC Ballet-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Addresses correct alignment, basic stretching, and warm-ups at the barre. Includes body and arm positions. Emphasizes techniques and technical terms. Class fee \$20 each.

**PE185RA,RB,RC Racquetball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Fundamentals, various shots, and strategies of singles and doubles playing. Class fee \$20 each.

**PE185RG,RH,RJ Roller Skating-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Covers fundamentals, including stroking, turns, figures, dance steps, and entry-level free-style moves. Promotes and encourages techniques of safety while practicing various skating activities.

**PE185SA,SB,SC Scuba Diving-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed to promote and encourage safe underwater activities.

**PE185SD,SE,SF Swim for Fitness-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed to increase cardiovascular endurance through swimming. Stroke technique, interval training, and lap swimming are cov-

ered. Prerequisite: Beginning swimming. Class fee \$20 each. Offered as needed.

**PE185SH,SJ,SK Skiing-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Fundamental skills and techniques including snowplow turns, traverse-stem turns, side-slip, uphill christie, beginning parallel, and parallel turn. Advanced includes free skiing, powder, and phase II.

**PE185SP,SQ,SR Softball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Fundamental skills and rules presented through participation in team play. Class fee \$20 each.

**PE185SS,ST,SU Swimming-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr.

Designed to develop and improve swimming skills and fitness levels through a pool workout. Covers stroke improvement and swim conditioning. Class fee \$20 each.

**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. Prerequisite: Red Cross intermediate certificate or consent of instructor. Class fee \$20.

**PE185TF,TG,TH Tennis-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Deals with tennis fundamentals, including stroke production, rules, scoring, strategy, and court etiquette. Class fee \$20 each.

**PE185TL,TM,TN Track and Field-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Incorporates the fundamentals, rules, and training techniques in track and field events. Class fee \$20 each.

**PE185VJ,VK,VL Volleyball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Instruction and practice in skills, rules, and strategy through individual and team play. Class fee \$20 each.

**PE185WA,WB,WC Weight Management-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

A class to educate, support, and motivate individuals interested in managing their weight. Includes theory, weigh-in, class discussion, and exercise. Class fee \$20 each.

**PE185WD,WE,WF Weight Training-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Develop and execute a strength-improvement program to meet individual goals. Class fee \$20 each.

**PE185WK,WL,WM Walking Fitness**

3 lab hrs/wk, 1 cr.

Helps students develop a lifelong plan for walking fitness. Includes goal setting, group and individualized recommendations for

walking intensity, and pre- and post-cardiovascular assessment. Class fee \$20 each.

**PE185YA,YB,YC Yoga for Relaxation-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

An introduction to Hatha "physical" yoga. Includes the background, safety precautions, and value of yoga. Stretching postures, proper breathing techniques, and stress reduction will be emphasized. Class fee \$20 each.

**PE190BI Baseball-Varsity**

3 lab hrs/wk, 1 cr.

Varsity baseball for men.

**PE190BN Basketball-Men's Varsity**

3 lab hrs/wk, 1 cr.

**PE190TQ Track and Field-Men's Varsity**

3 lab hrs/wk, 1 cr.

Intercollegiate varsity track and field competition for men.

**PE199R Rafting**

5 class and 18 lab hrs for 1 week, 1 cr.

A three-day, 52-mile river trip down the Deschutes River. Students will use frame-equipped rafts to practice individual rowing and maneuvering skills and paddle rafts for group participation. Class fee \$250. Su

**PE199S Alpine Ski Racing**

3 lab hrs/wk, 1 cr.

Designed to teach the intermediate to advanced skier the basic techniques and tactics of ski racing with emphasis on balance and edging, pressure, and steering skill development. W

**PE199SC Sports Conditioning**

3 lab hrs/wk, 1 cr.

Students will develop and execute conditioning programs for specific athletic activities. Class fee \$20. F, W, Sp

**PE199WE,WF,WG Water Exercises**

3 lab hrs/wk, 1 cr.

For non-swimmers and swimmers. Includes warm-up, stretching, strength, aerobic, and cool down periods so that students may improve flexibility, muscular strength, endurance, and cardiovascular fitness. Emphasizes safe exercise for each individual. Class fee \$20 each. Offered as needed.

**Professional Physical Education**

**PE194RA Racquetball-Professional**

1 class and 2 lab hrs/wk, 2 cr.

Covers progression of skills, knowledge, strategy, practice, conditioning, interpretation of rules, and teaching and coaching techniques. Class fee \$20.

**PE194TF Tennis-Professional**

1 class and 2 lab hrs/wk, 2 cr.

For physical education majors. Class fee \$20. Sp

**PE294BP Professional Activities-Basketball**

1 class and 2 lab hrs/wk, 2 cr.

Includes skill progression, knowledge, strategy, teaching and coaching techniques, practice, rules interpretation, and conditioning for safety. Class fee \$20. F

**PE294TR Track and Field-Professional**

1 class and 2 lab hrs/wk, 2 cr.

For physical education majors. Class fee \$20.

**PE294VP Professional Activities-Volleyball**

1 class and 2 lab hrs/wk, 2 cr.

Covers skill progressions, knowledge, strategy, practice, and conditioning; rules interpretation; and teaching and coaching techniques, as well as physical, social, emotional, and nutritional health; student support systems; and stress management. Class fee \$20. F

**PE294WP Professional Activities-Weight Training**

1 class and 2 lab hrs/wk, 2 cr.

How to teach or coach weight training. Emphasizes teaching and lifting techniques and safety. Prerequisite: PE185WD or consent of instructor. Class fee \$20. W

**PH**

**Physics**

**PH051 Practical Physics**

3 class 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 principles and procedures covered in class. Class fee \$8. W

**PH052 Practical Physics**

3 class 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 principles and procedures covered in class. Prerequisite: MTH053. Class fee \$8. F

**PH081 Applied Physics**

3 class 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. Prerequisite: Concurrent enrollment in MTH082 or MTH053, or consent of instructor. Class fee \$8. F, W

**PH082 Applied Physics**

3 class 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, light, and nuclear physics. Laboratory time provides demonstrations and experiments to clarify principles and procedures covered in lectures. Prerequisite: PH081 or consent of instructor. Class fee \$8. W, Sp

**PH121 Introduction to Astronomy**

3 class hrs/wk, 3 cr.

An introduction to the fundamentals of astronomy. Designed for non-science majors who have little or no preparation in mathematics or physical science. Offered as needed.

**PH201 General Physics**

3 class and 3 lab hrs/wk, 4 cr.

Develops strategies for analyzing the motion of objects. Applications range from the motion of molecules to the motion of planets.

**Prerequisite:** MTH111 and MTH112. Class fee \$12. F

### **PH202 General Physics**

3 class and 3 lab hrs/wk, 4 cr.

Heat transfer, kinetic theory, thermodynamics, vibrations, wave motion, and electrical forces. **Prerequisite:** PH201. Class fee \$12. W

### **PH203 General Physics**

3 class and 3 lab hrs/wk, 4 cr.

Electrical energy, magnetic fields, electromagnetic induction, electromagnetic waves, reflection and refraction of light, optical instruments, special relativity, and atomic physics. **Prerequisite:** PH202. Class fee \$12. Sp

### **PH207 Astronomy**

3 class and 2 lab hrs/wk, 4 cr.

A descriptive treatment of Earth's coordinate system, observational astronomy, the moon and the planets, evolution of the solar system, and the sun. Lab demonstrations illustrate principles of our solar system. **Prerequisite:** MTH070. Class fee \$8. F

### **PH208 Astronomy**

3 class and 2 lab hrs/wk, 4 cr.

A descriptive treatment of stellar coordinates and sidereal time, the nature of light and the spectroscope, and the birth and death of stars. **Prerequisite:** MTH070. Class fee \$8. W

### **PH209 Astronomy**

3 class and 2 lab hrs/wk, 4 cr.

A descriptive treatment of astronomical, optical, and radio telescopes; the Milky Way galaxies; the universe of galaxies; the origin of the universe and life in the universe. Laboratory demonstrations illustrate physical principles of the galactic system. **Prerequisite:** MTH070. Class fee \$8. Sp

### **PH211 General Physics for Engineers and Scientists**

4 class and 3 lab hrs/wk, 5 cr.

Motion, force, work, energy, and field interactions in one-, two-, and three-dimensional space. **Prerequisite:** MTH251. Class fee \$12. F

### **PH212 General Physics for Engineers and Scientists**

4 class and 3 lab hrs/wk, 5 cr.

Periodic motion, forced oscillations, wave propagation, molecular basis of temperature, thermodynamics, and electrostatic fields. **Prerequisite:** MTH252 and PH211. Class fee \$12. W

### **PH213 General Physics for Engineers and Scientists**

4 class and 3 lab hrs/wk, 5 cr.

Moving charge, magnetic fields, electromagnetic induction, propagation of electromagnetic waves, geometric optics, physical optics, and image formation. **Prerequisite:** PH212. Class fee \$12. Sp

## **PHL**

### **Philosophy**

#### **PHL201 Problems of Philosophy**

3 class hrs/wk, 3 cr.

Introduces philosophical methods and surveys and the history of philosophy and applies same to contemporary issues. F

#### **PHL202 Problems of Philosophy**

3 class hrs/wk, 3 cr.

Philosophical comparison and evaluation of world views of science and religion. W

#### **PHL203 Elementary Ethics**

3 class hrs/wk, 3 cr.

Theoretical and historical analysis of value systems which play a part in understanding contemporary issues. Sp

#### **PHL204 Introduction to Logic**

3 class hrs/wk, 3 cr.

Study of informal logic in language, including forms of reasoning and argument. An introduction to propositional logic, fallacies, proofs, and probabilities. Offered as needed.

#### **PHL205 Biomedical Ethics**

3 class hrs/wk, 3 cr.

Focuses on ethics in medical and health care fields. Studies roles of patients and health care providers, highlights personal and professional issues, examines special areas, including case studies, life-death questions, and social attitudes. Offered as needed.

## **Physical Science**

see General Sciences

## **PS**

### **Political Science**

#### **PS201 American Government**

3 class hrs/wk, 3 cr.

An introduction to the basic concepts and principles of the American political system in their historical and contemporary context. Covers the pattern of political behavior of the non-governmental political institutions, e.g., political parties and interest groups. F, W

#### **PS202 American Government**

3 class hrs/wk, 3 cr.

Continuation of PS201. Examines the three branches of government. Includes the study of the relationship of corporate America to the government and the making and execution of domestic and foreign policy. PS201 recommended but not required. W, Sp

#### **PS203 State and Local Government**

3 class hrs/wk, 3 cr.

Introduces American state and local government structure with emphasis on comparative political behavior in states and communities. Covers both policy content and the political and institutional processes by which state and local governments make policy. Offered as needed.

#### **PS205 International Relations**

3 class hrs/wk, 3 cr.

An introduction to world politics. Deals with the nature of global conflict, nationalism, U.S. foreign policy, the role of multinational corporations in international decision making, North-South relations, and the mechanisms of conflict resolutions. Examines current global issues facing nation-states. Offered as needed.

