

# CHEMEKETA COMMUNITY COLLEGE

1995 – 1996 CATALOG



BUILDING FUTURES FOR 25 YEARS



**CHEMEKETA COMMUNITY COLLEGE**

**1995 – 1996 CATALOG**



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## PROGRAM CHOICES

## Select one of the following programs of study:

### NON-CREDIT ONLY

Use only if all courses are non-credit (900)  
Do not use for auditing courses

High School Completion (06B)

### PROFESSIONAL-TECHNICAL PROGRAMS

- Accounting (025)
- Automotive Technician (129)
- Auto Parts Sales (668)
- Banking and Finance - One Year Option (546)
- Banking and Finance - Two Year Option (545)
- \* Building Inspection - One Year Option (63A)
- \* Building Inspection - Two Year Option (63B)
- Civil-Structural Engineering (110)
- Computer-Aided Design/Computer-Aided Manufacturing (151)
- Computer Electronics Technology (123)
- Computer Programming (032)
- Computer Programming - Microcomputer Support Specialist (038)
- \* Construction Technology (70C)
- Criminal Justice (044)
- \* Dental Assisting (08E)
- Drafting Technology - CAD (142)
- Early Childhood Education (060)
- Electronic Engineering (120)
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- Hospitality Systems Management (624)
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- \* Human Services - Gerontology (09G)
- \* Human Services - Social Services (09S)
- Industrial Electronics (126)
- Industrial Technology (160)
- \* Instructional Assistant - One Year (16A)
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- Manufacturing Operations (148)
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- Occupational Skills Training (705)
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- 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 - Clerical Basics (503)
- \* Professional-Technical Teacher Preparation (16P)
- Real Estate (040)
- Survey Technology (638)
- Travel Agency Operations (706)
- \* Visual Communications (14V)
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- Welding Fabrication (136)

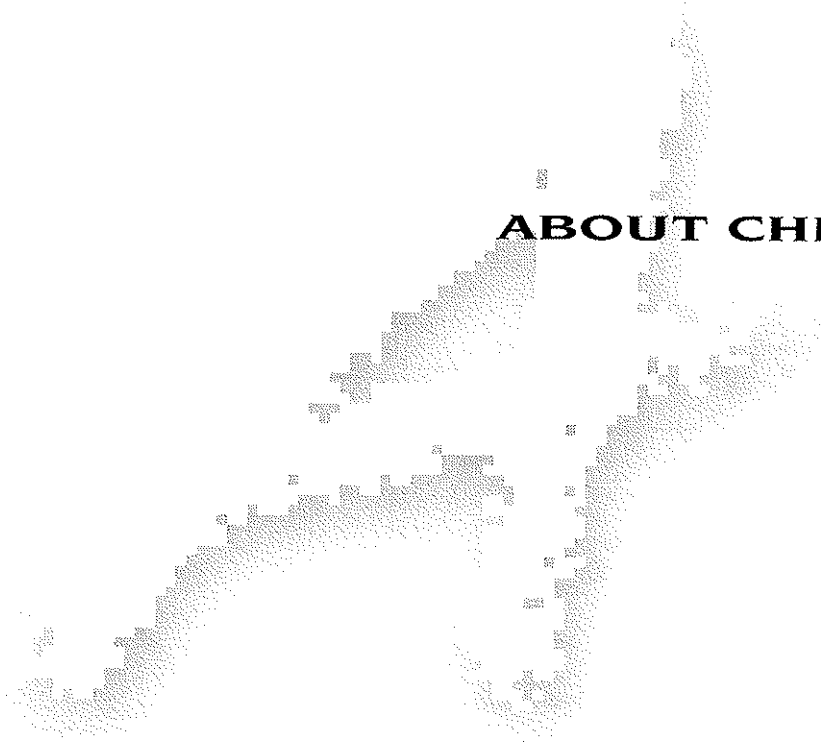
### LOWER DIVISION COURSES OF STUDY WHICH MAY BE TRANSFERRED TO OREGON'S FOUR-YEAR COLLEGES AND UNIVERSITIES

- 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 (350)**
  - \*\* Hotel, Restaurant, and Tourism Management
- 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 at 399-5006.

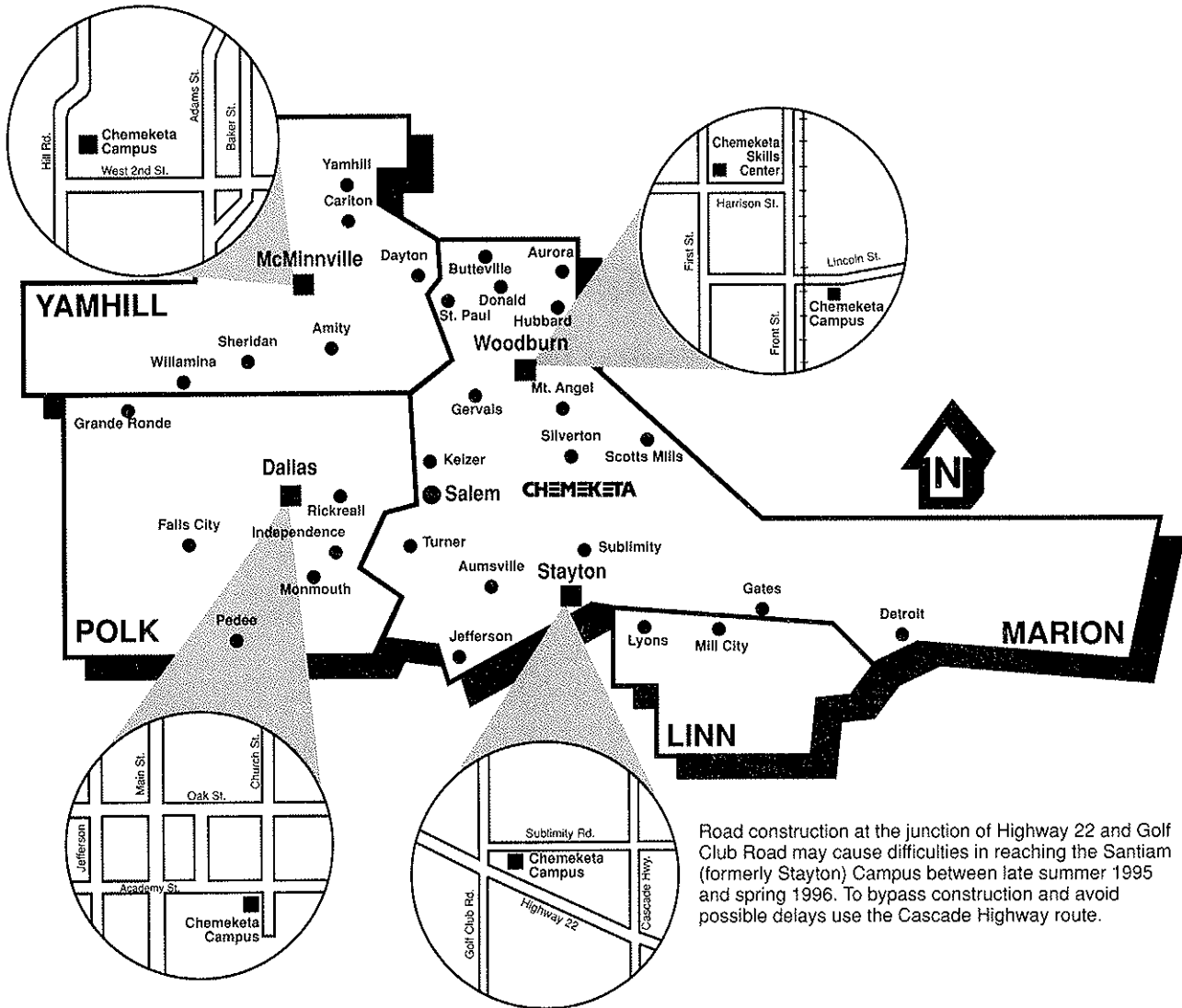
Two stars (\*\*) indicate which courses of study are included in the college catalog.

# ABOUT CHEMEKETA



# Chemeketa Community College District

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



Road construction at the junction of Highway 22 and Golf Club Road may cause difficulties in reaching the Santiam (formerly Stayton) Campus between late summer 1995 and spring 1996. To bypass construction and avoid possible delays use the Cascade Highway route.

## LEGEND

- CHEMEKETA** Salem Campus
- Communities with Chemeketa Campuses
- Other communities where Chemeketa classes are held



## Welcome to Chemeketa Community College

Chemeketa is your community college. Our goal is to serve all of our students in every way 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 campuses 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 or computer.

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 or don't have the prerequisite skills.

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 col-

lege or university. If you successfully complete Chemeketa's two-year college transfer program, you may also earn an Oregon Associate of Arts transfer degree. See Page 30 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, avoca-



# Academic Calendar

|   | Fall<br>1995  | Winter<br>1996 | Spring<br>1996     | Summer<br>1996 | Fall<br>1996<br>(tentative) |
|---|---|----------------|--------------------|----------------|-----------------------------|
| Registration begins   | <i>Please check each term's Schedule of Classes for registration information.</i> |                |                    |                |                             |
| Day and Evening<br>classes begin  | Sept. 25  | Jan. 8         | April 1            | June 24        | Sept. 23                    |
| Last day to withdraw and<br>receive a refund                                      | Oct. 6  | Jan. 19        | April 12           | July 5         | Oct. 4                      |
| Last day to register or add classes   | Oct. 13   | Jan. 26        | April 19           | July 12        | Oct. 11                     |
| Audit requests due  | Oct. 20   | Feb. 2         | April 26           | July 19        | Oct. 18                     |
| Applications for next term's<br>graduation due                                    | Oct. 20   | Feb. 2         | April 26           | July 19        | Oct. 18                     |
| Holidays  | Nov. 10<br>Nov. 23, 24  | Jan. 15        | May 27             | July 4         | Nov. 11<br>Nov. 28, 29      |
| Last day to withdraw from classes<br>without responsibility for grades            | Nov. 27   | March 1        | May 24             | July 26        | Dec. 2                      |
| Review and final examinations   | Dec. 11-14  | March 18-21    | June 10-13         | Aug. 12-15     | Dec. 9-12                   |
| End of term   | Dec. 15   | March 22       | June 14            | Aug. 16        | Dec. 13                     |
| <b>Graduation</b><br>GED and High School Completion<br>One- and two-year programs |   |                | June 15<br>June 15 |                |                             |



tional, and academic knowledge and skills; to retrain for new positions; and to continue your personal development.

■ *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 adjunct faculty 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 194-acre main campus is located at 4000 Lancaster Drive N.E., Salem. We have campuses 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 eight 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, distance-education programs, and a television studio. A new bookstore and staff office building is the most recent addition to the Salem Campus.

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 Facilities Scheduling Office in Building 22 or call 399-5008. Chemeketa's campuses 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 3,000 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 166 and 167 of this catalog. The creed lists standards of behavior 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.

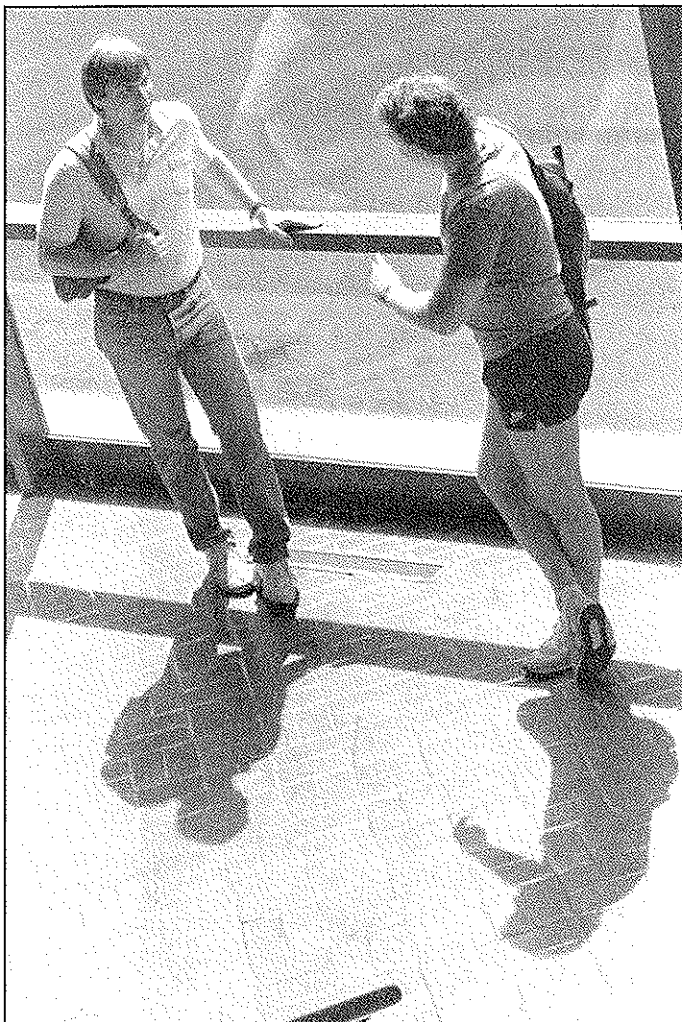
#### 3.0 Student Rights

Each student in the college community has certain rights that accompany

## 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.*



# How to Enroll at Chemeketa

| Student Classification  | 1. Academic and career decision making   | 2. Placement testing   | 3. Applying 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 Student Record Form with Admissions Office, Building 22, Salem Campus.  | <b>New Students</b> —Register following directions sent by Admissions Office.<br><br><b>Re-entering/ Continuing Students</b> —Register by touch-tone telephone 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 campus in Dallas, McMinnville, Stayton, or Woodburn (optional).   | Contact nearest Chemeketa campus.  | ■ File Student Record Form with Admissions Office, Building 22, Salem Campus or at nearest Chemeketa campus.   | <b>New Students</b> —Follow procedure above for enrolling on Salem Campus.<br><br><b>Re-entering/ Continuing Students</b> —Register by touch-tone telephone following directions published in the quarterly <i>Schedule of Classes</i> .    |
| <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 Student Record Form with Admissions Office, Building 22, Salem Campus.  | ■ Follow procedure above for enrolling on Salem Campus.<br><b>or</b><br>■ Register by touch-tone telephone following directions published in the quarterly <i>Schedule of Classes</i> .   |
| <b>Interested in GED or English as a Second Language (non-credit)</b> | Contact Developmental Education Office, Building 16, Salem Campus; a Chemeketa campus in Dallas, McMinnville, Stayton, or Woodburn; the Downtown Learning Center in Salem; or the Yamhill County Learning Center in McMinnville.   | <b>GED:</b> Contact Developmental Education Office, Building 16, Salem Campus.<br><b>ESL:</b> Contact ESL Office, Building 16, Salem Campus. | Student Record Form not required. Students under 18 must have a High School Release Form and be referred by the Downtown Learning Center.  | 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 campus in Dallas, McMinnville, Stayton or Woodburn (optional). During summer, contact Developmental Education Office, Building 16. | Contact Advising and Counseling Center, Building 2, Salem Campus.  | ■ File high school transcript with High School Completion Office, Building 50, Salem Campus.<br>■ File Student Record Form with Admissions Office, Building 22, Salem Campus.<br>■ Students under 18 must have a High School Release form and be referred by the Downtown Learning Center. | 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  
Construction Technology  
Dental Assisting  
Emergency Medical Technology  
Fire Suppression  
Health Services Management

(Health Information Technician,  
Claims Analyst/Medical Biller,  
Health Services Management,  
Medical Receptionist/Clerk,  
Medical Transcriptionist)  
Human Services

Instructional Assistant  
Medical Office Assistant  
Nursing (RN, LPN, nursing assistant,  
re-entry courses)  
Professional-Technical Teacher Preparation  
Visual Communications



●●●●●●●●

## Student's Check List

Before you register:

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

taken mathematics, reading, and writing 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 professional-technical 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 campus 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. Schedules are also available at the Advising and Counseling Center, Salem Campus, Building 2, at the Chemeketa campus in your community, or by calling (503) 399-5006

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.

3.2 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.

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

You will find a Student Record 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 campuses in Dallas, McMinnville, Stayton, and Woodburn.

### Placement tests

(399-5120)

If you are a new student and taking six or more credits, 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, 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 campuses 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 will introduce you to Chemeketa services. You will receive information about registering and selecting courses.

### 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 information, see *How to Enroll at Chemeketa* on Page 5. Each term the *Schedule of Classes* gives the specific registration dates and 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 a Student Schedule Change (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 form at the Registrar's Office or the Business 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 of 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

Construction Technology  
 Dental Assisting  
 Emergency Medical Technology  
 Fire Suppression  
 Health Services Management  
 (Health Information Technician, Medical  
 Transcriptionist, Health Services  
 Management, Claim Analyst/Medical  
 Biller, Medical Receptionist/Clerk)  
 Human Services  
 Medical Office Assistant  
 Nursing (Registered Nurse, Licensed  
 Practical Nurse, Nursing Assistant, and  
 re-entry courses)  
 Professional-Technical Teacher Preparation  
 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.

Many of Chemeketa's professional-technical programs plan to establish new entry requirements over the next few years. You may need to be assessed and may be required to take preparatory courses before you will be admitted to these programs. If you plan to enroll *after* fall term 1995, check with the program you plan to enter.

### **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.

If you need a copy of your transcript for your records or for advising, please order additional copies sent to your home address.

In general, Chemeketa accepts in transfer college-level credits earned at a regionally accred-

ited 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 Page 16.

Chemeketa also accepts some credits from the military and the Community College of the Air Force. Submit an official copy of your CCAF transcript to the Admissions Office from CCAF or submit 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**

**(399-5141; FAX, 399-2519)**

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 Admissions Office has special application materials and deadlines 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 within the past year, 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.

## Credit Class Tuition

| No. of Credit Hours | Oregon Students | Out-of-State Students | International Students |
|---------------------|-----------------|-----------------------|------------------------|
| 1                   | \$33            | \$120                 | \$140                  |
| 2                   | \$66            | \$240                 | \$280                  |
| 3                   | \$99            | \$360                 | \$420                  |
| 4                   | \$132           | \$480                 | \$560                  |
| 5                   | \$165           | \$600                 | \$700                  |
| 6                   | \$198           | \$720                 | \$840                  |
| 7                   | \$231           | \$840                 | \$980                  |
| 8                   | \$264           | \$960                 | \$1120                 |
| 9                   | \$297           | \$1080                | \$1260                 |
| 10                  | \$330           | \$1200                | \$1400                 |
| 11                  | \$363           | \$1320                | \$1540                 |
| 12                  | \$396           | \$1440                | \$1680                 |
| 13                  | \$429           | \$1560                | \$1820                 |
| 14                  | \$462           | \$1680                | \$1960                 |
| 15                  | \$495           | \$1800                | \$2100                 |
| 16                  | \$528           | \$1920                | \$2240                 |
| 17                  | \$561           | \$2040                | \$2380                 |
| 18                  | \$594           | \$2160                | \$2520                 |

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

## Money Matters

### Tuition

(399-5011)

Tuition and fees are due when you register. If your credit is in good standing, you may pay tuition in installments, with one-third of the amount due plus a \$20 contract fee to be paid at the time of registration.

### Credit courses

Use the chart on this page to calculate the cost of your credit tuition. Some classes charge fees in addition to tuition. Fees are noted in the course descriptions which begin on Page 105.

### 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

most non-credit English as a second language classes. There is a \$45 fee to take the GED test.

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.

### Tuition refund policy

If the college cancels a class, we will refund your tuition. Some financial aid students may be subject to a separate refund policy.

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 16.

If Chemeketa cancels a course because the enrollment is below a minimum number of students, we will 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 \$200 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 41 to 104.

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.

## Older Adult Tuition

(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. Some scholarships are available for those who may need tuition assistance.

## Student health and accident insurance

(399-5011)

Student insurance may be purchased directly from the insurance company. If you are enrolled for six or more credit hours, you may pick up insurance information at the Cashier's Office in Building 22. 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 F-1 international students to obtain health and accident insurance. You must purchase insurance at the time of registration. International students should contact the Admissions Office, 399-5006, for further information.

## Veterans' services

(399-5004)

If you are a veteran, contact the veterans' specialist 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. 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.



- Complete 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' specialist will advise you that you are on probation. If you do not maintain the GPA and/or credit hour requirements for two consecutive terms, a notice of unsatisfactory progress will be forwarded to the VA regional office.

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:



# 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><br><br>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 1995-96 will be \$2,340.</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 1995-96 will be \$150.</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 1995-96 will be \$840.</li> </ul>         | <ul style="list-style-type: none"> <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>  |
| <b>Loans</b><br><br>Federal Perkins Student Loan Program (FPSL)                    |  | <ul style="list-style-type: none"> <li>■ You may borrow up to \$3,000 in an academic year.</li> <li>■ The highest award at Chemeketa for 1995-96 will be \$1,500.</li> </ul>   | <ul style="list-style-type: none"> <li>■ You must complete a separate Perkins Loan application form.</li> <li>■ You do not have to pay any interest or principal while in school.</li> <li>■ You must begin payment six to nine months after you drop your enrollment to less than six credit hours.</li> <li>■ The current interest rate is 5 percent.</li> <li>■ You must repay Chemeketa.</li> <li>■ You must view an orientation video before funds are disbursed.</li> <li>■ Interest is paid by the federal government while you are enrolled in an approved program.</li> <li>■ You must attend an entrance and an exit interview.</li> <li>■ Contact the Financial Aid Office for information on repayment and deferments.</li> </ul> |

## Loans (Cont.)

**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 8.25 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.)

- School has the right to deny loan certification and/or limit amount borrowed.