## **PSY**

### **Psychology**

#### **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

#### **PSY101 Psychology of Human Relations**

3 class hrs/wk, 3 cr.

Explores basic principles of psychology to enhance an understanding of personality development, self-concept, and interpersonal relations. F, W, Sp

#### **PSY102 Assertiveness Training**

3 class hrs/wk, 3 cr.

Theoretical background, behavioral skills, and techniques of assertion. Particularly valuable to those anxious about situations which require they stand up for their personal rights. Explores internal and external blocks to assertion as a method for learning self-management skills. Offered as needed.

#### **PSY114 Career Development, Personal Perspective**

3 class hrs/wk, 3 cr.

A comprehensive developmental program that explores opportunities to integrate personal, educational, and occupational elements of career development. Encourages career-planning and decision-making based on realistic self-knowledge and self-assessment. Offered as needed.

#### **PSY119 Processes in Living**

3 class hrs/wk, 3 cr.

How to achieve self-understanding through exploring values, attitudes, interests, beliefs, and abilities. How these personal factors influence learning, educational and vocational decision making, and interpersonal relationships. Offered as needed.

#### **PSY201 General Psychology**

3 class hrs/wk, 3 cr.

Introduction to psychology. Focuses on psychology as a science. Stresses history and methodology, as well as the biological foundations of behavior, human development, sensation, and perception. F, W, Sp

#### **PSY202 General Psychology**

3 class hrs/wk, 3 cr.

Second of three introductory courses in psychology. Includes learning, memory, cognition, motivation, emotion, and stress. Recommended that students take PSY201 prior to this course. W, Sp

#### **PSY203 General Psychology**

3 class hrs/wk, 3 cr.

Third of three introductory courses in psychology. Includes personality; mental disorder; social, statistical, and psychological assessment; and stress. Recommended that students take PSY201 prior to this course. Sp

#### **PSY206 Introduction to Social Psychology**

3 class hrs/wk, 3 cr.

Problems, theories, and methods of social psychology. Emphasizes 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 war, sexuality, discrimination, violence, and interpersonal attraction. Recommended that students take PSY201 prior to this course. Offered as needed.

**PSY211 Brain, Mind, and Behavior**  
3 class hrs/wk, 3 cr.

Study of the human brain, integrating neurobiology with brain functions. Discusses current findings, theories, and applications of brain science and its effects on human behavior. Offered as needed.

**PSY219 The Mind**

3 class hrs/wk, 3 cr.

A multidisciplinary approach to understanding the human mind and its functions. Offered as needed.

**PSY237 Growth and Development**

3 class hrs/wk, 3 cr.

An introductory course in human growth and development from genetics and conception to death. Recommended that students take PSY201 prior to this course. F, W, Sp

**PSY239 Introduction to Abnormal Behavior**

3 class hrs/wk, 3 cr.

Theories, diagnosis, and treatment of major psychopathological syndromes. Includes anxiety and related neuroses, depressions, schizophrenia, psychophysiological and personality disorders, and sexual variations and dysfunctions. Recommended that students take PSY100 or PSY201 prior to this course. Offered as needed.

**PSY246 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.

**R Religion**

**R199 Comparative Religion: The Long Search**

3 class hrs/wk, 3 cr.

A study of living religions (primitive, Eastern, and Western traditions) in the 20th century. Examines the questions of syncretism, exclusivity, and "new" vs. "old" faiths. F

**R201 Primitive and Far Eastern Religions**

3 class hrs/wk, 3 cr.

Introduces ways of studying religions. Concentrates on history, beliefs, and practices in Hinduism and Buddhism. F

**R202 Near Eastern Religions**

3 class hrs/wk, 3 cr.

Surveys the beginnings of Judaism, Christianity, and Islam. Focuses upon history of early founders, beliefs, and communal traditions. Prerequisite: R201 or consent of instructor. W

**R203 American Religions**

3 class hrs/wk, 3 cr.

A critical approach to American religious pluralism and secularity. Traces the immigrations to America and roots American piety in the Catholic and Protestant reformations. Sp

**RD**

**Reading**

see also Communication Skills, Skills Development

**RD006 Success Strategies For Deaf and Hearing Impaired Students (Critical Reading)**

1 class hr/wk, 1 cr.

An individualized course designed for deaf and hearing impaired students wanting to improve their reading skills. Emphasizes the comprehension of idiomatic phrases, sentences, and paragraphs in technical as well as leisure reading material. Focuses on both comprehension and speed. F, W, Sp

**RD008ABC Reading Improvement**

3 lab hrs/wk, 1 cr. each

Individualized reading course designed for students needing to upgrade their skills to meet the prerequisites of the three-credit reading courses. Also for students who have completed the three-credit reading courses but wish to continue to upgrade particular reading skills. Student needs and progress will be determined through diagnostic evaluations. Prerequisite: RD009, RD009LL, a college reading placement score above that recommended for RD009, or consent of instructor. Class fee, \$5. F, W, Sp, Su

**RD009 Reading Fundamentals**

3 class hrs/wk, 3 cr.

Instruction for students who need to improve their basic reading skills. Emphasizes phonics, vocabulary, and paragraph comprehension. Prerequisite: Concurrent enrollment in RD009LL, a college reading placement score for RD009, or consent of instructor. F, W, Sp, Su

**RD009LL Reading Fundamentals Lab**

3 lab hrs/wk, 1 cr.

A required companion course to RD009. Special attention is given to individually-diagnosed skill deficiencies in comprehension and vocabulary. Provides application of the comprehension and vocabulary skills taught in RD009. Prerequisite: A placement test score that recommends RD009 and consent of instructor. F, W, Sp, Su

**RD090 College Textbook Reading**

3 class hrs/wk, 3 cr.

Instruction for students who need to improve their reading skills in college textbooks. Emphasizes understanding paragraphs, chapters, and vocabulary. Prerequisite: A placement test score that recommends RD090 and consent of instructor. F, W, Sp, Su

**RD115 Accelerated Reading Tactics I**

3 class hrs/wk, 3 cr.

Designed to improve reading skills of the student who has average and above-average reading skills. Strategies for comprehending and retaining nonfiction materials, espe-

cially textbooks, are studied. Presents skills to vary reading speed according to purpose and difficulty of material. F, W, Sp, Su

**RD116 Accelerated Reading Tactics II**

3 class hrs/wk, 3 cr.

Provides instruction in an analytical method of reading nonfiction material. Aims to improve reading speed and comprehension using organizational patterns of articles. Prerequisite: College placement test score of 45 or grade C or higher in RD115. Offered as needed.

**RD117A,B,C Reading for Professionals, Managers and Technicians**

1 class hr/wk, 1 cr. each

Uses job-related materials to improve personal reading productivity. Geared to professionals, managers, and technicians. Offered as needed.

**RD120 Critical Thinking and Reading**

3 class hrs/wk, 3 cr.

Assists students in analyzing and improving both their critical and creative thinking skills and problem-solving techniques. Students will practice metacognitive techniques to analyze their own thinking processes and learn how to examine and evaluate thinking processes. Critical reading skills will be applied to verbal and mathematical word problems and to essays in a variety of content areas. Prerequisite: College placement score at or above RD115 or consent of instructor. F, W, Sp

**RE**

**Real Estate**

**RE051 Legal Descriptions, Platting and Map Reading**

1 class and 2 lab hrs/wk, 2 cr.

Locating properties, sites, and points, and reading and writing legal descriptions using metes and bounds, lot and block, and governmental rectangular survey systems. Presents information graphically with drafting plats, plot plans, and maps. Studies land measurements, areas, and dimensions. Emphasizes functional skills rather than cartographic methods. Prerequisite: BA260, or BA263. Offered as needed.

**RE055 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, ratios of values, finance, leverage, appreciation, depreciation, and equity ownership. Offered as needed.

**RE056 Escrow Procedures I**

3 class hrs/wk, 3 cr.

The use of work sheets by escrow agents. Emphasizes significance of a third party in real estate transactions. Covers documents required to be held on deposit between the seller and buyer until terms of a contract are completed. Prerequisite: BA262. F

### RE057 Escrow Procedures II

3 class hrs/wk, 3 cr.

Obligations of escrow departments and title insurance companies in real estate transactions. Deals with defects of title and abstracts of title to indicate the value of title insurance. Emphasizes the ramifications of title insurance. **Prerequisite:** RE056. Offered as needed.

### RE058 Escrow Procedures III

3 class hrs/wk, 3 cr.

Theory and practice of real estate exchanges and sales of businesses, including 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. Includes review of RE056 and RE057. **Prerequisite:** RE057. Offered as needed.

### RE061 Real Estate Appraisal I

3 class hrs/wk, 3 cr.

Theories, functions, and purposes of appraisal principles of valuation. Includes cost, market and income approach techniques for determining condemnation, insurance, loan, purchase, and sales values. Students prepare a residential property report. **Prerequisite:** BA264 or consent of instructor. F, W, Sp

### RE062 Real Estate Appraisal II

3 class hrs/wk, 3 cr.

Methods and theories of income property appraisal techniques using indicators of value, including gross rent multiplier (GRM), capitalization, and yield rates. **Prerequisite:** RE061. F

### RE063 Real Estate Appraisal III

3 class hrs/wk, 3 cr.

Continuation and applications of RE062. Students develop data and prepare income property demonstration reports. **Prerequisite:** RE062, or qualified appraisal experience, and computer/spread sheet capability. W

### RE064 Mass Appraising of Real Estate

3 class hrs/wk, 3 cr.

Designed to help student appraisers meet educational requirements for state certification. Covers how mass appraisals are planned, organized, executed, and evaluated and presents the responsibilities of the county assessor. **Prerequisite:** RE061 or qualified appraisal experience. Sp

### RE065 Appraisal Report Writing

3 class hrs/wk, 3 cr.

How to write appraisal reports that can be easily understood by clients and their representatives. **Prerequisite:** RE061. Offered as needed.

### RE066 Real Estate Investment Analysis

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 investments, determining cash flow before and after taxes, mortgage retirement, and internal rate of return. **Prerequisite:** MTH062 or higher. F

### RE069 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 design, material and labor requirements, building codes, and approximate cost estimating for real estate students. Sp

### RE070 Zoning, Subdividing, and Community Planning

3 class hrs/wk, 3 cr.

Course will cover zoning regulations, codes, restrictions, and cost of development of property. Designed for persons who want to subdivide, upgrade or change land use under zone codes, procedures, and material required by the State of Oregon, its counties and cities. W

### RE083 Real Estate Effective Selling

3 class hrs/wk, 3 cr.

Positive approaches and methods of handling functions and requirements of real estate sales, especially residential property. Lectures, class discussions, visual aids, films, tapes, case studies, and role-playing to help students develop and improve sales abilities. Offered as needed.

### RE085 Property Management

3 class hrs/wk, 3 cr.

Emphasizes residential landlord-tenant relationships, proper conduct of a firm under Oregon's property management license, owner-tenant relations, leasing procedures, marketing, and record keeping. Also covers commercial and industrial leasing techniques, requirements, and expectations. F, Sp

### RE090 Applied Title Operations

3 class hrs/wk, 3 cr.