- 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 9 percent.
- Lenders loan their own funds.
- Payment begins 60 days after the date funds are disbursed.

## Work

**Federal Work Study Program (FWS)**

- Amounts vary according to your financial need.
- Funds usually are no more than \$500 a term or \$1,500 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.
- Contact 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 1994-95 was \$5.10 an hour.

- No FAFSA is required.
- Apply at the Placement Resource Center in Building 17 on the Salem Campus.





## 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 Campuses**

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

#### **Chemeketa Dallas Campus**

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

#### **Chemeketa McMinnville Campus**

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

#### **Chemeketa Santiam (Stayton) Campus**

*11656 Sublimity Road, SE  
769-7738 or 399-5215*

#### **Chemeketa Woodburn Campus**

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



•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.

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 36 in the reading section of the college's placement test. If you score below 36, 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 campus 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 campus 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 to 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.

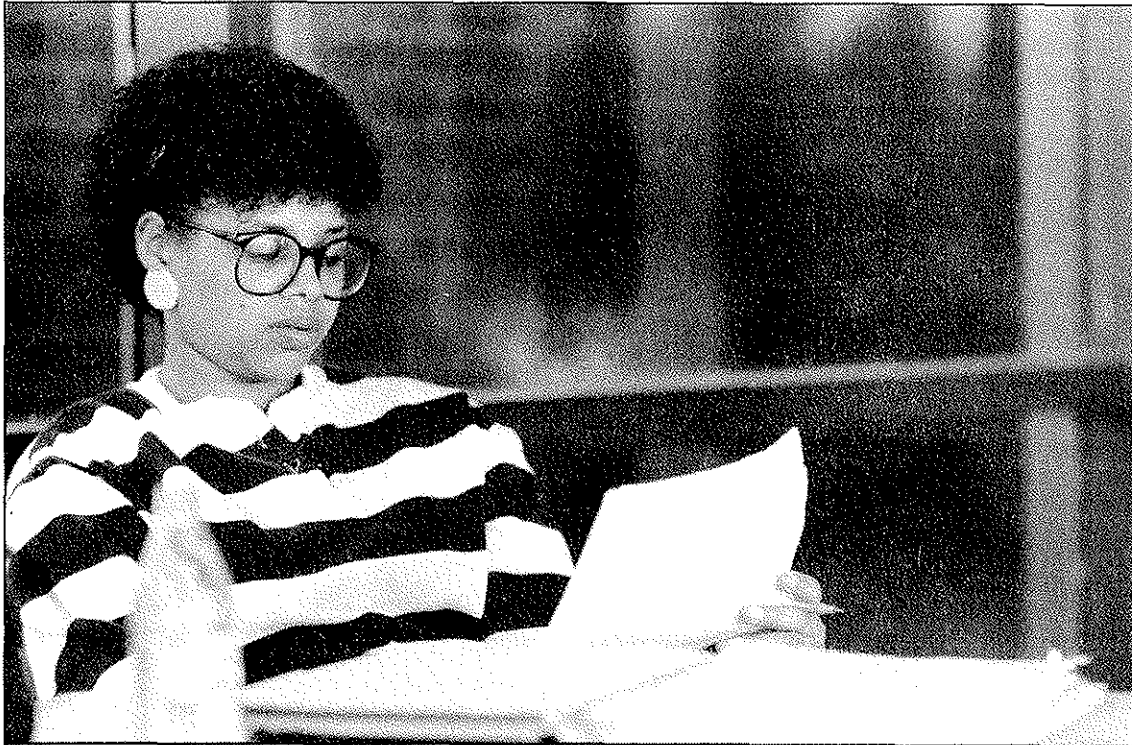
Recommended application dates for each term are posted in the Financial Aid Office and included with your FAFSA. If you apply after these dates, you may be eligible only for a Pell Grant and a Stafford Student Loan for the following term.

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**

Federal Pell Grant and Federal 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 Federal Perkins Student Loan, Federal Supplemental Educational Opportunity Grant, and Federal 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 Federal 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

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## 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 or 399-5192 (TDD).*

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) Federal Stafford Loan, 2) Federal Supplemental Loan for Students, 3) Federal "PLUS" Program, 4) Federal Perkins Student Loan, 5) Federal Pell Grant, 6) Federal 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 transfer credit evaluations, correspondence, curriculum deviations, and evaluation of progress toward graduation.

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.

You are required to keep the Registrar's Office informed of any change of address while you are a student at Chemeketa.

OAR 581-41-460 authorizes Chemeketa Community College to ask you to provide your Social Security number. The number will be used by the college for reporting, research, and record keeping. Your number will also be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon, the state Office of Community College Services, and the Oregon Community College Association. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research, and develop programs. This information helps the colleges support the progress



of students and their success in the workplace and other education programs.

OCCURS and the college may also match your Social Security number with records from the following systems:

- State and private universities, colleges, and vocational schools, to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education.
- The Shared Information System, which gathers information to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available.
- The Office of Professional-Technical Education Management Information System, to provide reports to the state and federal governments. The information is used to learn about education, training, and job market trends for planning, research, and program improvement. Funding for community colleges is based on this information.
- The American College Testing Services, if you take the ASSET placement test, for educational research purposes.

Your number will be used only for the purposes listed above. State and federal law protects the privacy of your records.

### 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. However, you may request no information be released by completing a Non-Disclosure Form at the Admissions Office. You may go to the Registrar's Office to inspect Chemeketa's student records policy and procedure, which are in compliance with the Federal Family 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 Notice of Incomplete Status in a Course Form, 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.

### Academic Progress/Review Program (399-5120)

Chemeketa wants to help students reach their academic goals. To accomplish this, the college has initiated an Academic Progress/Review Program which provides for intervention with students at certain points throughout their enrollment at Chemeketa. These intervention points are determined by either grade point average and/or course completion rate. Listed below are the criteria used for determining intervention by the Academic Progress/Review Program:

### Academic Warning Status

- A first term student taking six or more credit hours who falls below a 2.0 GPA, or
- A continuing student who falls below a 2.0 cumulative GPA with more than 36 credit hours of coursework.

### Academic Probation Status

- A student who falls below a 2.0 GPA for a second consecutive term, or
- A student who falls below a 2.0 cumulative GPA, with 36 credit hours or more, for a second consecutive term.

### Academic Suspension Status

- A student who was, during the preceding enrolled term, on academic probation and, during the current term, earns below a 2.0 GPA. The student will be suspended from further enrollment at Chemeketa until reinstated.

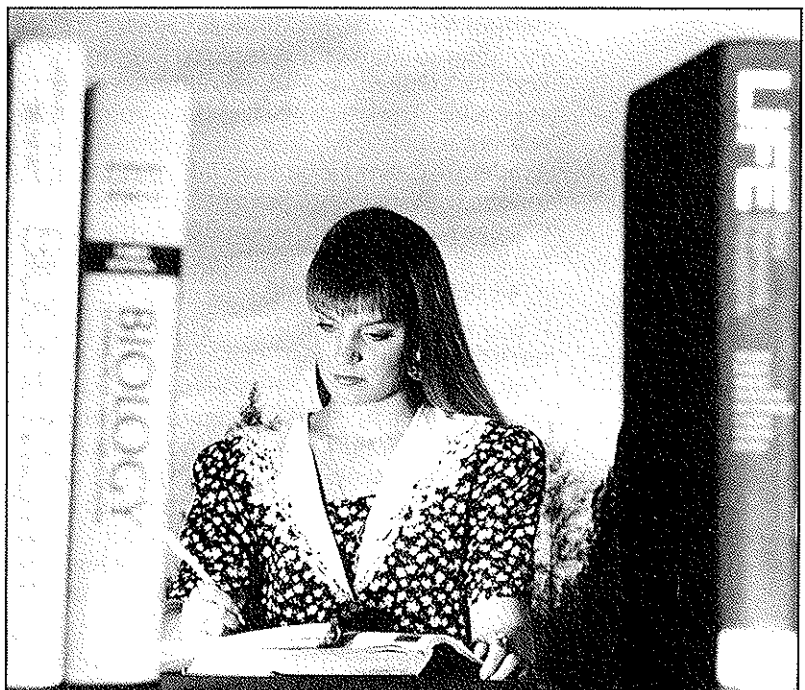
### Academic Reinstatement

- Once suspended, a student will not be allowed to register for credit classes for a period of one academic year. After the one-year period, a student may file an appeal with the Academic Review Committee for reinstatement.

### 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





## Student Rights and Responsibilities

*Chemeketa's Board of Education has approved a document outlining the rights and responsibilities of students. See pages 166 and 167.*



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 before you register. 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 on Page 8.

### 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 campuses in Dallas, McMinnville, Stayton, or Woodburn. Submit the completed form to the Registrar's Office or one of our campuses 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

(399-5210)

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 Advising and Counseling Center about what courses and scores are accepted at Chemeketa.

### College Level Examination Program (CLEP)

(399-5120)

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

### Credit by examination

(399-5120)

Another way to earn credit for some courses is to demonstrate 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 non-refundable fee of \$25 for each exam. Grades are recorded on the student's transcript for successfully-completed exams once the student registers and pays for the course. The availability of challenge exams may be limited during summer term.

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 the appropriate instructor 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 the instructor and the program coordinator 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. Students may be required to attend some class meetings on the Salem Campus.

**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 campuses 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 campuses. Two-way communication allows students at the campuses 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 computer, modem, and telecommunications software to send your coursework to campus and to communicate with your instructor and classmates.

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.

## 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. A current student ID card is required to use these services.

## 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 16.

## Learning assistance and skills development classes

(399-5162)

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, study skills, vocabulary building and spelling. 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 16 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 16, 399-3902.

**Volunteer tutoring services**—Building 16, 399-2557.

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





## 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.*



## 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 29.

### Services for students with disabilities (399-5192 voice/TDD) and Services for students who are deaf and hard of hearing (399-5022 voice or 399-5049 TDD)

The disabilities specialist 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 campuses are designed to provide access for students with physical disabilities. Parking spaces are reserved for persons with handicap 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 disabilities specialist is available to help you assess your needs, coordinate access to facilities and processes, and plan academic adjustments that will make classes accessible to you.

Chemeketa offers additional services if you are deaf or hard of hearing. These include counseling, interpreting, and special classes in language development and basic reading.

If you need an alternative format for this publication, call the disabilities specialist at 399-5192 (voice/TDD).