Problems in real property title transfers. Emphasizes avoiding, eliminating, and solving problems from viewpoints of principals, agents, and title insurance companies. **Prerequisite:** BA263 or equivalent as determined by the instructor. Offered as needed.

### RE280 Cooperative Work Experience

see AUM280.

## RUS

### Russian

#### RUS101, 102, 103 First Year

Russian, Terms I, II, III

4 class hrs/wk, 4 cr.

Covers speaking, reading, writing, and aural comprehension. **Prerequisite:** RUS102: RUS101 or consent of instructor. RUS103: RUS101, RUS102, or consent of instructor. Class fee \$2 each. RUS101: F; RUS102: W; RUS103: Sp

## Secretarial

see Office Administration

## SKD

### Skills Development

see also Human Development, Mathematics, Reading

#### SKD003 College Orientation For Deaf Students

1 class hr/wk, 1 cr.

Offers a survey of services available to deaf students at Chemeketa. Also helps deaf students develop basic study and decision-making skills. Offered as needed.

#### SKD005ABC Success Strategies for Deaf and Hearing Impaired Students

1 class hr/wk, 1 cr. each

A: (Language Enrichment Through the Media) An individualized course designed to help deaf and hearing impaired students develop comprehension strategies and critical thinking skills to access information from media sources.

B: (Vocabulary Enrichment) An individualized course designed for deaf and hearing impaired students who want to enrich their vocabulary use and improve their vocabulary comprehension.

C: (Communication Through Writing) An individualized course designed for deaf and hearing impaired students who want to improve their basic writing skills. Emphasizes application of grammatical structures through practice with sentences, notes, memos, and letters. Explores the function of idioms in English. F, W, Sp

#### SKD006 Success Strategies for Deaf and Hearing Impaired Students (Organization For Success)

1 class hr/wk, 1 cr.

An individualized course designed to equip deaf and hearing impaired students with study habits necessary for college success. F, W, Sp

#### SKD007 Success Strategies For Deaf and Hearing Impaired Students (Special Projects for Success)

1 class hr/wk, 1 cr.

This individualized course allows deaf and hearing impaired students to pursue special interests while enhancing language skills. F, W, Sp

#### SKD009 Introduction to College Language Skills

6 class and 2 lab hrs/wk, 7 cr.

Course designed to improve communication skills through intensive work combining written composition, spelling, and vocabulary development. **Prerequisite:** A score of 23-32 on the college writing placement test or consent of instructor. F, W, Sp

#### SKD010 Successful College Habits

3 class hrs/wk, 3 cr.

Assists students in controlling their college education through a variety of processes which integrate self-esteem development, including self-discovery, establishing priorities, setting goals, using resources, communicating effectively, solving problems, reducing stress, and implementing academic strategies for future success. F, W, Sp

**SKD013ABC Phonics for Spelling**

3 class hrs/4 wks, 1 cr. each

Course provides instruction in phonics principles and syllabication as an aid to spelling. In addition, students will develop a personal spelling log. F, W, Sp, Su

**SKD014A,B,C Intermediate Spelling**

3 class hrs/4 wks, 1 cr. each

Individualized instruction in spelling improvement. Includes instruction in spelling rules and exceptions, practice in pronunciation, and development of a personal spelling list. **Prerequisite:** SKD013ABC, a placement test score of 27 or above or consent of instructor. F, W, Sp, Su

**SKD015A,B,C Vocabulary Building**

3 class hrs/4 wks, 1 cr. each

Instruction in methods of learning vocabulary. Students will apply these techniques to their college textbooks. Offered individualized format. **SKD015A:** Dictionary, word memory techniques, and suffixes. **SKD015B:** Prefixes, roots, and context. **SKD015C:** Thesaurus, word histories or etymology, and applications to vocabulary in college texts. F, W, Sp, Su

**SKD030A,B,C Advanced Vocabulary Building**

3 class hrs/4 wks, 1 cr. each

Provides an in-depth analysis of vocabulary. Designed to increase the student's general and/or vocational vocabulary. **Prerequisite:** SKD015A,B,C or consent of instructor. F, W, Sp, Su

**SKD031A Academic Skills Preview**

12 class hrs/1 wk, 1 cr.

Focuses on the personal side of academic success: organization and motivation, listening and note taking, analysis of learning styles, and time management. SKD031ABC cannot be taken if SKD031LMN has already been taken. Su

**SKD031B Academic Skills Preview**

1 class hr/wk, 1 cr.

Focuses on specific study strategies: concentrating, reading college textbooks, and developing a more retentive memory, as well as tips on researching and writing a term paper. Su

**SKD031C Academic Skills Preview**

1 class hr/wk, 1 cr.

Focuses on dealing with testing situations: coping with test anxiety, predicting exam questions, and taking objective and essay exams. Su

**SKD031L,M,N Studying for College**

3 class hrs/4 wks, 1 cr. each

Designed for students who have difficulty in getting organized and studying efficiently. After an initial assessment of study strategies the student, with the instructor, will select study strategy activities (3 per credit). Study strategy activities are similar to HD112 content, but designed for student at RD009-RD090 level. SKD031LMN cannot be taken if SKD031ABC has already been taken. F, W, Sp, Su

**SKD045A,B,C Problem Solving and Thinking Skills**

1 class hr/wk, 1 cr. each

Assists students in analyzing and improving thinking skills and problem-solving tech-

niques. Students develop their skills in diagnosis and analysis by acquiring insight into their own problem-solving processes (metacognition). **A:** Emphasizes problem-solving processes, creative thinking, and personal thinking styles. **B:** Focuses on the application of problem-solving processes to verbal and mathematical word problems. Students assess their own analytical skills. **C:** Assists students to deal with critical reading of complex problems and abstractions, including drawing conclusions and seeing inference. Students will use deductive reasoning as well as trends and patterns to plot and graph complicated reading problems. Students assess their own logical thinking with the Test of Logical Thinking. **Offered as needed.**

**SOC****Sociology****SOC204 General Sociology-Introduction**

3 class hrs/wk, 3 cr.

Basic issues and findings regarding the biological, symbolic, and social nature of humankind. 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 methods and major sociological theorists. F, W

**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. Recommended that students take SOC204 prior to this course. W, Sp

**SOC206 General Sociology-Social Problems**

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. It is recommended that students take SOC204 prior to this course. Sp

**SOC210 Marriage and Family 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 changing styles of family relationships. **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. **Offered as needed.**

**SOC227 Introduction to Social Psychology**

3 class hrs/wk, 3 cr.

Presents some of the problems, theories, and methods of social psychology. Emphasizes diverse ways in which social influence alters

an individual's thoughts, feelings, and actions. Examines prejudice, conformity, leadership, and aggression from an experimental viewpoint. Considers the relationship of these traits to such phenomena as war, sexuality, discrimination, violence, and interpersonal attraction. Recommended that students take PSY201 and SOC204 prior to this course. **Offered as needed.**

**SOC250 Social Science Research Lab**

3 lab hrs/wk, 1 cr.

Applies geographic information systems to concepts, issues, and variables in the social sciences. Uses computer to calculate demographic information. **Prerequisite:** Concurrent enrollment in SOC291 or consent of instructor. **Offered as needed.**

**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 information reporting. Includes analysis of data. **Offered as needed.**

**SOC292 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 influences of perception, personality, attitudes, culture, family life, and social class on how and why people buy and consume products. **Offered as needed.**

**SP****Speech****SP105 Effective Listening**

3 class hrs/wk, 3 cr.

Analyzes listening behavior and develops an understanding and appreciation of the importance of listening. **Offered as needed.**

**SP111 Fundamentals of Speech**

3 class hrs/wk, 3 cr.

A survey of communications including interpersonal, group, and public. F, W, Sp, Su

**SP112 Fundamentals of Persuasion**

3 class hrs/wk, 3 cr.

Introduces public speaking on a persuasive level. Includes discussion of the verbal and nonverbal levels of persuasion and concentrates on effective delivery, theories of persuasion, and use of support in effective persuasive speeches. Activities allow students to use theories in public speaking situations. F, W, Sp, Su

**SP113 Fundamentals of Small Group Communication**

3 class hrs/wk, 3 cr.

Designed to prepare people to participate effectively in our committee-oriented society. Includes discussion and activities designed for developing leadership abilities and improved communication techniques in small group situations. W, Sp

### **SP114 Interpersonal Communication**

3 class hrs/wk, 3 cr.

For students who would like to be able to communicate more effectively with friends and business associates in one-on-one settings. Covers concepts of self-awareness, nonverbal communication, emotional listening, and assertiveness. F, W, Sp, Su

### **SP115 Introduction to Intercultural Communication**

3 class hrs/wk, 3 cr.

Explores impact of culture on communication. Investigates the areas of language, nonverbal communication, values, cultural systems and models, sex roles, belief systems, and culture shock. Offered as needed.

### **SP118A Interpersonal Communication in the Health Professions**

1 class hr/wk, 1 cr.

Designed to familiarize students with the communication skills essential to the health care provider. Emphasizes the provider/client relationship and examines communication from the perspective of different communication barriers. The course will be taught primarily through lecture and discussion with assigned outside readings. **Prerequisite:** Interest or involvement in health professions. Offered as needed.

### **SP118B Interpersonal Communication in the Health Professions**

1 class hr/wk, 1 cr.

Provides a detailed examination of the nonverbal communication patterns that are significant in a health care setting. Through lecture and discussion, students will analyze the communication significance of paralinguistics, time, space, form, and action. Through in-class group exercise students will practice strategies of non-verbal communication to help them understand the messages of both clients and colleagues, and to help sensitize them to their own non-verbal patterns. **Prerequisite:** SP118A or consent of instructor. Interest or involvement in health professions. Offered as needed.

### **SP118C Interpersonal Communication in the Health Professions**

1 class hr/wk, 1 cr.

Examines organizational and small group communication in the health care setting. Covers both characteristic and ideal patterns of organizational structure and communication and how to analyze and apply such small group dynamics as leadership, cohesiveness, task and social roles, and strategies of power. Students will participate in small group activities. **Prerequisite:** SP118A, SP118B, or consent of instructor. Interest in or involvement in health professions. Offered as needed.

### **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. Offered as needed.

## **SPAN**

### **Spanish**

#### **SPAN066, 067, 068 Conversational Spanish, Terms I, II, III**

3 class hrs/wk, 3 cr. each

Emphasizes Spanish-American pronunciation, grammar, and practical curriculum-based vocabulary, with some reading and writing. Offered as needed.

#### **SPAN069 Advanced Conversational Spanish, Term I**

3 class hrs/wk, 3 cr.

Advanced conversational skills, including comprehension, self-expression, and pronunciation. Emphasizes vocational and special interest vocabulary building. **Prerequisite:** SPAN068 or proficiency in basic conversational Spanish. Offered as needed.