### Writing Center (399-7179)

If you need writing assistance, help is available in the college Writing Center. You may consult with writing instructors or make use of computers programmed with writing-assistance software. Watch the quarterly *Schedule of Classes* for a listing of free writing workshops offered by the center. For more information or

to make an appointment, call or stop by the Writing Center in Building 35, Room 101.



## Student Services

### Bookstore (399-5131)

You may purchase books and supplies at the college Bookstore in Building 1 on the Salem Campus and at the McMinnville Center. Textbooks also are available at the beginning of each term at our campuses 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.

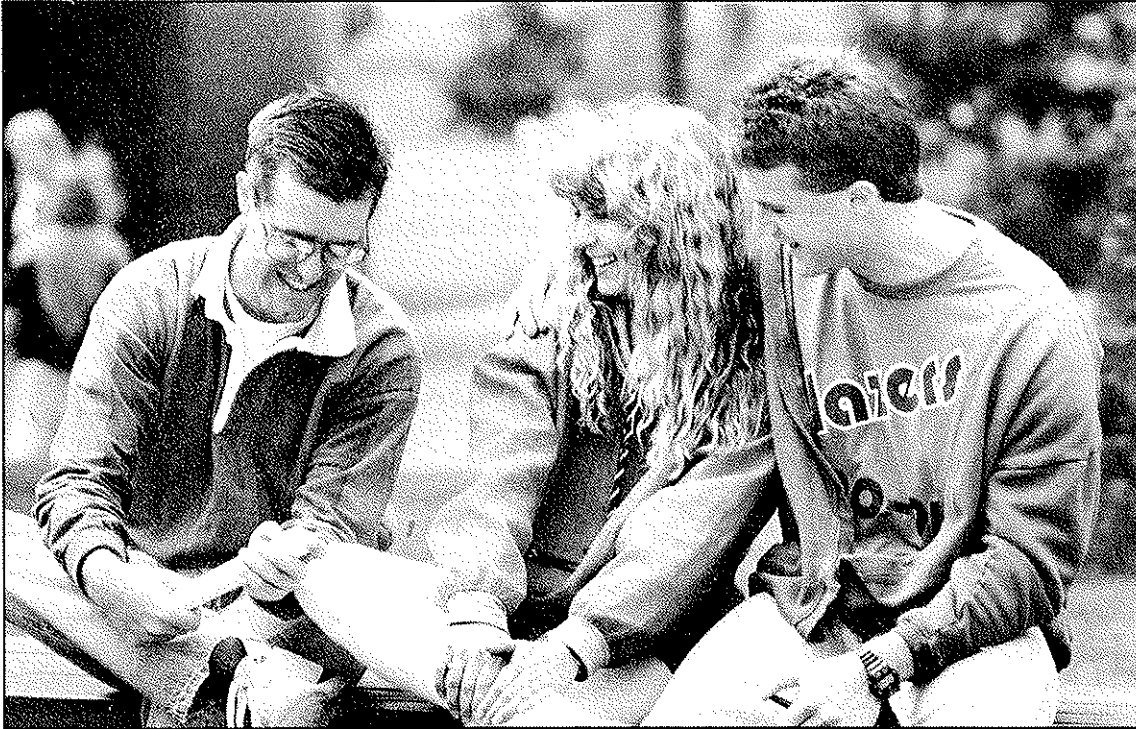
### Student identification cards (399-5116)

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 in the Student Life Office in Building 3, Room 101, Mondays through Thursdays from 8 a.m. to 7 p.m., and Fridays from 8 a.m. to 4 p.m. ID cards will not be issued during final exam weeks or between terms. 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 or campus health facilities, you must rely upon



your personal physician, dentist, or clinic to meet other medical needs.

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

If you are a Chemeketa student who parks a motor vehicle on the Salem Campus during the day, the college requires you to have a parking permit. Pick up your permit 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. There is no charge for the parking permit, which is valid for the academic year. 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 campus safety is contained in an annual report available from the Public Safety Booth.

### **Smoking on the Salem Campus (399-5023)**

Chemeketa's Salem Campus has been designated as a no-smoking area with the exception of six specific outdoor locations. You may smoke at the north end of Building 28, the southeast covered area of Building 3, the covered area of Building 4 north of the graphics storage room, the northwest covered area of Building 6, the covered area of Building 49

south of the patio, and the covered area of Building 50 near the high school completion rooms. These areas are posted as smoking areas.

### **Where to eat**

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

**Slam Dunk Deli**, Building 7, 399-8895—fat-free and low-fat sandwiches, soups, and salads.

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

**Blue Moon Cafe**, MaPS Building, 399-8005—50s dining including burgers, salads, blue plate specials, and fountain items.

**Espresso Cart**, Building 2—Espresso, gourmet coffees, and pastries.

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 distributes the *Apartment Guide*, which lists apartments in the Salem area. Also, read the classified section of local newspapers for housing vacancies.



## The meaning of Chemeketa

*The name Chemeketa is a Native American word meaning "place of peace." Long before 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.*



### Child care

Chemeketa offers two child care programs on the Salem Campus.

**Child Development Center, Building 39, 399-5107**—As a training center for students enrolled in the Early Childhood Education program, the center offers full- or part-time care for approximately 35 children ages two-and-a-half to six years old. Applications are accepted at any time, but we advise you to apply early. Contact the center for applications and fee information.

**Chemeketa Community Child Care Center, Building 50, 399-5174**—This facility 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. Applications are accepted at any time for the current year. Contact the center for applications, fee information, and parent tours.

The Financial Aid Office, Building 22, Room 118, has a list of other child-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

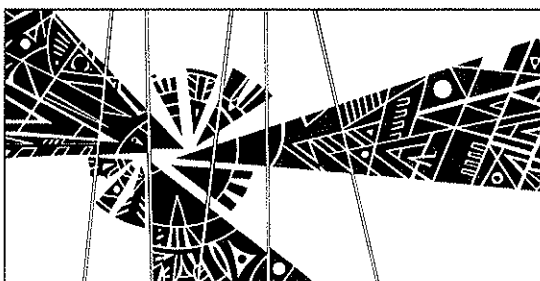
**(399-5131)**

Cherriot bus passes are available for purchase at the Bookstore in Building 1. Cherriot bus schedules are available in the lobby of Building 2.

### Ride sharing

**(399-5116)**

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 Alcohol and Other Drugs Committee 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 campus 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 issues. For assistance, drop in during open hours. Call the Advising and Counseling Center for current hours of operation. Diagnostic testing and assessment are available by appointment.

#### Career planning workshops

Career planning workshops are conducted by counseling staff for persons trying to choose 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. There is a \$10 fee for each workshop. 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 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 information about occupations, and suggest appropriate educational and training institutions.

### **Academic advising**

Chemeketa offers academic advising for all students. If you are enrolling in a professional-technical 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 Advising and Counseling Center will assist in advisor assignments if a change is desired.

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 campuses in Dallas, McMinnville, Stayton, or Woodburn.

### **Placement Resource Center (399-7789)**

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 write resumes and cover letters, prepare for interviews, and develop techniques for contacting employers.

### **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.

### **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 advertisements 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 resource materials including employer contact and job search information 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 campuses in Dallas, McMinnville, Stayton, and Woodburn and the Salem Public Library.

### **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 participate in work-based learning in your career field through our Cooperative Work Experience (CWE) program. This program allows you to combine your classroom studies with work-related experiences.



## 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** - A required, non-specific 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.



In this program, you work with a CWE coordinator to find a qualified training site, 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. 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.

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. CWE may also improve your ability to make the transition from school to work following completion of your program.

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

### 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.

The following services are available through the TED Center:

**Work and family seminars**—These seminars focus on various issues related to balancing work and family and are intended to help employees be productive on the job while maintaining a caring family relationship. A seminar is also available to help supervisors assist employees in balancing the demands of work and family. Personal consulting on balancing work and family responsibilities is available by contacting the TED Center.

**Small Business Development**—Classes and free counseling are offered for those who wish

to start a business and for those currently operating a small business.

**Small Business Management Program**—This 10-month program is for business owners and operators and includes counseling at the business site and evening classes on business topics.

**American Management Association Extension Institute**—Courses developed to meet the needs of working professionals who want to update their business and management skills.

**Leadership Strategies for High Performance**—This skill-building program consists of a series of sessions designed to prepare today's leaders to manage, empower, and influence employees to do a better job.

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

**Computer Training**—The TED Center offers a variety of hands-on computer classes throughout the year. These workshops cover a variety of topics, including computer fundamentals and MS/DOS and MS/Windows operating systems, as well as an assortment of software for database, word processing, spreadsheet, and finance and accounting applications. A mobile Macintosh and microcomputer lab is available for hardware and software workshops. Each lab is equipped with 12 computers plus additional equipment and software for group training.

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

Twelve Oregon community colleges, including Chemeketa, comprise 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.

Check the *Schedule of Classes* for OATC training opportunities.

### 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 of-

office administration and technology, sewing as a business, nursing assistant, medication aide, medical claims analyst, medical receptionist/clerk, construction, family day care provider, and custodian. Offerings include credit and non-credit classes which range in length from one week to four terms. 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 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 credit short-term training options may apply to the Associate of Applied Science, the Associate of General Studies, and the Oregon Associate of Arts transfer degrees. Check with the Advising and Counseling Center to determine if your coursework will apply.

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)**

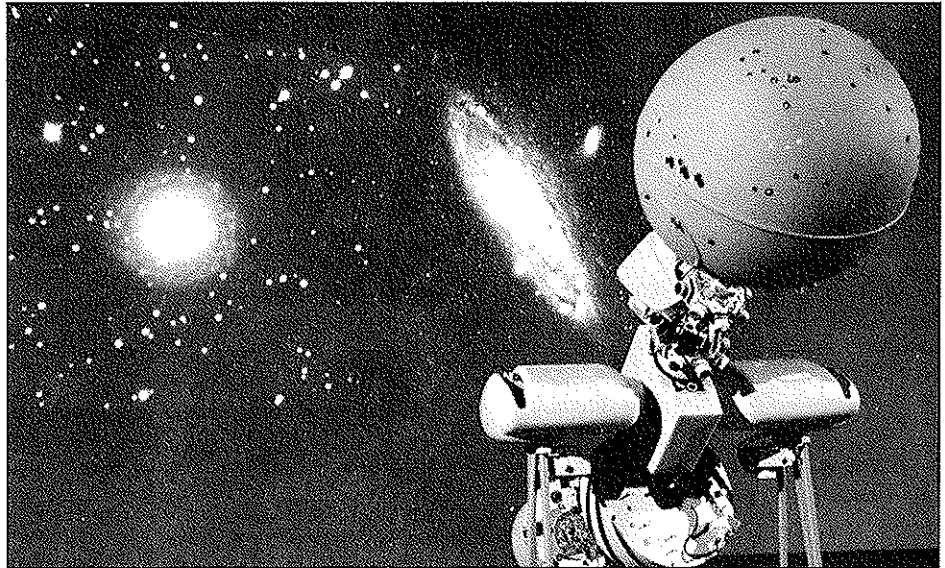
Chemeketa's art gallery is in Building 3, Room 122 on the Salem Campus. It presents juried exhibits of professional artists from around the country. Several shows a year, featuring a wide variety of media, are open for viewing by students, staff, and the public.