#### **SPAN101, 102, 103 First Year Spanish, Terms I, II, III**

4 class hrs/wk, 4 cr. each

**SPAN101:** Develops skills in reading, writing, speaking, and understanding basic Spanish. Introduces culture of Hispanic countries. **SPAN102:** Continues development of basic communication skills, and focuses on culture of Hispanic countries. **SPAN103:** Continues development of basic communication skills, and focuses on culture of Hispanic countries. **Prerequisite:** SPAN102: SPAN101, one year of high-school-level Spanish, or consent of instructor. **SPAN103:** SPAN101, SPAN102, one year of high-school-level Spanish, or consent of instructor. Class fee \$2 each. **SPAN101:** F; **SPAN102:** W; **SPAN103:** Sp

#### **SPAN111 Spanish Conversation-Beginning, Term I**

3 class hrs/wk, 3 cr.

Introduces the language and culture of Spanish-speaking countries through oral communication. Includes practice in idiomatic usage, vocabulary, and aural comprehension. Class fee \$2. F

#### **SPAN112 Spanish Conversation-Beginning, Term II**

3 class hrs/wk, 3 cr.

Continues study of the language and culture of Spanish-speaking countries through oral communication. Includes practice in idiomatic usage, vocabulary, and aural comprehension. **Prerequisite:** SPAN111. Class fee \$2. W

#### **SPAN113 Spanish Conversation-Beginning, Term III**

3 class hrs/wk, 3 cr.

A continuation of SPAN112. **Prerequisite:** SPAN112. Class fee \$2. Sp

#### **SPAN150 First Year Spanish, Accelerated Term 1**

6 class hrs/wk, 6 cr.

Develops skills in reading, writing, speaking, and understanding basic Spanish. Introduces culture of Hispanic countries. This course covers the same content as SPAN101 and the first half of SPAN102. Class fee \$2. W

#### **SPAN151 First Year Spanish, Accelerated Term 2**

6 class hrs/wk, 6 cr.

Continues to develop skills in reading, writing, speaking, and understanding basic

Spanish. Focuses on culture of Hispanic countries. This course covers the same content as the second half of SPAN102 and SPAN103. **Prerequisite:** SPAN150 or equivalent as determined by the instructor. Class fee \$2. Sp

#### **SPAN199 Special Studies: Spanish Conversation Workshop**

11 class hrs for 1 day/1 cr.

Presents selected topics in Spanish. Emphasizes development of oral communication skills and concepts through participation in a variety of large and small group situations. **Prerequisite:** SPAN101 and SPAN102. Sp

#### **SPAN201 Second Year Spanish, Term I**

4 class hrs/wk, 4 cr.

Continues study and application of Spanish vocabulary, grammar, and syntax. Emphasizes self-expression in Spanish. Includes study of Hispanic literature and culture. **Prerequisite:** SPAN103 or equivalent as determined by the instructor. Class fee \$2 each. F

#### **SPAN202 Second Year Spanish, Term II**

4 class hrs/wk, 4 cr.

Continues study and application of Spanish vocabulary, grammar, and syntax. Emphasizes self-expression in Spanish. Includes study of Hispanic literature and culture. **Prerequisite:** SPAN201 or equivalent as determined by the instructor. Class fee \$2 each. W

#### **SPAN203 Second Year Spanish, Term III**

4 class hrs/wk, 4 cr.

Focuses on Hispanic culture, reviews grammar, and expands vocabulary through extensive reading, writing, and discussion. Emphasizes self-expression in Spanish. **Prerequisite:** SPAN202 or equivalent as determined by the instructor. Class fee \$2 each. Sp

## **SSC**

### **Social Science**

#### **SSC150 Ethnic Cultures of the Willamette Valley**

3 class hrs/wk, 3 cr.

An introductory study of major ethnic groups currently residing in the Willamette Valley. Lectures, audio-visual resources, discussions, group assignments, and field studies provide a variety of experiences for students. Members of cultural groups serve as resource persons. Independent study is encouraged. Offered as needed.

#### **SSC151 Hispanic/Latino and Indigenous Cultures of the Northwest United States**

3 class hrs/wk, 3 cr.

Provides an introductory study of minority ethnic groups, focusing on Hispanic/Latino and indigenous cultures and represents an overview of historical, cultural, economic, social, psychological, and political factors. Offered as needed.

**ST****Occupational Skills Training****ST050A-L Occupational Skills Training**

40-480 lab hrs/term, variable 1-12 cr. per term

A site-based, short-term training program. Covers instruction based on a curriculum personalized for each student's chosen occupation as well as their individual abilities, skills, and interests. Includes training in job search and basic employment skills, as well as on-site curriculum reviews. **Prerequisite:** HD220 and HD221. Students must be referred by a sponsoring agency. F, W, Sp, Su

**TA****Theater Arts****TA110 Introduction to the Theater Arts**

3 class hrs/wk, 3 cr.

An overview of the theater: past, present, and future. Emphasis on historical development and general theater appreciation. Focuses on directing, acting, design, playwriting, lighting, and costuming. Offered as needed.

**TA121 Fundamentals of Acting**

3 class 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, W, Sp

**TA122 Fundamentals of Acting**

3 class hrs/wk, 3 cr.

Use of the voice in dramatic roles, its production, and control. An introduction to dialects and accents. **Prerequisite:** TA121 or consent of instructor. F, W, Sp

**TA123 Fundamentals of Acting**

3 class hrs/wk, 3 cr.

Problems in the analysis and presentation of characters in dramatic literature. **Prerequisite:** TA122 or consent of instructor. F, W, Sp

**TA261 Costuming**

3 class hrs/wk, 3 cr.

Elements of costume design and production. Includes line, form, and color within various historical periods, as applied to particular actors. Covers historical costuming and practical costume construction. F

**TA285A,B,C, Theater Production Workshop**

Variable hrs and cr.

Principles of dramatic production demonstrated through practical production experiences or special laboratory projects. Course may be repeated for a maximum of nine credits. F, W, Sp

**TR****Tourism****TR054 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, Sp

**TR055 Travel Agency II**

3 class hrs/wk, 3 cr.

Continuation of TR054. Designed to provide students with the working knowledge and skills required to continue beyond an entry-level travel agent. Study of trade publications, videos, tour products, ticketing procedures, and travel planning. **Prerequisite:** TR054. W

**VC****Visual Communications****VC040 Introduction to Graphics**

3 class and 9 lab hrs/wk, 1 cr.

A 12-hour introduction to Visual Communications. Provides a brief look at the graphic arts industry and an opportunity to try the skills required of workers. Su

**VC051 Graphic Design and Character Generation**

3 class and 12 lab hrs/wk, 6 cr.

Development of skills in desktop publishing, computer design, typesetting, and paste-up, with additional work in principles of layout, proofreading, copy fitting, and typography. Also examines career opportunities. **Prerequisite:** A course in basic keyboarding or touch typing ability of 35 words per minute. F, W, Sp

**VC052 Process Photography, Stripping and Platemaking**

3 class and 12 lab hrs/wk, 6 cr.

Development of technical competency in production methods including photography, computerized photo manipulation, line copy, halftones, development stripping (including multiple exposures), register systems, exposure computers, platemaking, and elementary densitometry. Also examines career opportunities. **Prerequisite:** Completion or current enrollment in a basic black and white photography course. F, W, Sp

**VC053 Press Work and Reproduction Systems**

3 class and 12 lab hrs/wk, 6 cr.

Development of skills in offset press operation with additional work in press adjustment and minor repair, dampening units, inking systems, register systems, paper stock cutting, finishing, and bindery. **Prerequisite:** Ability to lift 30 pounds or more. F, W, Sp

**VC061 Advanced Graphic Design**

3 class and 12 lab hrs/wk, 6 cr.

Practice and experience in visual communication and graphic technology relating to information design. Computerized design, typesetting systems, typographic design, display and tabular composition, proofing/planning procedures, career opportunities, and audience analysis will be studied. Students will produce work for real clients. **Prerequisite:** Second-year standing in the Visual Communications program or consent of instructor. F, W, Sp

**VC062 Image Conversion and Image Carriers for Offset Lithography**

3 class and 12 lab hrs/wk, 6 cr.

Practice and experience in visual communication and graphic technology relating to computerized photo manipulation, process photography, densitometry, multiple color

stripping, specialized films, photographic materials, plates, and other image carriers. Students will produce work for real clients. **Prerequisite:** Second-year standing in the Visual Communications program or consent of instructor. F, W, Sp

**VC063 Advanced Presswork**

3 class and 12 lab hrs/wk, 6 cr.

Practice and experience in visual communication and graphic technology through the operation and maintenance of offset presses. Skills to be developed include presswork, trouble shooting, ink mixing, color matching, quality control, and speed of operation. Students will produce work for real clients. **Prerequisite:** Second-year standing in the Visual Communications program or consent of instructor. F, W, Sp, Su

**VC067 Basic Technical Photography**

3 class 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, computerized photo alteration, and display techniques. Includes directed photographic assignments and photo lab work. **Prerequisite:** Enrollment in the Visual Communications program. Class fee \$8. W

**VC068 Intermediate Technical Photography**

2 class 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, shooting and processing of color slides, use of color analyzers and densitometers, career opportunities, techniques of photographic copying, computerized photo alteration, and retouching of negatives and prints. **Prerequisite:** VC067. Class fee \$8. F

**VC071,072,073,074,075,076,077,078,079 Special Problems in Graphic Communications**

variable hrs and cr.

A graphic communication problem is identified and a contract written by student and instructor. The contract sets forth a proposal to solve the problem and identifies objectives, procedures, and equipment needed, together with key checkpoints for student-instructor conferences. This is intended as a "final" course for students in both graphic arts and photography. Potential areas of study include color separation, plant management, and quality control. Consideration and encouragement will be given to an interdisciplinary team of students working on a common problem. **Prerequisite:** VC051, VC052, VC053 or consent of instructor. F, W, Sp

**VC083 Cost Accounting for Printers**

3 class and 1 lab hr/wk, 3 cr.

Use of cost accounting in the printing industry. Covers calculation of overhead, labor, and material costs and establishing the hourly costs of the different operations of a printing business. **Prerequisite:** Second-year standing in Visual Communications program or consent of instructor. W

**VC280 Cooperative Work Experience**  
see AUM280.

## **WFB**

### **Welding Fabrication**

**WFB087 Fabrication Practices III**  
1 class and 6 lab hrs/wk, 3 cr.

Emphasizes structural fabrication using steel and aluminum. **Prerequisite:** Enrollment in Welding and Fabrication program or consent of program chair. Class fee \$15. W

**WFB088 Fabrication Practices IV**  
1 class and 6 lab hrs/wk, 3 cr.

Instruction and experience in production-type welding with use of jigs, fixtures, and positioners. **Prerequisite:** WFB087 or consent of program chair. Class fee \$15. Sp

**WFB096 Shop Projects**  
1 class and 3 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:** Enrollment as a full-time student in the Welding program or consent of the program chair. Class fee \$40. Sp

**WFB280 Cooperative Work Experience**  
see AUM280.

## **WLD**

### **Welding**

**WLD051 Basic Arc Welding**  
2 class and 9 lab hrs/wk, 5 cr.

A study of the basic principles involved in making fillet welds on mild steel using standard industrial procedures, equipment, and welding electrodes with the shielded metal arc welding (SMAW) process. Includes information concerning other welding processes and compares them to the shielded metal arc welding process. Class fee \$25. F

**WLD052 Intermediate Arc Welding**  
2 class and 9 lab hrs/wk, 5 cr.

Continuation of WLD051 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 materials. **Prerequisite:** WLD051, WLD077 or consent of program chair. Class fee \$30. W

**WLD053 Advanced Arc Welding**  
1 class and 6 lab hrs/wk, 3 cr.

Welding under code type procedures, on pipe and plate. A study of welding procedures previously covered as they apply to heavy gauge welding with groove type joints. For an additional fee, students may take a certification test. **Prerequisite:** Satisfactory completion of WLD051 and WLD052, or equivalent industrial experience with consent of program chair. Class fee \$30. Sp

**WLD056 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 welding drawings. F

**WLD057 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. Class fee \$5. W

**WLD058 Weld Shop Problems**

2 class and 15 lab hrs/wk, 7 cr.

A review and application of 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 present typical layout, fabrication, and production problems. **Prerequisite:** Student must possess sufficient welding and fabrication skills to complete assigned projects under job-shop conditions. Class fee \$25. Sp

**WLD061 Basic Gas Metal Arc Welding (MIG)**

1 class and 6 lab hrs/wk, 3 cr.

Basic skills in semiautomatic metal inert gas (MIG) welding processes. Principles involved in 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. Class fee \$25. F

**WLD062 Intermediate Gas Metal Arc Welding (MIG)**

1 class and 6 lab hrs/wk, 3 cr.

A continuation of WLD061. Includes study of and practice in welding of carbon steel. Emphasizes production welding situations using large diameter electrodes (solid and flux-cored) with mixed shielding gases in flat or horizontal positions. **Prerequisite:** WLD061 or consent of program chair. Class fee \$35. W

**WLD063 Advanced Gas Metal Arc Welding (MIG)**

1 class and 6 lab hrs/wk, 3 cr.

Continuation of WLD062. Includes welding mild steel, aluminum, stainless steel and steel pipe welding. Students may take a certification test in accordance with the American Society of Mechanical Engineers (ASME) Section IX code or the American Welding Society (AWS) unlimited plate test in accordance with AWS D1.1 structural code. **Prerequisite:** WLD061 or consent of program chair. Class fee \$35. Sp

**WLD071 Basic Oxyacetylene Welding**

1 class and 3 lab hrs/wk, 2 cr.

Fundamentals of oxyacetylene welding, including brazing and cutting processes. Class fee \$20. F

**WLD072 Oxyacetylene Cutting**

5 lab hrs/wk, 2 cr.

Use and care of oxyacetylene cutting equipment. Class fee \$20. W

**WLD073 Basic Gas Tungsten Arc Welding (TIG)**

1 class and 6 lab hrs/wk, 4 cr.

Fundamentals of tungsten inert gas (TIG) welding processes, machine setting and application, and development of inert gas welding skills. Includes welding of mild steel, aluminum, aluminum alloys, stainless steel, and magnesium. Class fee \$35. W

**WLD074 Weld Shop Safety**

1 class hr/wk, 1 cr.

A survey of principles of safety for industry. Uses films and case studies to develop an awareness of hazards and positive attitudes toward prevention of accidents. F

**WLD077 Welding Processes**

2 class and 6 lab hrs/wk, 4 cr.

A beginning course in fundamentals of shielded metal arc welding, oxyacetylene welding and cutting, metallic inert gas welding (MIG), and arc-air procedures. Class fee \$35. W

**WLD081 Welding Metallurgy I**

2 class hrs/wk, 2 cr.

Fundamentals of metallurgy pertaining to welders. Covers identification of ferrous metals, distortion, stress relieving, flame straightening and hardening, plus various metallurgical problems. W

**WLD082 Welding Metallurgy II**

2 class hrs/wk, 2 cr.

A continuation of WLD081 covering heat treatment of steel, common non-ferrous alloys, and alloy steels. **Prerequisite:** WLD081. Sp

**WLD097 Welding**

1 class and 3 lab hrs/wk, 2 cr.

Fundamentals and application of arc welding, oxyacetylene welding, brazing and cutting pertaining to the automotive industry. Class fee \$20. F

## **WR**

### **Writing**

see also Skills Development

**WR040 Writing Skills**

3 class hrs/wk, 3 cr.

Writing correct and varied sentences. Includes grammar, punctuation, and writing practice. F, W, Sp, Su

**WR115 Introduction to Composition**

3 class hrs/wk, 3 cr.

Introduces the writing of expository essays. Emphasizes sentence and paragraph development as well as short essay formation. Class fee \$2. F, W, Sp, Su

**WR121 English Composition-Exposition**

3 class hrs/wk, 3 cr.

First-term college-level English composition course emphasizes clear, detailed informative writing, clear thinking, and active reading. **Prerequisite:** Ability to organize thoughts and competency in standard written English, as demonstrated by (a) standard placement test or (b) completion of WR115. Class fee \$2. F, W, Sp, Su



**WR122 English Composition-Logic and Style**

3 class hrs/wk, 3 cr.

Includes logical, effective argumentative prose, awareness of stylistic elements, and critical reading. **Prerequisite:** WR121. Class fee \$2. F, W, Sp, Su

**WR123 English Composition-Research Writing**

3 class hrs/wk, 3 cr.

Covers the acquisition and evaluation of evidence, integration of opinion, and process and forms for developing research papers. **Prerequisite:** WR121 and WR122. Class fee \$2. F, W, Sp, Su

**WR227 Technical Writing**

3 class hrs/wk, 3 cr.

Objective and direct report writing, including format, organizational strategies, supplements, and illustrations. Emphasizes coherence, clarity, conciseness, and accuracy in a wide range of occupational writing situations as well as technical writing as a career. **Prerequisite:** WR121 or consent of instructor. Class fee \$2. F, W, Sp, Su

**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. Class fee \$2 each. **WR241:** F; **242:** W; **243:** Sp

**WR248A-C Strategies for Revision**

3 class hrs/wk, 1-3 cr.

Series of exercises designed to initiate, sustain, and refine personal and professional writing. **Offered as needed.**

**WR298A Independent Studies: Writing**

3 cr.

Faculty-supervised independent study in an area of student interest. May be taken for a maximum of nine credits. **Offered as needed.**

**WS**

**Women's Studies**

**WS101 Introduction to Women Studies: Women in American Society**  
3 class hrs/wk, 3 cr.

An introduction to the sociology of women in American society throughout the life cycle. Focuses on the search for identity and meaningful relationships as well as theories of gender role socialization and covers the new scholarship concerning women in western civilization, their history, and alternative futures. F

**WS102 Introduction to Women's Studies: Women, Work and Family**  
3 class hrs/wk, 3 cr.

Examination of the economic position of women in American society today. Includes an overview of working women in American history from colonial times to the present. Focuses on the problems women face today as a result of economic pressures, changing family and work roles, societal expectations, and the "double day." W

**WS103 Introduction to Women's Studies: Women Around the World**  
3 class hrs/wk, 3 cr.

A survey of women around the world in the 20th century using cross-cultural compari-

sons. Examines the status of women in subsistence economies and developing countries, and under socialism and capitalism. Explores women's productivity, access to resources and political power, and gender relations in different societies. Debates the politics of ecofeminism, environmental consciousness, and ecological awareness. Sp

**ZOO**

**Zoology**

**ZOO201 General Zoology**  
3 class and 3 lab hrs/wk, 4 cr.

An introductory study of principles and theories of animal life. Includes application of these theories and principles to vertebrates as well as selected study of the morphology and physiology of animal cells. Class fee \$12. F

**ZOO202 General Zoology**  
3 class and 3 lab hrs/wk, 4 cr.

A continued study of the animal cell dealing with the principles of embryology and Mendelian and molecular genetics. Includes selected study of the morphology, physiology, and ecology of invertebrates. **Prerequisite:** ZOO201 or consent of instructor. Class fee \$12. W

**ZOO203 General Zoology**  
3 class and 3 lab hrs/wk, 4 cr.

A continued study of animal biology dealing with the principles of the morphology, physiology and ecology of vertebrates. Involves a comparative anatomical survey of the major vertebrate groups with a study of selected human body systems. **Prerequisite:** ZOO201 and ZOO202, or consent of instructor. Class fee \$12. Sp

## Staff as of June, 1993

This is a partial listing of Chemeketa Community College's staff. It includes most of the people who are employed full time in instructional, coordinating, and administrative roles.

### A

Acker, Ted—Instructor, Construction Skills Training  
 Adams, Chuck—Officer, Chemeketa Foundation  
 Aebischer, Joanne—Coordinator, Automated Library Systems  
 Agee, Steve—Instructor, Automotive Technology  
 Alfaqeeh, Nuri—Instructor, Mathematics  
 Alvarez, Maria (Cleo)—Counselor  
 Anderson, D. Craig—Coordinator, Agriculture Program  
 Anderson, Frank—Coordinator, Evening On-Campus and Apprenticeship Programs  
 Anderson, GwenEllyn—Counselor  
 Anderson, Holly—Instructor, Human Services  
 Anderson, Kenneth—Instructor, Inmate Education  
 Archer, Nancy—Diagnostician  
 Asher, Greg—Instructor, Psychology

### B

Baker, Chris—Instructor, Human Services  
 Bannon, David—Instructor, Physical Science  
 Barber, Wayne—Instructor, Mathematics  
 Barth, H. Philip—Director, Business Services  
 Bartlett, Karen—Instructor, German  
 Bates, Michael—Program Chair, Computer Science  
 Bay, Brian—Director, Emergency Services  
 Beaufeit, Dorothy—Instructor, Mathematics  
 Beck, Sally—Instructor, Adult Basic Education and GED  
 Beebe, Janell—Instructor, Office Administration and Technology  
 Beigh, Marybelle—Instructor, Electronics  
 Bennett, Suzanne—Coordinator, Cooperative Work Experience  
 Benson, June—Instructor, Developmental Education  
 Berger, Gerard—Interim President; Vice President, Academic Services  
 Berman, Arthur—Program Chair, Accounting and Management  
 Bibler, Rob—Program Chair, Art; Instructor, Film Studies  
 Blakley, Mollie—Instructor, Office Occupations, Woodburn Center  
 Blodget, James—Specialist, Media Production  
 Blucher, Robert—Instructor, Computer Science  
 Bode, Elizabeth—Program Chair (winter and spring terms); Instructor, Health Care Support Services  
 Bodtker, Diana—Program Chair, Life Science  
 Bodtker, Egon—Director, Social Science and Criminal Justice  
 Bohlander, Susan—Instructor, Office Administration and Technology  
 Bolen, Gene—Director, Advising and Counseling  
 Booth, Karleen—Instructor, Office Administration and Technology  
 Bothe, Janell—Instructor, Dental Assisting  
 Bothwell, Bruce—Instructor, Electronics  
 Bowman, Roberta—Instructor, Deaf and Hearing Impaired  
 Boyington, Gary—Program Chair, Electronics  
 Brooks, W. David—Instructor, Accounting  
 Brownlow, Carol—Director, Allied Health, Physical Education, and Athletics  
 Brummond, Candis—Counselor, Life Skills  
 Buchanan, Mary Ann—Instructor, High School Completion  
 Buttles, George—Instructor, Human Services  
 Byers, E. Maxine—Instructor, Learning Assistance/Skills Development