### **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. 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 18.

## **Student Life**

### **Special programs and activities (399-5116)**

At Chemeketa, we believe that activities outside the classroom involve students more fully in their education. Our student activities program is designed to respond to your recreational, service, 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.

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## Chemeketa Campuses

Extended Learning 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 campuses for information:

**Chemeketa Dallas Campus**  
182 SW Academy Street  
623-5567 or 399-5206

**Chemeketa McMinnville Campus**  
500 N Hill Road  
472-9482 or 399-5219

**Chemeketa Stayton (Stayton) Campus**  
11656 Sublimity Road, SE  
769-7738 or 399-5215

**Chemeketa Woodburn Campus**  
120 E Lincoln Street  
981-8820 or 399-5207

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Activities vary throughout the year, depending upon student interests. These activities and opportunities are planned for you. For more information, contact the Student Life Office in Building 3, Room 101 on the Salem Campus. There are numerous opportunities for students to participate in student government.

### Student leadership opportunities

**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 nine appointed student representatives. The Executive Council consists of five elected and appointed officers: executive for college representation, executive for senate, executive for finance, executive for campus clubs and organizations, and executive for campus issues.

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.

**Programming Board (399-5167)**

The Programming Board is a diverse student team that works together to plan campus activities including special events and noontime programs as well as sports, recreational, multicultural, and educational activities.

As members of the Programming Board, students can learn leadership and programming skills while promoting a variety of activities for the enjoyment of students, staff, and the community. Students are selected through an application and interview process and are paid a stipend at the end of each term.

**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**—A select humanities faculty group solicits student literary contributions throughout the year. Works are reviewed

and selected entries are published in *Visions*, a literary supplement to *The Chemeketa Courier*.

**Cultural Forum (315-4263)**

The Cultural Forum's goal is to increase the college community's cultural awareness, to support the many cultures on campus, and to increase the development of intercultural communication skills. The forum is staffed by a diverse student team. This team researches and plans projects and events with the help of Chemeketa staff and students.

**Chemeketa Internship Program (ChIPs) (399-3995)**

This internship program can give you the opportunity to work as a student intern in a variety of college settings. Students are selected on the basis of their interests, abilities, and experiences working with people. ChIPs students conduct campus tours and provide assistance to prospective students through personal telephone contacts and correspondence. They are also involved in recruitment, promotional and special events, high school visitations, and working with international and multi-cultural students.

**Mentor Program (399-5116)**

The Mentor Program gives Chemeketa students an opportunity to take part in a community service project. Student mentors are trained to assist middle school students, one-on-one, in developing positive self-esteem and encouraging them to continue their education. Mentors attend a seminar course for academic credit which will combine large group study/training with small group consultations. Each mentor meets weekly at the middle school to assist in class assignments and other group or one-to-one situations.

**Peer Assistants (399-5120)**

Peer Assistants are experienced Chemeketa students who are trained to help others. They know about campus and community resources and assist fellow students with personal, social, and academic concerns.

Students are selected for this program through an application and interview process conducted by Advising and Counseling. Peer Assistants attend a three-credit training course and are then available to assist others while earning Cooperative Work Experience credit.

**Student clubs and organizations (399-5117)**

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

American Society of Certified Engineering Technicians (ASCET)

Cheerleading Club  
 Chess Club  
 Christian Fellowship Club  
 Data Processing Management Association (DPMA)  
 Deaf and Hearing Impaired Club  
 Fire Protection Club  
 Forestry Club  
 German Club  
 Health Occupation Students of America (HOSA)  
 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  
 Outdoor Club  
 Pacific Islanders Club  
 Phi Theta Kappa  
 Political Action Club  
 Ski Club  
 Social Club  
 Society of Hosteurs (hospitality management)  
 Soccer Club  
 Society of Manufacturing Engineers (SME)  
 Student Nurses Organization (SNO)  
 Triangle Society

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

### College committees

(399-5117)

Student representatives serve on campus-wide committees with Chemeketa staff. The ASCCC executive for college representation appoints student representatives to the following committees:

- Academic Standards
- Alcohol and Other Drugs
- Curriculum
- Multi-cultural
- Risk Management
- Student Success

### Community Colleges of Oregon Student Association and Commissions (CCOSAC)

(399-5117)

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 300,000 community college students in Oregon.

### 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 Dallas, McMinnville, Stayton, and Woodburn campuses; 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 campuses also provide Adult Basic Education, General Educational Development (GED) test preparation, and High School Completion programs. Each campus has a mathematics lab for individualized, self-paced instruction and an office occupations program which includes training on computers and word processors.

### Outreach campus services

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

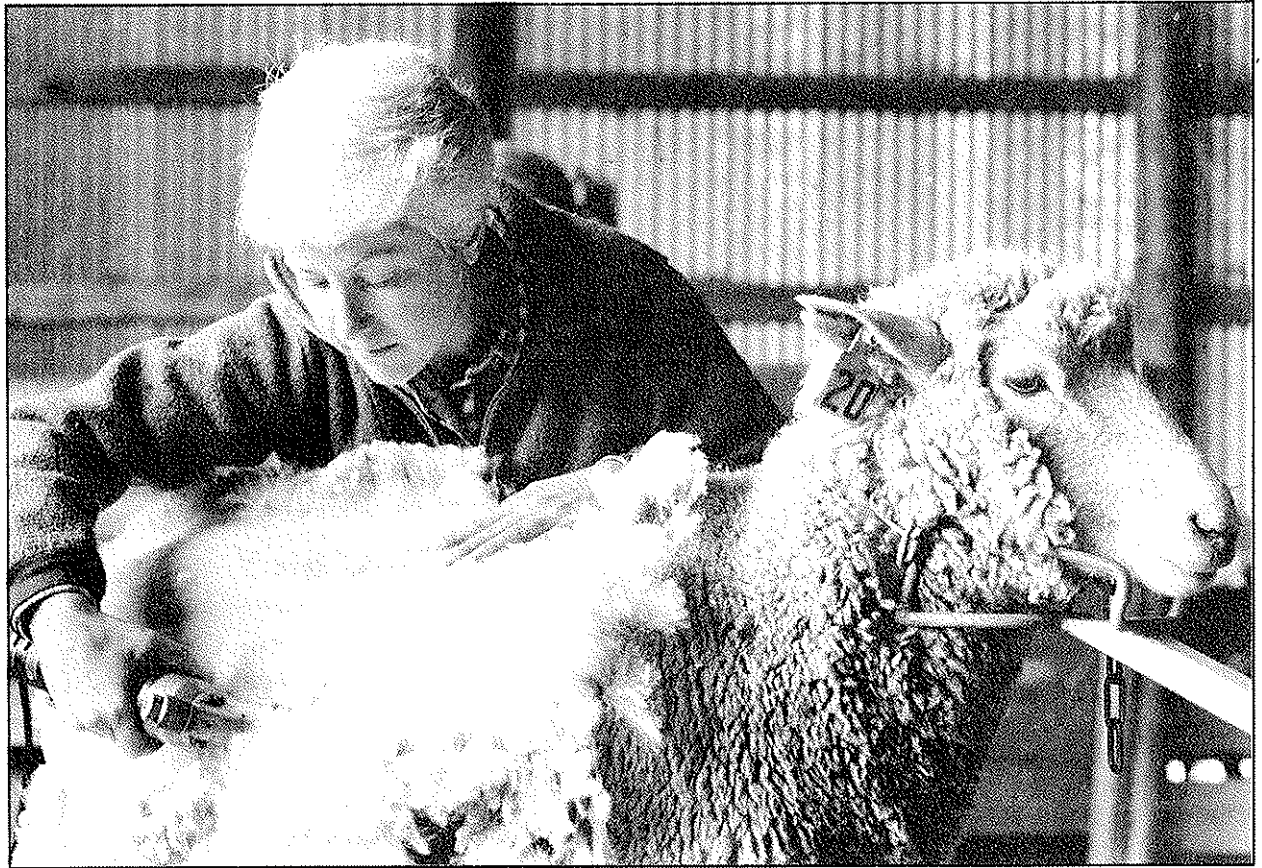
- academic advising, program planning, and course selection guidance.
- career counseling.
- information on financial aid and veterans' benefits.
- placement and vocational interest testing.

### College for Older Adults

(399-5139)

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 computers, writing, and arts and crafts.

### **Agriculture classes**

**(399-5139)**

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 399-5066)**

Chemeketa's three-year Farm Business Management program trains farmers in basic record-keeping and financial management. For more information, see Page 70.

### **Family Resource Center/Program**

**(399-3915)**

The Family Resource Center is located in Building 50 on the Salem Campus. The Center operates the Chemeketa Community Child Care Center and provides parent education programs and information to the community. Anyone is welcome to drop in and visit. A variety of courses and workshops related to the needs and concerns of families and family members are held both on and off campus in Salem and at our campuses in Dallas, McMinnville, Stayton and Woodburn. Topics range from human relations and personal growth to parenting and family studies.

### **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.



**DEGREES, DIPLOMAS, CERTIFICATES**

**AND TRANSFER INFORMATION**



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 Oregon Associate of Arts transfer degree 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 an Oregon Associate of Arts transfer degree, an Associate of Applied Science degree, or an Associate of General Studies degree. All are nationally-recognized degrees.

### Oregon Associate of Arts transfer degree

The Oregon Associate of Arts transfer 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 the Associate of Arts degree while earning college transfer credits. It is easy to earn the 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 Pages 42 and 43 for a complete list of our transfer programs. Information and curriculum outlines of these programs begin on Page 44.

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 Oregon Associate of Arts transfer degree, you must meet the requirements listed on Page 30.

### 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 Pages 42 and 43 for a complete list of A.A.S. degree programs. Information and curriculum outlines of these programs begin on Page 44 along with college transfer curricula.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on Page 31.

### Associate of General Studies degree

The Associate of General Studies degree addresses the needs of students who are not seeking an Oregon Associate of Arts transfer degree or the specific program requirements of an Associate of Applied Science degree. This degree allows you to combine a broad core of basic courses with a program of study that may be tailored to your academic or professional goals.

You may wish to use this degree to enhance your employment, to fulfill the requirements of a specific four-year college program, or to meet the special expectations of agency-sponsored students.

To qualify for the Associate of General Studies degree, you must meet the requirements listed on Page 32.