Bynum, Randall—Instructor, Speech

### C

Campbell, Lorraine—Coordinator, Family Resource Center  
 Carnegie, Kay—Instructor, Nursing  
 Cardiff, Bill—Coordinator, Copy Center  
 Caster, John—Instructor, Farm Business Management  
 Chancey, Fred—Instructor, English, Writing, and Literature  
 Chesley, Bob—Instructor, Mathematics  
 Clark, Lori—Instructor, Health and Physical Education  
 Clyde, Bobbie—Coordinator, Small Business Assistance  
 Cochrane, Edward—Instructor, History  
 Cochrane, Linda—Director, Learning Resource Center  
 Cockrell, Barbara—Director, Business and Management  
 Cockrell, James—Program Chair, Real Estate  
 Colton, Lois—Instructor, Developmental Education  
 Concepcion, Paul—Program Chair, Social Science and Criminal Justice  
 Connor, Marilyn—Instructor, Communication Skills; Coordinator, Technical Preparation  
 Cornutt, Delvin—Instructor, Sociology  
 Couse, Lyle—Instructor, Accounting  
 Craven, Linda—Instructor, Early Childhood Education  
 Crossler-Laird, Janice—Instructor, English as a Second Language  
 Cudmore, Wynn—Instructor, Life and Physical Sciences  
 Cullison, Joanne—Instructor, Learning Assistance/Skills Development

### D

Davenport, Susan—Coordinator, Older Adult Programs  
 Davidson, Mollie—Instructor, Human Services  
 Davis, Anne—Counselor  
 DePue, Thomas—Associate Dean/Director, Information Technology  
 Dinsdale, Sara—Instructor, Basic Skills  
 Dixon, Robert—Coordinator, Oregon Advanced Technology Consortium  
 Dobay, Deborah—Instructor, Psychology  
 Doeneka, Molly—Instructor, Anthropology and Political Science  
 Dow, Lisa—Instructor, Health Care Support Services  
 Dunn, Tim—Program Chair, Civil-Structural Engineering and Forest Resources Technology

### E

Ehlers, Deborah—Instructor and Counselor, Life Skills  
 Eichsteadt, Wendy—Instructor, Emergency Medical Technology  
 Elegant, Ann—Instructor and Counselor, Life Skills  
 Elias, Marilyn—Instructor, Nursing  
 Entwit, Peggy—Instructor, Emergency Medical Technology  
 Eppler, Carol—Instructor, Office Administration and Technology  
 Erovick, Joyce—Instructor, Nursing  
 Eustrom, James—Coordinator, Student Life

### F

Felton, Maureen—Assistant to the Vice President  
 Fenske, Helen—Instructor, Human Services  
 Ferguson, Elaine—Instructor, Center for Independent Learning, McMinnville Center  
 Ferguson, Jim—Instructor, Physical Science  
 Ferry, Marjorie—Instructor, English  
 Fisher, Gene—Program Chair, Fire Protection  
 Fishfader, Randy—Instructor, Early Childhood Education  
 Fitzgerald, George—Instructor, Life Science  
 Ford, Edward—Instructor, Health and Physical Education  
 Ford, Lowell—Dean, Student Services and Extended Learning  
 Forest, Jacques—Instructor, Economics  
 Forslund, Larry—Instructor, Life Science



## Board of Education

*Members of Chemeketa's Board of Education are elected to represent seven geographical zones in the college district.*

*Zone one—Signe Pribnow*

*Zone two—Marilyn Crouser*

*Zone three—Robert Simon*

*Zone four—Wayne E. Feller*

*Zone five—Philip Frey*

*Zone six—Gerald Watson*

*Zone seven—Gwen VanDenBosch*



Freeman, Tony—Program Chair, Human Services

## G

Galligan, Patricia—Director, Financial Aid

Garaventa, James—Specialist, Executive/Employee Development

Garcia, Francisco—Counselor

Gassner, Gayle—Director, Corrections Education

Gerard, Kay—Program Chair, English as a Second Language

Gilbert, Jeremy—Instructor, Psychology

Gill, Tom—Assistant to the President for Institutional Advancement

Gillette, David—Instructor, Mathematics

Gohaidan, Carol Ann—Instructor, English as a Second Language

Gohring, Judy—Director, Personnel and Affirmative Action

Goward, Richard—Director, Auxiliary Services

Graham, Jerry—Instructor, Adult Basic Education

Green, Constance—Assistant to the President, Special Projects

## H

Haines, Beverley—Coordinator, Cooperative Work Experience

Hanby, Stephen—Instructor, Welding Technology

Hargreaves, Hal—Instructor, Philosophy and Religion

Harmon, Millie—Instructor, Sociology and Women's Studies

Harris, Lois—Instructor, Nursing

Harris, Ralph—Instructor, Mathematics

Hartline, Ron—Instructor, Manufacturing Engineering

Hassoun, Judith—Counselor

Heater, Steven—Instructor, Welding Technology

Held, Leonard—Instructor, Composition, Literature, and Film Studies

Henderson, Madeleine—Instructor, Center for Independent Learning, Woodburn Center

Hilgemann, Vickie—Coordinator, Opportunity Center

Hodges, Gary—Instructor, Automotive Technology

Holmes, Darrel—Program Chair, Building Inspection

Hoobler, Tony—Instructor, Physical Science

Howard, Jeffrey—Program Chair, Deaf and Hearing Impaired

Hulett, Ronald—Director, Training & Economic Development Center

Hunter, Jeri—Assistant Registrar

## I

Irving, Jan—Instructor, Nursing

Ivey, Marion—Instructor, Custodial/Building Maintenance

## J

Jacobson, Lee—Instructor, Art

Jantzi, Ron—Director, Trades and Technologies

Johanson, Terri—Specialist, Academic Computing

Johnen, Elizabeth—Associate Dean/Director, Developmental Education

Johnson, Donald—Instructor, Drafting Technology

Johnson, Robert—Instructor, Computer Science

Jolly, Dale—Instructor, Geography

Jones, Ben—Counselor

Jones, Debra—Instructor, Alternative High School

Jones, Jeffrey—Instructor, Fire Protection Technology

Jones, Lee—Instructor, Mathematics

Jordan, Carol—Instructor, Office Administration and Technology

Judd, Connie—Instructor, Learning Assistance/Skills Development

Judd, Roger—Instructor, Mathematics

## K

Kaczmarczyk, Lisa—Instructor, Computer Science

Kalb, David—Instructor, Automotive Technology

Kimmel, Fred—Instructor, Drafting Technology

King, James—Instructor, Human Services

King, Janet—Director, Stayton Center

Kirk, Barbara—Instructor, Physical Science

Kirksey, Nancy—Director, Woodburn Center

Kizziah, John—Instructor, Welding Technology

Knab, Bernard—Director, Humanities and Communications

Knight, Franklin—Instructor, Electronics

Koch, Alan—Director, Marketing, Publications, and Student Life

Koontz, Everett—Instructor, High School Completion

Kurz, Sandra—Instructor, Health and Physical Education

## L

Lacy-Tang, Jean—Career Counselor

Larson, Lillis—Instructor, Early Childhood Education

Lang, William—Career Counselor

Leavitt, Judith—Manager, Bookstore

Leonard, Phyllis—Instructor, Mathematics

LeRoy, Robert—Instructor, Composition and Literature

Levine, Ellen—Director, Regional Professional/Technical Education

Levine, Richard—Dean, Business, Health, and Industry

Libbon, George—Athletic Director; Instructor, Health and Physical Education

Longshore, Glen—Specialist, Media Production

Lund, Eugenia—Instructor, Center for Independent Learning, Dallas Center

Lynch, James—Program Chair, Construction Skills Training

## M

MacDonald, Lucy—Instructor, Learning Assistance/Skills Development

MacInnes, Patricia—Instructor, Inmate Education

Malone, Patricia—Instructor, Office Administration and Technology

Marckx, Elaine—Instructor, Nursing

Marges, Dawn—Director, Child, Family, and Work

Martin, Joel—Counselor

McCready, Marveen—Instructor, Mathematics

McDermott, Laura—Reference Librarian

McDonough, Thomas—Instructor, Physical Science

McGill, Meg—Coordinator, Salem Area Programs

McGowan, Esther—Instructor, Inmate Education

McIntyre, Sondra—Instructor, Communication Skills

McLain, Roger—Instructor, Criminal Justice

McLaughlin, Suzanne—Instructor, Spanish

McLaughlin, Terrence—Instructor, Physical Education

McNicholas, Michael—Program Chair, Physical Science

Meadowbrook, Ann—Counselor

Mendenhall, Mike—Instructor, Building Inspection

Merola, Joseph—Program Chair, Visual Communications

Meyers, Dianne—Instructor, Nursing

Michels, John—Instructor, Mathematics

Miller, Mark—Instructor, Engineering and Math

Mills, Keith—Instructor, Management

Mock, John—Instructor, Composition and Literature

Mock, Lorene—Instructor, Dental Assisting

Moffitt, Ray—Instructor, Small Business Management

Mohn, Elaine—Instructor, Nursing

Moothart, Janine—Coordinator, 2+2/Technical Preparation Programs

Morgan, Micheal—Director, Science, Mathematics, and Electronics

Morin, Christiane—Program Chair, Humanities; Instructor, French

Moxley, Doug—Specialist, Academic Computing

Murray, Susan—Coordinator, Opportunity Center

Myers, James—Instructor, Psychology

Myers, Lynette—Instructor, Basic Skills

## N

Nagle, Priscilla—Instructor, Adult Basic Education and GED

Nava, Andy—Manager, Public Safety

Nelson, Cynthia—Instructor, Early Childhood Education  
 Nelson, Sandra—Coordinator, New Workforce  
 Neuendorf, Mary—Coordinator, Public Relations  
 Newton, Kristi—Instructor, Office Administration and Technology  
 Nichols, Van—Program Chair, College Transfer Engineering and Drafting Technology  
 Niebuurt, Kathleen—Instructor, Nursing  
 Nubile, Barbara—Team Coordinator, Nursing

**O**  
 Ochsner, Ken—Program Chair, Emergency Medical Technology  
 O'Hara, Rick—Instructor, Life Science  
 O'Harra, Kris—Instructor, Communication Skills  
 Olheiser, Dean—Program Chair, Automotive Technology  
 Olson, Betty—Instructor, Nursing  
 O'Reilly, Edward—Instructor, Automotive Technology  
 Ottaway, Carol—Program Chair, Business Education, Dallas Center  
 Owens, Chris—Instructor, Health Education