### Second degree

Effective fall term 1996, to earn a second Associate degree, you must complete 12 credits in addition to those you have completed for the first degree.

### 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's Office. 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 this page.

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 campuses in Dallas, McMinnville, Stayton, and Woodburn.



## 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 Pages 42 and 43 for a complete list of Certificate of Completion programs. Information and curriculum outlines of these programs begin on Page 44 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 campuses 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 campuses 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 you are 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 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 campuses 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. Special tuition rates may apply.

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

# Oregon Associate of Arts Transfer Degree Requirements

| Requirements  | Credit hrs. | Courses which satisfy requirements   |
|---|-------------|--|
| Complete a minimum of 93 credit hours. These must include the following:  |             |  |
| <b>General Education Requirements</b>   |             |  |
| <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, SP118, 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). A maximum of 12 credits of PE185 may be applied toward an A.A. degree.   |
| <i>Computer Studies</i>   | 3           | CIS120, CS101, CS131, CS161, or other computer information science or computer science courses.  |
| <b>Distribution Requirements</b><br>(Courses used to meet the Distribution Requirements should be at least three credits each.)   |             |  |
| <i>Arts and Letters</i><br>A minimum of 12 credits, chosen from at least two disciplines, with no more than nine credits from one discipline. (All foreign languages are considered one discipline.) Each course must be worth at least three credits.<br><b>Note:</b> The course taken to meet the oral communication/rhetoric requirement above may not be used to meet this requirement.   | 12          | ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 197, 204, 205, 206, 210, 221, 222, 223, 230, 233, 234, 244, 245, 246, 254, 260, 261, 270, 271, 272, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255, 260, 261, 262, 263; FA251, 255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM100; JPN201, 202, 203; J216, 217, 224, 225, 226; MS251, 252, 253, 259; MUS201, 202, 203; PHL201, 202, 203, 204, 205; R201, 202, 203; SP105, 111, 112, 113, 114, 115, 130, 230; SPAN201, 202, 203; TA110, 121, 122, 123, 261, 285C; WR241, 242, 243, 248C, 270E  |
| <i>Social Sciences</i><br>A minimum of 15 credits, chosen from at least two disciplines, with no more than nine credits from one discipline. Each course must be worth at least three credits.  | 15          | ANTH101, 102, 103, 207, 208, 209; EC200, 201, 202, 203; GEOG105, 106, 107, 201, 202; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY100, 101, 102, 114, 119, 201, 202, 203, 206, 211, 219, 237, 239, 246; SOC204, 205, 206, 210, 221, 227, 291, 292; SSC150, 151, 206; WS101, 102, 103  |
| <i>Sciences, Math, Computer Science</i><br>Minimum of 15 credits (including at least 12 credits in biological or physical sciences with laboratories) chosen from at least two disciplines. Each course must be at least three credits.<br><b>Note:</b> The course taken to meet the math requirement above may not be used to meet this requirement. The course used to meet the computer studies requirement above may also be used to meet the three hours of additional Sciences/Math/Computer Science. | 15          | Choose 12 credits from: BI101, 102, 103, 103A, 131, 132, 133, 200, 231, 232, 233, 234; BOT201, 202, 203; CH100, 104, 105, 106, 111, 115, 116, 117, 121, 122, 123, 150, 201, 202, 203, 221, 222, 223, 241, 242, 243; G142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH111, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203.<br>Additional credits to bring total to 15 credits may be chosen from the list above or from the following: CIS120, 121, 122; CS101, 113, 125A1, 125A2, 125A3, 125DB, 125E, 125FX, 125P, 125Q, 125SS, 131, 133A, 133C, 133E, 133F, 133R, 133U, 133VB, 135DB, 135FX, 135SS, 140A, 140B, 144, 145, 161, 162, 171, 233A, 233B, 233C, 233I, 233M, 233U, 234C, 234L, 236, 237, 240, 244, 246, 252B, 260, 270, 275, 278, 279, 285; G160; GS120, MTH105, 111, 112, 211, 212, 213, 231, 232, 241, 251, 252, 253, 254, 255, 256; OC133; PH121 |
| <b>Electives</b><br>Additional courses to bring the total number of credits to 93.  |             | All courses numbered 100 and above except ENG116. A maximum of 12 credit hours in courses numbered 050-099 may be included except the following: COM051, 052, 053; MTH051 through 095; OA084, 085; RD090. A maximum of 12 credit hours of cooperative work experiences be applied toward an Association of Arts degree.  |
| 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.   |             |  |

# 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><br/>           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:<br><p><i>Social Science</i></p> <p><i>Humanities/Fine Arts</i></p> <p><i>Science/Applied Science</i></p> <p><i>Communications</i></p>  | <p>Anthropology, Economics, Geography, History, Human Development/Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies</p> <p>Art, English, Film Art, Foreign Language, American Sign Language, Humanities, Multidisciplinary Studies, Music, Philosophy, Religion, Theater Arts</p> <p>Approved program-related instruction may satisfy this requirement, or courses in Biology, Botany, Chemistry, Foods and Nutrition, General Science, Geology, Oceanography, Physics, Physical Science, Zoology</p> <p>Communication Skills, English as a Non-native Language, Journalism, Speech, Writing, Reading, plus these specific classes: RD115, RD116, and HD112</p> |
| Three additional credits from any of these areas:<br><p><i>Communications</i></p> <p><i>Health Education</i></p> <p><i>Humanities/Fine Arts</i></p> <p><i>Math</i></p> <p><i>Physical Education</i></p> <p><i>Science</i></p> <p><i>Social Science</i></p>  |   |
| 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, unless otherwise indicated, apply toward the degree.   |   |
| Programs requiring grade C or better in all courses (as specified in the Programs of Study section of this catalog) will supercede the above wording.   |   |

- 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.



# Associate of General Studies Degree Requirements

| Requirements   | Credit hrs. | Courses which satisfy requirements   |
|--|-------------|--|
| Complete a minimum of 90 credit hours. These must include the following:                                 |             |  |
| <i>Writing</i> (with grade "C" or better)  | 6           | WR121 and one additional course from WR122, 123, 227, 241, 242, 243 or BA214   |
| <i>Math</i> (with grade "C" or better)   | 4           | MTH095 or above  |
| <i>Speech</i> (with grade "C" or better)   | 3           | SP111 or above   |
| <i>Computer Studies</i>  | 3           | CIS120, CS101, or other computer science courses or DRF072; ELT091; GE102; OA200, 201; VC051A, 051B, 061   |
| <i>*Physical Education or Health</i>   | 3           | Any three-credit health course with an HE prefix; HPE295 (three credits); or three terms of PE180, PE185, or PE190 classes (one credit each)   |
| <i>Arts and Letters/Humanities</i>   | 9           | Choose courses from Art, American Sign Language, English, Film Art, French, German, Humanities, Journalism, Japanese, Music Performance, Music, Philosophy, Religion, Speech, Spanish, Theater Arts, Writing |
| <i>Social Science</i><br>(Courses must be chosen from at least two disciplines.)                         | 12          | Choose courses from Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, Women's Studies   |
| <i>Science</i><br>(Courses must include a laboratory.)   | 8           | Choose courses from Biology, Botany, Chemistry, Geology, General Science, Physics, Zoology   |
| <i>Electives:</i><br>Additional courses to bring the total number of credits to 90.                      |             | A maximum of 36 credit hours in professional-technical courses numbered 050-099 may be applied toward the 90 credit hours required for the degree. All other courses must be numbered 100 or above.          |
| 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.  |             |  |

**Notes:** \*1. A maximum of 12 credit hours of physical education may be applied toward the degree.

2. A maximum of 12 credit hours of cooperative work experience may be applied toward the degree.

## 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 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 campuses 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.

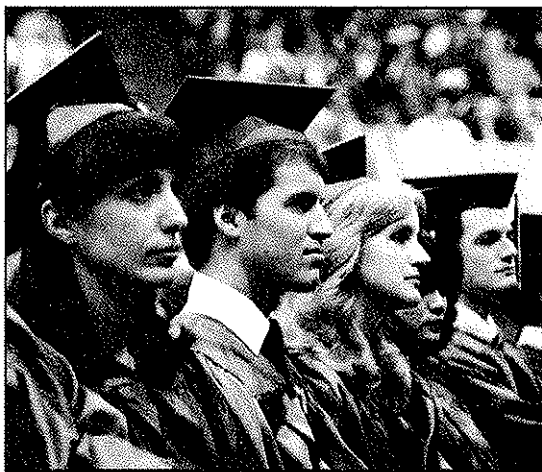
Chemeketa's college transfer programs are adapted from curriculum requirements listed in the most recent catalogs of Oregon's public four-year colleges and universities. The Advising and Counseling Center in Building 2 on the Salem Campus and academic advisors have the catalogs. You may also meet with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

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 Pages 42 and 43 for a list of our college transfer programs. Information and curriculum outlines for these programs begin on Page 44.

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><br>(Choose courses from at least two different prefixes other than your major.)      | Minimum 15 hours | ART101, 204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255, 260, 261, 262, 263; FA255, 256, 257; HUM100; MS251, 252, 253; MUS201, 202, 203; PHL201, 202, 203; R199; SP115; TA110   |
| <b>Natural Science</b><br>(Choose courses from at least two different prefixes other than your major.) | Minimum 15 hours | ANTH101; BI101, 102, 103, 131, 132, 133, 200; BOT201, 202, 203; CH100, 104, 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; PH111, 121, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY211, 219; Z00201, 202, 203 |
| <b>Social Science</b><br>(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><br>(Choose courses outside of your major.)                           | Minimum 15 hours |   |
| <b>Artistic Creation</b><br>(Sub-Area 1)   | 3 to 12 hours    | ART115, 116, 117, 131, 154, 155, 156, 221, 223, 244, 254, 260, 261, 270, 271, 281, 284, 291, 292, 293; MUP100, 101, 174; MUS197, 199; TA121, 122, 123, 261; WR199A, 241, 242, 243   |
| <b>Languages and Logic</b><br>(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, 243; NOR101, 102, 103; PHL204, RUS101, 102, 103; SP111, 112, 113, 114, 115, 118A, 118B, 118C, 130; 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.

| Requirements  | Credit hours               | Chemeketa courses which satisfy requirements  |
|---|----------------------------|---|
| <p><b>Communication</b></p> <p>Speech</p> <p>English Composition</p> <p>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.</p> | <p>3</p> <p>6</p> <p>9</p> | <p>SP111</p> <p>WR121 and 122</p> <p>WR123, 227; BA214; SP113; no equivalent courses for WR230, 231, 322, 323, 327</p>  |
| <p><b>Business</b></p> <p>Nine credits of business and industrial management.</p>   | 9                          | BA200 courses that are appropriate to the projected major at OIT  |
| <p><b>Humanities</b></p> <p>Nine credits selected by student or specified by a major department.</p>  | 9                          | ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 197, 198, 199, 204, 205, 206, 210, 221, 222, 223, 230, 232, 233, 234, 244, 245, 246, 254, 260, 261, 270, 271, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293, 299; ENG104, 105, 106, 107, 108, 109, 116, 201, 202, 203, 204, 205, 206, 253, 254, 255, 260, 261, 262, 263; FA251, 255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM100, 199A; JPN201, 202, 203; MUP101, 105, 174; MUS134, 197, 199, 201, 202, 203; PHL201, 202, 203, 204, 205; SPAN201, 202, 203; TA110, 121, 122, 123, 285 |
| <p><b>Social Sciences</b></p> <p>Twelve credits selected by student or specified by a major department.</p>   | 12                         | ANTH101, 102, 103, 207, 208, 209; CJ101, 110, 131, 200, 206, 220, 226; EC200, 201, 202, 203; GEOG105, 106, 107, 201, 202; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS151, 201, 202, 203, 205; PSY100, 101, 201, 202, 203, 206, 211, 219, 237, 239, 246; SOC198, 204, 205, 206, 210, 221, 227, 291, 292; SSC150, 206; WS101, 102, 103  |
| <p><b>Technology</b></p> <p>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.</p>   | 12                         | ENGR211, 212, 213. Select computer course from CIS120, 121, 122; CS101, 125A1, 125A2, 125A3, 125FX, 125P, 125Q, 131, 133A, 133C, 133E, 133F, 133U, 133VB, 140A, 140B, 140C, 140M, 140U, 144, 171, 199B, 199D, 233I, 233M, 233U, 234C, 234L, 235, 240, 244, 246, 260, 279, 285   |
| <p><b>Science/Mathematics</b></p> <p>College Algebra</p> <p>Twelve additional credits selected by student or specified by a major department from biological sciences, mathematics, or physical science.</p>  | <p>4</p> <p>12</p>         | <p>MTH111</p> <p>BI101, 102, 103, 103A, 131, 132, 133, 200, 231, 232, 233, 234; BOT201, 202, 203; CH100, 104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; G142, 143, 144, 160A, 201, 202, 203; GS104, 105, 106, 107; HE268; MTH105, 112, 231, 243, 251, 252, 253, 254, 255, 256; OC133; PH121, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203</p>   |

- 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 transfer to OIT. Some sequence courses require a "C" grade or better in a prerequisite course in order to continue in the sequence.
  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<br>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<br>Including lab  | 4            | BI101, 102, 103, 200, 234; BOT201, 202, 203; ZOO201, 202, 203   |
| One additional Physical Science<br>or Biological Science course  | 4 to 5       | Any courses listed for Physical or Biological Science above.  |
| Western Culture  | 3            | ART101, 204, 205, 206; ENG107, 108, 109, 201, 202, 203, 204, 205, 206, 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; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 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   |
| Difference, Power, and Discrimination  |              | Must be taken at OSU.   |
| Two additional courses from two of these areas:<br>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. No more than two courses from the same department may be used to fulfill the Baccalaureate Core Curriculum requirements.
  3. In general, only courses with letter prefixes and numbers above 100 are accepted at OSU.
  4. 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.
  5. Departments, schools, or colleges at OSU may restrict the courses used by their major students to satisfy each general educational component.
  6. OSU will accept "D" grades. Some departments, schools, or colleges may not accept "D's" in required courses.
  7. Courses from the major department may not be used to fulfill the Baccalaureate Core Curriculum requirements.
  8. 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.
  9. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.

| <b>Requirements</b>   | <b>Credit hours</b> | <b>Chemeketa courses which satisfy requirements</b>   |
|---|---------------------|---|
| <b>Freshman Inquiry</b><br>(Three 5-credit courses)   | 15                  | Complete 45 credit hours from courses listed for Oregon Associate of Arts transfer degree. Courses should include writing, speech, and computer science. It is also important to learn appropriate information technology resources of the library. |
| Electives   | 30                  |   |
| <b>Sophomore Level</b><br>(Three 4-credit courses selected from different interdisciplinary programs or general education clusters) | 12                  | Complete 45 credit hours from courses listed for the Oregon Associate of Arts transfer degree and courses required for major. Students planning to attend Chemeketa for two years should complete the Oregon Associate of Arts transfer degree.     |
| Electives   | 33                  |   |

- 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 100 and higher are accepted at PSU.
  3. PSU accepts credit in certain professional/technical courses when these are equivalent or parallel to PSU courses.
  4. Students must have achieved a 2.00 cumulative GPA with 30 transferable credit hours to be considered as a resident transfer student.
  5. PSU does not accept courses in which "D" grades have been earned.
  6. PSU does not award credit for the following courses: CPL120; CS125FX; CS125P; NUR111; NUR215; OA121, 122, 123 (and some other office administration classes), and VC251.
  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.
  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.



| Goals  | Credit hours | Chemeketa courses which satisfy requirements  |
|--|--------------|---|
| 1. To be able to express ideas written in clear, logical, and grammatically correct 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 (Pass with a "C" grade or better)  |
| 2. To be able to communicate clearly and effectively in oral English.  | 3            | SP111, 112, 113, 114, 130 (Pass with a "C" grade or better)   |
| 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 departments. At least two courses must include a laboratory component.)</i>   | 12           | Choose nine to 12 credits from these laboratory courses: BI101, 102, 103; BOT201, 202, 203; CH121, 122, 123, 201, 202, 203, 221, 222, 223; G142, 201, 202, 203; GS104, 105, 106; PH201, 202, 203, 211, 212, 213; ZOO201, 202, 203<br>Choose up to three credits from the following non-laboratory courses: GEOG105; GS120; PH207, 208, 209  |
| 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: ART101, 204, 205, 206; HUM100; MUS201, 202, 203. Choose up to three credits from the following studio courses: ART115, 116, 117, 131, 154, 155, 156, 221, 222, 223, 233, 244, 245, 246, 254, 260, 261, 270, 271, 272, 273, 274, 281, 284, 285, 286, 291, 292, 293; MUP100, 101, 105, 174; MUS134, 197; TA121, 122, 123, 261, 285A, 285B, 285C; WR241, 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: ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 260; PHL203 (No more than three credits from ENG201, 202, 203 may be applied toward this goal.)<br>Choose up to three credits from the following media courses: FA255, 256, 257; J224  |
| 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: ANTH103, 207, 208, 209; FR101, 102, 103, 150, 151, 201, 202, 203; GEOG107, 201, 202; GER101, 102, 103, 150, 151, 201, 202, 203; HST110, 111, 112; SPAN101, 102, 103, 111, 112, 113, 150, 151, 201, 202, 203<br>Choose up to three credits from the following U.S. history, U.S. geography, and U.S. culture courses: HST201, 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            | CJ100; EC201, 202, 203; PS201, 202, 205; SOC205   |
| 9. To understand how humans function in society.   | 3            | CJ101; HE250; PSY100, 101, 201, 202, 203, 206; SOC204, 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 SOSC.
  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 SOSC.
  9. This guide is subject to change without notice and should not be regarded as a contract between SOSC and students attending Chemeketa Community College.
  10. SOSC will not grant credit for the following courses: RD115 and RD116.

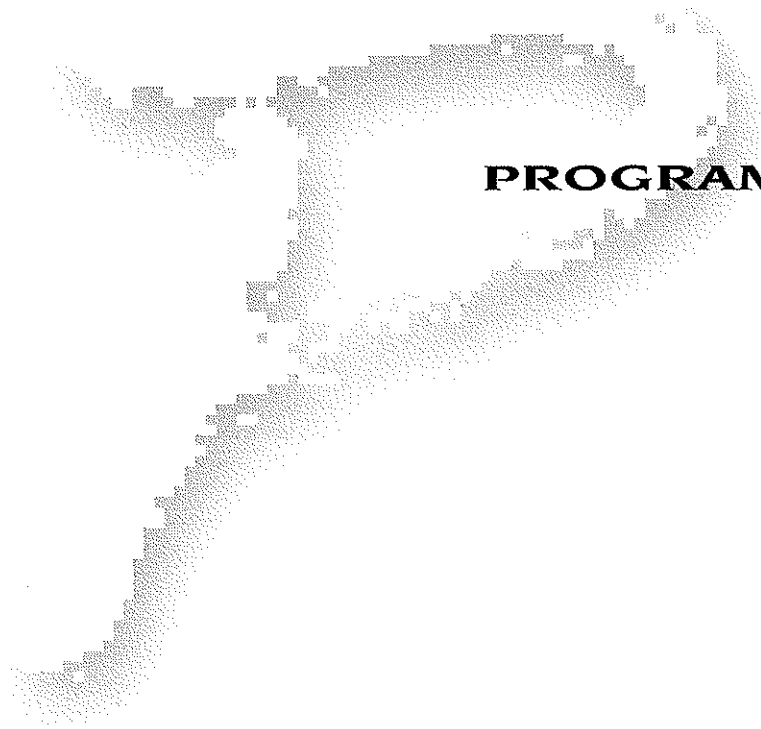
| Requirements  | Units           | Chemeketa courses which satisfy requirements  |
|---|-----------------|---|
| Written English   | 6 credit hours  | WR121 (must be completed before transferring) and WR122 or WR123 (with grade "C" or better)   |
| Arts and Letters*<br>These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject.  | 16 credit hours | Choose from the following: ART101, 204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255, 260, 262; FA255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM100; JPN201, 202, 203; MUS201, 202, 203; PHL201, 202, 203, 204, SPAN201, 202, 203; TA110   |
| Social Science*<br>These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject   | 16 credit hours | Choose from the following: ANTH102, 103, 207, 208, 209; EC201, 202, 203; GEOG106, 107, 201, 202, ; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; J224; PS201, 202, 203, 205; PSY202, 203, 206, 219, 237, 239, 246; R201, 202, 203; SOC204, 205, 206, 210, 221, 227; SSC150; WS101, 102, 103  |
| Science*<br>These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject. (MTH105 or MTH111 must be completed before transferring.)   | 16 credit hours | Choose from the following: ANTH101; BI101, 102, 103, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; CIS120, 121, 122; CS133F, 161, 162, 244, 246; G142, 143, 144, 201, 202, 203; GEOG105; GS104, 105, 106, 120, 141, 142, 143; MTH105, 211, 212, 213, 241, 243, 251, 252, 253; OC133; PH121, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY201, 211; ZOO201, 202, 203 |
| Multicultural Studies<br>You must complete two courses chosen from two of the following three areas:<br><br>Area 1– American Culture<br>Area 2–Identity, Pluralism, and Tolerance<br>Area 3–International Cultures<br><br>(Some courses may be chosen to meet this requirement and one of the requirements listed above.) | 2 courses       | HST257, 258, 259; SSC150<br>ENG260; WS101, 102, 103<br>ANTH103, 207, 208, 209; GEOG202; HST110, 111, 112, 157, 158, 159; R201, 202  |