**P**  
 Panasuk, Eugene—Instructor, Farm Business Management  
 Parker, Sheri—Instructor, Custodial/Building Maintenance  
 Parmeter, Stanton—Instructor, Life Science  
 Patterson, Darrell—Instructor, Emergency Medical Technology  
 Perkins, Ruth—Instructor, Inmate Education  
 Phipps, Raymond—Director, Cooperative Work Experience and Placement Services  
 Pielstick, Dean—Registrar  
 Pillsbury, Chris—Instructor, Human Services  
 Pintler, Michael—Program Chair, Welding Technology  
 Pitt, Donald—Instructor, Civil-Structural Engineering Technology  
 Pratt, Betty—Instructor, Office Administration and Technology  
 Prothero, Marilyn—Instructor, English as a Second Language

**R**  
 Rasmussen, Douglas—Program Chair, Mathematics  
 Reid, Donna—Instructor, Art  
 Rhodes, Sandra—Instructor, Adult Basic Education and GED, Downtown Learning Center  
 Rice, Leonard—Instructor, Drafting Technology  
 Richardson, Steve—Program Chair, English, Writing, and Literature  
 Risenhoover, C.C.—Instructor, Journalism; Advisor, Student Newspaper  
 Roelofs, Gary—Instructor, English as a Second Language  
 Rogers, Timothy—Program Chair, High School Completion  
 Rogland, Paul—Instructor, Inmate Education  
 Rose, Robin—Instructor and Counselor, Life Skills  
 Rosen, Lois—Instructor, English as a Second Language

**S**  
 Sansone, Steve—Instructor, Health and Physical Education  
 Sauter, Betty—Instructor, Business Education, McMinnville  
 Sawser, Judith—Coordinator, Placement Resource Center  
 Schaefer, William—Instructor, Physical Science  
 Scheer, Sara—Instructor, Nursing  
 Scherf, Joan—Director, Dallas Center  
 Schmidt, Steve—Manager, Computer Services  
 Scoggin, Paul—Coordinator, Hospitality Systems Management  
 Seals, Georgina—Program Chair, Office Administration and Technology

Showers, Alene—Coordinator, Tutor Services  
 Skirvin, Charles—Counselor  
 Slemenda, Steve—Instructor, Composition and Literature  
 Slosser, Joseph—Instructor, Psychology  
 Smith, Craig—Chief Financial Officer  
 Sprenger, John—Instructor, Adult Basic Education  
 Stam, Bruce—Program Chair, Early Childhood Education  
 Steiner, Ann—Instructor, Adult Basic Education  
 Steiner, Jerry—Executive Dean  
 Stephens, Debra—Instructor, Criminal Justice  
 Stevens, Malia—Program Chair, Instructional Assistant Program  
 Stubbs, Dina—Instructor, Nursing  
 Suter, Marcia—Instructor, Communication Skills  
 Suter, Paul—Instructor, Communication Skills

**T**  
 Tabor, Patrick—Instructor, History  
 Tardaewether, Virginia—Instructor, Adult Basic Education and Even Start  
 Terhes, John—Instructor, Communication Skills  
 Terpin, Mark—Education Specialist, Developmental Education  
 Thorp, Anne—Instructor, Adult Basic Education and GED  
 Triplett, Geary—Counselor, Life Skills  
 Trumbo, Mark—Director, McMinnville Center

**V**  
 Vanalcar, Verna—Coordinator and Instructor, Adult Basic Education, McMinnville  
 Vaughan, Joyce—Program Chair, Dental Assisting  
 Vessello, Jerry—Director, Facilities and Operations

**W**  
 Wade, DeVon—Instructor, Accounting  
 Wahl, Donn—Advisor, Small Business Management  
 Wahner, Royal—Program Chair, Manufacturing Engineering Technology  
 Wall, David—Instructor, Science  
 Wall, James—Coordinator, Cooperative Work Experience  
 Ward, H. Jill—Special Projects Coordinator, Developmental Education  
 Warren, John—Instructor and Counselor, Life Skills  
 Warren, Lynda—Director, Business Services  
 Wasson, Barbara—Program Chair, Learning Assistance/Skills Development  
 West, Susan—Program Chair, Health and Physical Education  
 Westford, Gary—Instructor, Inmate Education  
 Wetle, Victoria—Instructor, Health Care Support Services  
 White, Roger—Instructor, Electronics  
 Whitton, Louanne—Program Chair, Adult Basic Education and GED  
 Wigginton, Barbara—Instructor, Composition and Literature  
 Williams, Doris—Director, Nursing  
 Williams, Shirley—Reference Librarian  
 Willis, Vicki—Assistant to the President, Organizational Development  
 Wintermeyer, Larry—Instructor, Computer Science  
 Woods, Rae—Counselor  
 Wright, Larry—Instructor, Accounting and Business Management  
 Whyte, Catherine—Instructor, Instructional Assistant

**Y**  
 Yenne, Michele—Instructor, Nursing

**Z**  
 Zacharias, Patricia—Program Chair (fall term); Instructor, Health Care Support Services  
 Zolkoske, Gary—Instructor, Manufacturing Engineering Technology

# Student Rights and Responsibilities

## 1.0 Preamble

Chemeketa Community College provides an environment that celebrates the freedom to learn and the freedom to teach. In that celebration of teaching and learning it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.

## 2.0 Code of Behavior

As a community of people seeking education, Chemeketa students are dedicated to improving personally and academically. Choosing to join the college community obligates each member to a code of behavior.

Chemeketa students will:

- 2.1 Practice personal and educational integrity.
  - 2.1.1 Students shall practice academic honesty by not cheating, plagiarizing, or misrepresenting their coursework in any way.
  - 2.1.2 Students shall not misuse college documents, library or computer resources, student records, or identification cards.
- 2.2 Maintain standards of academic performance and contribute to the safe, cooperative, and respectful learning environment throughout the college.
  - 2.2.1 Students shall participate in classroom assignments and discussions and attend classes regularly.
  - 2.2.2 Students shall not disrupt the teaching/learning process.
- 2.3 Discourage bigotry and respect the diversity and dignity of all persons.
  - 2.3.1 Students shall not participate in physical or verbal abuse of any individual.
  - 2.3.2 Students are encouraged to demonstrate respect for all persons.
- 2.4 Respect the rights and property of all persons.
  - 2.4.1 Students shall do nothing to impede another's right to move about freely, express his/herself or enjoy privacy.
  - 2.4.2 Students shall not destroy, deface, or misuse property belonging to an individual or the college.
- 2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.
  - 2.5.1 Students have an ethical obligation to confront, challenge, or report destructive or abusive behavior.
  - 2.5.2 Students shall not abuse alcohol or other drugs.
  - 2.5.3 Students shall abide by federal, state, and local laws.

## 3.0 Student Rights

Each student in the college community has certain rights that accompany his/her responsibilities. Those rights are to be protected by both students and staff regardless of an individual's race, sex, religion, color, creed, disability, sexual orientation, political affiliation, national origin, ancestry, or age.

The college will:

- 3.1 Provide access to education and campus facilities.
  - 3.1.1 The college shall be open to applicants who are qualified according to current admission requirements within the limits of its resources and facilities.
  - 3.1.2 Students have the right to be informed about class requirements and college policy and procedures.
  - 3.1.3 Students have the right to participate in evaluations of programs, course content, and educational objectives.
  - 3.1.4 If a student is charged with a violation of law not related to his/her activities on campus, the matter shall be of no disciplinary concern to the college, unless the student is incarcerated and cannot comply with educational requirements.
  - 3.1.5 Students, official clubs and organizations may use available college facilities according to college policy and procedures.
- 3.2 Assure the protection of confidential student records and information.

- 3.2.1 Student records and information are protected and governed by federal and state laws and the college's Student Records Policy and Procedures.

- 3.2.2 Information about student views, beliefs, private activities, and political associations which is acquired or learned by college employees in the course of work is to be treated with professional judgment and confidentiality.

- 3.2.3 Professional evaluations and references about the ability and character of students may be provided under appropriate circumstances.

- 3.3 Provide opportunities for association and preserve freedom of expression.

- 3.3.1 Policy and procedures governing clubs and organizations shall be established by the college and ASCCC Student Senate.

- 3.3.2 Students may express their views on college policy or matters of general interest and may support causes by any orderly means that does not disrupt the operation of the college.

- 3.3.3 In the classroom, students may take exception to the information and may reserve judgment about matters of opinion, but they are responsible for learning the content of the course.

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

- 3.3.5 The student newspaper shall be governed by the Student Newspaper "Guidelines" and shall follow the Canons of Journalism of the American Society of Newspaper Editors.

- 3.3.6 Student publications shall state that the opinions expressed are not necessarily those of the college or student body.

## 4.0 Conflict Resolution

- 4.1 When there is a difference of opinion, values, or treatment, members of the Chemeketa community are encouraged to seek resolution directly with the individual with whom the conflict exists or his/her supervisor. When conflict is with a service area of the college, resolution should be sought first in that area or with its supervisor. If the issue involves alleged discrimination such as sexual harassment, the college's Affirmative Action Office should be contacted.

- 4.2 When resolution cannot be reached by talking to the individual (or when contact with the individual would not be appropriate) the Dean of Student Services and Extended Learning should be contacted. The Dean of Student Services and Extended Learning has multiple informal processes to assist the student to resolve the conflict. Unbiased investigation will be used in the informal processes in an attempt to resolve issues. Examples include but are not limited to:

- 4.2.1 Referral to supervisors or appropriate staff to achieve resolution.

- 4.2.2 Referral to the college ombudsperson. The ombudsperson serves as a resource to resolve disputes on an informal basis. The ombudsperson may find mediators who will work with the referred parties to achieve resolution.

- 4.2.3 Referral to a fact-finding committee, especially designed to achieve resolution. The committee will be composed of members who are approved by both sides of the issue.

- 4.2.4 The Dean of Student Services and Extended Learning may conduct an investigation of the situation to achieve resolution.

- 4.3 If the processes above do not result in agreement by both parties, the student may follow the College Appeals Process (Section 6.0) by contacting the Dean of Student Services and Extended Learning.

## 5.0 Student Discipline

- 5.1 If a college staff member believes a student has violated the Student Rights and Responsibilities document, the person or persons involved shall attempt to resolve the issue by personal contact, if possible.
- 5.1.1 Informal conflict resolution processes (Section 4.2) are encouraged for resolution of possible violations of the Student Rights and Responsibilities document. The Dean of Student Services and Extended Learning should be contacted for assistance.
- 5.1.2 Disciplinary action may be imposed upon a student by college staff for misconduct or for violation of law and/or college rules and policies.
- 5.1.3 Types of disciplinary action which may be imposed and authorization for such action are:
1. *Temporary Exclusion* is the removal of a student from a class or service area, not to exceed one class session, one day, or removal from a college-sponsored function for the duration of a function.  
Any staff member of the college may impose temporary exclusion only when the presence of the student poses a danger to students, other persons, college property or a threat of disrupting the educational process. (See College Policy 4220.) A written report of the circumstances requiring this action shall be submitted to the appropriate director or dean within one working day following the incident with specific directions or expectations and consequences for non-compliance.
  2. *Disciplinary Probation* is a written warning to a student which may include interim exclusion. Interim exclusion may not exceed five days. The appropriate director may impose disciplinary probation.
  3. *Suspension* is the exclusion of a student from classes in a program or service area and college-sponsored functions for a specified period of time as set forth in the notice of suspension.  
The appropriate dean may impose suspension from classes in a program, from a service area, or from college-sponsored functions. Suspension may not exceed one term.
  4. *Expulsion* is the permanent separation of a student from a program or service area or conditional separation from the college.  
The Dean of Student Services and Extended Learning may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.
- 5.2 The Dean of Student Services and Extended Learning may take any disciplinary action deemed appropriate for student behaviors which are considered destructive to the educational environment of the college.
- 5.3 Chemeketa staff who take disciplinary action against a student shall submit a written statement to the Dean of Student Services and Extended Learning specifying the nature of the alleged violation.
- 5.3.1 At the earliest possible time after a statement of violation, the appropriate director or dean shall meet with the student or issue a written statement for the purpose of advising the student of:
1. The nature of the charge(s).
  2. Possible sanctions or sanctions imposed based on evidence.
  3. The student's right to counsel, who may assist the student for advising purposes only.
  4. The student's rights under college policy.
- 5.3.2 The student charged may:
1. Accept sanctions imposed by the college staff person. If the student does not submit a written appeal within five working days, it will be concluded that the sanctions have been accepted.
  2. Request alternate resolution by notifying the college ombudsperson in writing within five working days.
  3. Appeal the action within five working days by contacting the Dean of Student Services and Extended Learning who may use multiple

informal processes to resolve the conflict or may refer to the College Appeals Committee.

## 6.0 College Appeals Process

- 6.1 A hearing before the College Appeals Committee occurs in situations which may require a summary decision on an unresolved conflict or may result in the permanent expulsion of a student.
- 6.2 The college president shall appoint two students and three staff members to form a College Appeals Committee. The appeals committee must have a quorum of four to conduct a hearing. The hearing is not considered a formal legal trial.
- 6.3 The general rules governing a hearing are listed below. The specific rules for a hearing are contained in the guidelines of the College Appeals Committee. A copy of these guidelines is on file in the office of the Dean of Student Services and Extended Learning and is available for examination by any student upon request.
- 6.3.1 A written statement of the alleged college violation shall be delivered by the student to the Dean of Student Services and Extended Learning. A written statement of the alleged student violation shall be delivered to the student.
- 6.3.2 A hearing shall be held not less than three nor more than 20 working days after the filing of the statement of violation with the Dean of Student Services and Extended Learning. For reasonable cause, the College Appeals Committee may grant a postponement.
- 6.3.3 The student may be accompanied by counsel for advising purposes only; however, counsel will not participate directly in the hearing.
- 6.3.4 If the student who filed the appeal or is the subject of the appeal fails to appear for the hearing or agrees in writing not to contest the case, the College Appeals Committee shall review the evidence and prescribe the appropriate action.
- 6.4 In any case, the student may appeal findings and judgment of the College Appeals Committee to the College Board. If an appeal is submitted, the student must present to the College Board Chairperson a written notice stating the basis for the appeal. The appeal must be filed within five working days after the pronouncement of the judgment of the Appeals Committee; otherwise the right of the appeal shall be waived.
- 6.5 Upon the filing of an appeal, the College Board Chairperson shall review the record of the hearing and the judgment. The College Board may schedule a hearing if further clarification is needed.
- 6.6 Within a reasonable time, the College Board Chairperson will respond in writing prescribing the final decision.

## 7.0 Definitions

- 7.1 *College* shall mean Chemeketa Community College.
- 7.2 *College Board* shall mean the Board of Education.
- 7.3 *Staff* shall mean any employee of the college, both full- and part-time, management, faculty, and classified. Staff rights and responsibilities shall be provided by college policy, procedure, and collective bargaining agreements. Staff are expected to intervene and facilitate adherence to the Student Rights and Responsibilities document.
- 7.4 *Student* shall mean any person currently enrolled in a college class.
- 7.5 *Community member* shall mean any person not enrolled in a Chemeketa class. A community member shall have the rights and responsibilities provided by local, state, and federal laws. The Student Rights and Responsibilities document does not apply to community members. Community members may contact the college ombudsperson for clarification of their rights and responsibilities.
- 7.6 *Associated Students of Chemeketa Community College (ASCCC)* shall mean the official organization of the student body, made up of currently enrolled students at the college.
- 7.7 *ASCCC Student Senate* shall consist of student representatives of the student body selected according to the ASCCC Constitution and Bylaws.
- 7.8 *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 at the college as an official organization.
- 7.9 The College Appeals Committee shall be composed of students and staff and will conduct non-judicial hearings on alleged violations of the Student Rights and Responsibilities document. The hearings are not considered formal, legal trials.



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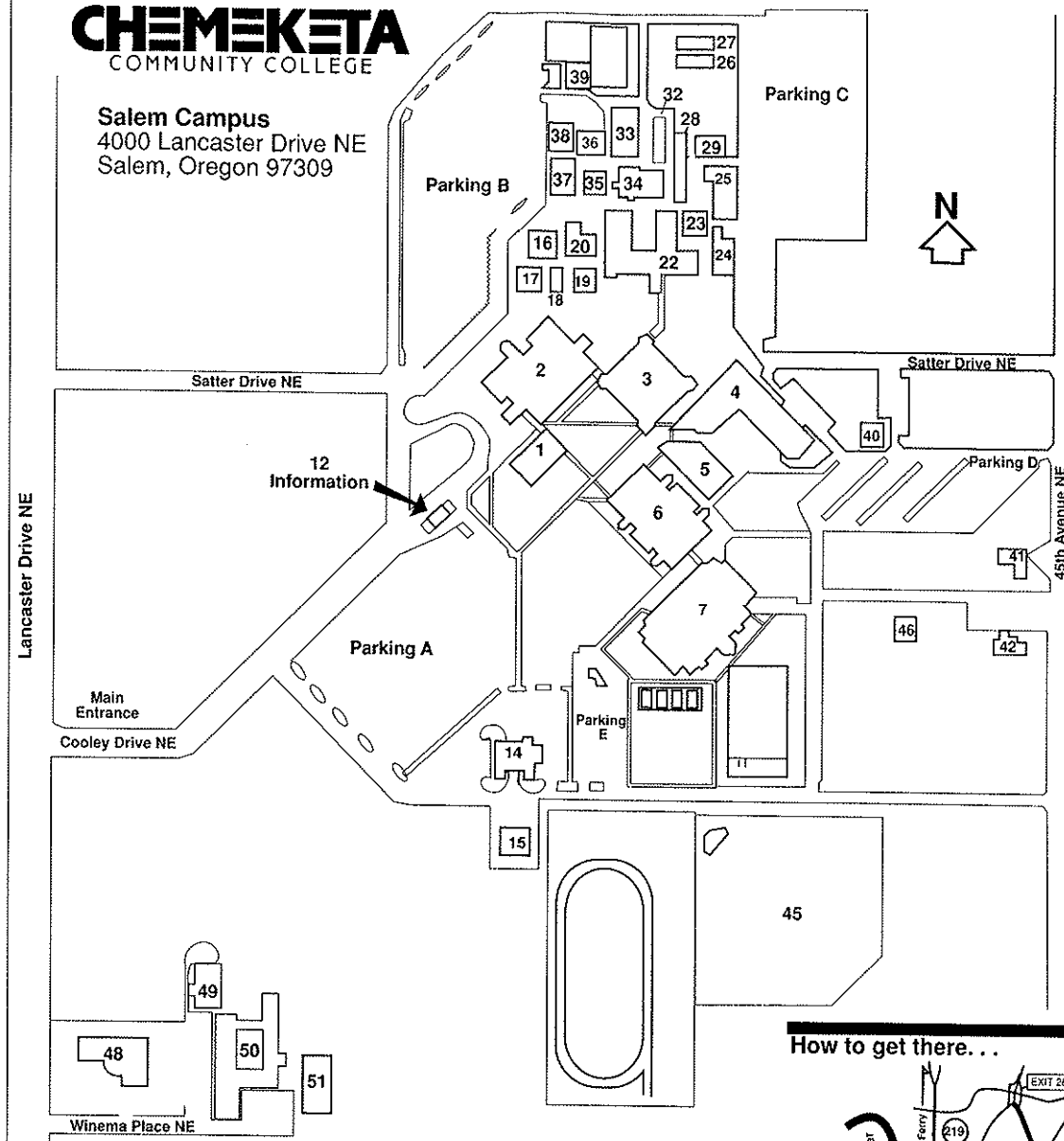
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# CHEMEKETA COMMUNITY COLLEGE

**Salem Campus**  
4000 Lancaster Drive NE  
Salem, Oregon 97309

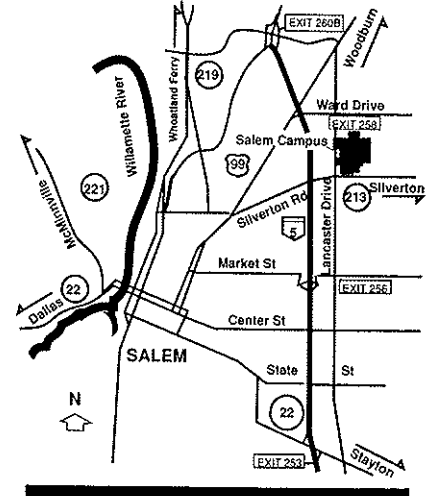


## Map Legend

1. Bookstore and Staff offices  
(Staff offices open Jan. 1, 1994)
2. Advising and Counseling,  
Developmental Education,  
Library, Media Services, President's  
Office, Tutoring
3. General classrooms, computer labs,  
Student Life Office
4. Technical Skills classrooms
5. Technical Skills classrooms
6. Science and Allied Health classrooms and labs
7. Physical Education
12. Information and Public Safety
14. Fire Station
15. Emergency Operations and Research Facility
16. Under renovation
17. Cooperative Work Experience, Placement  
Resource Center, JOBS Program
18. English as a Second Language, Volunteer  
Tutor Program

19. Life Skills Center
20. Under renovation
22. Admissions, Business Office, Computer  
Services, Financial Aid, Personnel,  
Registrar's Office
23. Under renovation
24. Machine Shop
25. Welding Shop
26. Classrooms A-B
27. Classrooms A-B
28. Classrooms A-F
29. Staff offices, classroom
32. Classrooms A-D
33. Mailing, Purchasing, and Receiving
34. Food Service
35. Under renovation
36. Staff offices
37. Math lab and classrooms
38. Staff Offices
39. Child Development Center
40. Classrooms
41. Classrooms
42. Ceramics and Sculpture

## How to get there...



45. Activity Field
46. Greenhouse
48. Office Building (MAPS)
49. Northwest Center
50. Classrooms, High School Completion, Extended  
Learning, Farm Business Management,  
Apprenticeship, Family Resource Center,  
Cooperative Child Care Center
51. Construction Skills