- 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, 211, 212, and 213; or MTH105, 111, and 243; or MTH112, 231 and 241 or 243; or CS161 and 162; or anyone of MTH251, 252, 253, 254, 255, or 256.
  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 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 Multicultural Studies requirement is not satisfied by completing the A.A. degree unless acceptable courses are 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.
- \* No more than three courses from any one department may be used to satisfy the total 48 credit group requirement. Courses in the major may be used to satisfy the group requirement.



| Requirements  | Credit hours | Chemeketa courses which satisfy requirements   |
|---|--------------|--|
| English Composition   | 3            | WR121 or 122 or 123  |
| Speech  | 3            | SP111, 112, 113, 114, 126 or 130. SP111 preferred.   |
| Physical Education  | 4            | Any activity courses selected from PE180, 185, 190, 194, 294 and HPE295. (HPE295 and one hour of activity class preferred)   |
| Creative Arts<br>(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.<br>*A maximum of three hours of music performance courses is allowed.   |
| Humanities<br>(Literature, Philosophy, and Religion)  | 12           | A sequence of at least nine hours in literature is required: ENG104, 105, 106; ENG107, 108, 109; ENG201, 202, 203; ENG204, 205, 206; or ENG253, 254, 255, and one philosophy or religion course: PHL201, 202, 203, or 204, or R201, 202, or 203  |
| Laboratory Science  | 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, PH, ZOO (Elementary education majors should take BI101, GS104, and GS106.)  |
| Social Science  | 12           | 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<br>The remaining three hours may be in any social science area including psychology and criminal justice. (PSY237 is required for elementary education majors. U.S. history and geography are recommended for elementary education majors.) |
| Special LACC graduation requirement<br>MTCS100 (an integrated math/computer science course) |              | MTH105 or higher math and CS101 or higher numbered computer science course. (Elementary education majors should take MTH211, 212, 213 Foundation of Elementary Mathematics and a computer science course.)   |

- 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 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 credits and are not applied to the major or LACC requirements. Up to 12 hours of CWE can be accepted.
  7. 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.
  8. 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.
  9. 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





# Program Guide

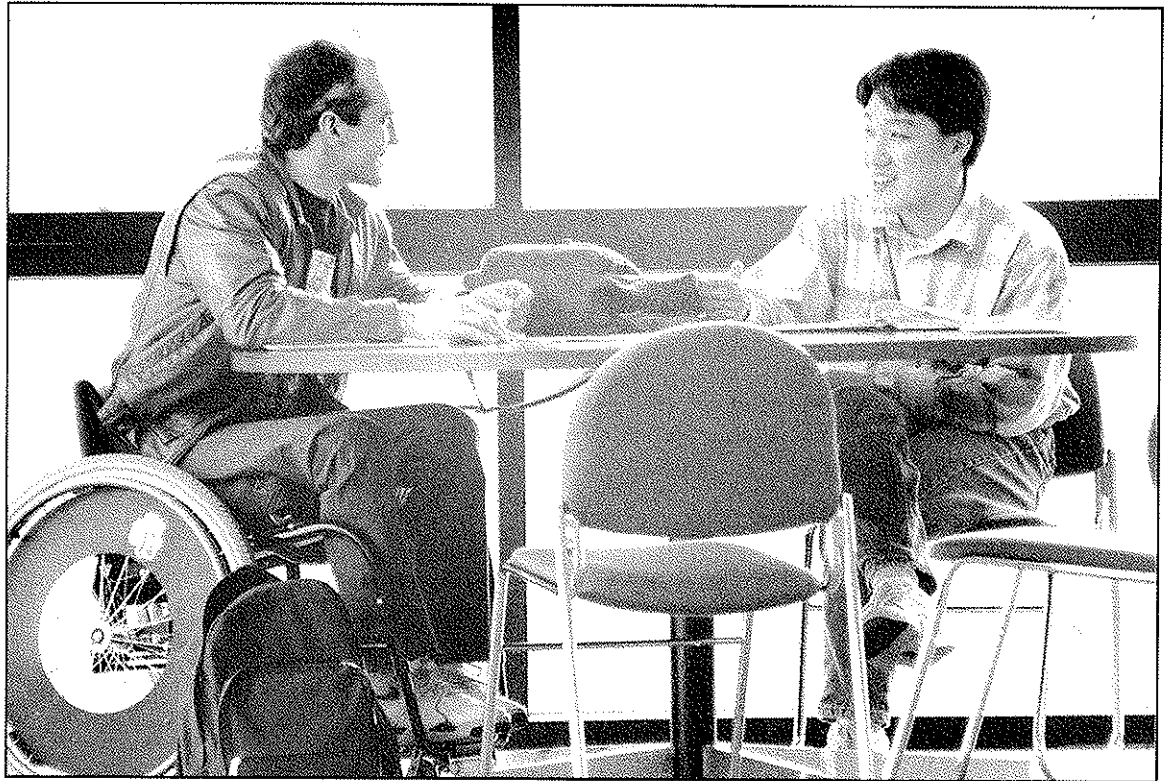
Here's a quick reference listing of the programs of study and courses available at Chemeketa. If you don't find the program or course you are looking for, check the index in the back of this catalog. For more information, call the Advising and Counseling Center at 399-5120.

- 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                              |   |   |   |   |
| <i>Automotive Technician</i>                       |   | ✓ |   |   |
| <i>Automotive Parts Sales</i>                      | ✓ |   |   |   |
| Banking and Finance                                | ✓ | ✓ |   |   |
| Biology  |   |   | ✓ |   |
| Botany   |   |   | ✓ |   |
| Building Inspection Technology                     | ✓ | ✓ |   |   |
| Business Administration                            |   |   | ✓ |   |
| Chemistry  |   |   | ✓ |   |
| Chiropractic                                       |   |   | ✓ |   |
| Civil-Structural Engineering Technology            |   |   |   |   |
| <i>Survey Technology</i>                           | ✓ |   |   |   |
| <i>Civil-Structural Engineering Technology</i>     |   | ✓ |   |   |
| Computer Programming                               |   | ✓ |   |   |
| <i>Microcomputer Support Specialist</i>            |   | ✓ |   |   |
| Computer Science                                   |   |   | ✓ |   |
| Construction Skills Training ( <i>Short-Term</i> ) | ✓ |   |   |   |
| Criminal Justice                                   |   | ✓ |   |   |
| Dental Assisting                                   | ✓ |   |   |   |
| Dental Hygiene                                     |   |   | ✓ |   |
| Drafting Technology-CAD                            |   |   |   |   |
| <i>Drafting</i>                                    |   | ✓ |   |   |
| <i>CAD-CAM</i>                                     |   | ✓ |   |   |
| <i>Mechanical Design</i>                           |   | ✓ |   |   |
| Early Childhood Education                          |   |   |   |   |
| <i>Child Development Certificate</i>               | ✓ |   |   |   |
| <i>One-Year</i>                                    | ✓ |   |   |   |
| <i>Two-Year</i>                                    |   | ✓ |   |   |
| Economics  |   |   | ✓ |   |
| Education (Elementary and Secondary)               |   |   | ✓ |   |
| Electronics Technologies                           |   |   |   |   |
| <i>Computer Electronics</i>                        |   | ✓ |   |   |
| <i>Electronic Engineering Technician</i>           |   | ✓ |   |   |
| <i>Microelectronics/Industrial Electronics</i>     |   | ✓ |   |   |
| Emergency Medical Technology-Paramedic             |   | ✓ |   |   |
| English as a Second Language                       |   |   |   | ✓ |
| Engineering  |   |   | ✓ |   |
| English  |   |   | ✓ |   |
| Entomology   |   |   | ✓ |   |
| Farm Business Management                           |   |   |   | ✓ |
| Fire Protection Technology                         |   |   |   |   |
| <i>Fire Suppression</i>                            |   | ✓ |   |   |
| <i>Fire Protection-Insurance Risk Inspection</i>   |   | ✓ |   |   |
| Foreign Languages                                  |   |   | ✓ |   |
| Forest Resources Technology                        |   | ✓ |   |   |
| Forestry   |   |   | ✓ |   |

| Program Name   | C | A | T | O |
|--|---|---|---|---|
| General Educational Development (GED)                    |   |   |   | ✓ |
| General Science  |   |   | ✓ |   |
| General Studies  |   |   | ✓ |   |
| Geography  |   |   | ✓ |   |
| Geology  |   |   | ✓ |   |
| Health, Health Education                                 |   |   | ✓ |   |
| Health Services Management                               |   |   |   |   |
| <i>Claims Analyst/Medical Biller (Short-Term)</i>        | ✓ |   |   |   |
| <i>Health Information Technician</i>                     | ✓ |   |   |   |
| <i>Health Services Management</i>                        |   | ✓ |   |   |
| <i>Medical Receptionist/Clerk (Short-Term)</i>           | ✓ |   |   |   |
| <i>Medical Transcriptionist</i>                          |   | ✓ |   |   |
| History  |   |   | ✓ |   |
| Home Economics   |   |   | ✓ |   |
| Hospitality Systems Management                           |   | ✓ |   |   |
| <i>Travel Agency Operations (Short-Term)</i>             | ✓ |   |   |   |
| Hotel, Restaurant, and Resort Management                 |   |   | ✓ |   |
| Human Services   |   |   |   |   |
| <i>Alcohol and Drugs</i>                                 |   | ✓ |   |   |
| <i>Gerontology</i>                                       |   | ✓ |   |   |
| <i>Social Services</i>                                   |   | ✓ |   |   |
| Industrial Technology and Apprenticeship                 |   | ✓ |   |   |
| Instructional Assistant                                  | ✓ |   |   |   |
| Journalism   |   |   | ✓ |   |
| Management   |   | ✓ |   |   |
| Manufacturing Engineering Technologies                   |   |   |   |   |
| <i>Manufacturing Operations</i>                          | ✓ |   |   |   |
| <i>Manufacturing Technologies</i>                        |   | ✓ |   |   |
| Mathematics  |   |   | ✓ |   |
| Medical Office Assistant                                 | ✓ |   |   |   |
| Nursing  |   |   |   |   |
| <i>Nursing Assistant</i>                                 | ✓ |   |   |   |
| <i>Licensed Practical Nurse</i>                          | ✓ |   |   |   |
| <i>Registered Nurse</i>                                  |   | ✓ |   |   |
| Nursing  |   |   | ✓ |   |
| Occupational Skills Training ( <i>Short Term</i> )       | ✓ |   |   |   |
| Office Administration and Technology                     |   |   |   |   |
| <i>Clerical Basics</i>                                   | ✓ |   |   |   |
| <i>Engineering</i>                                       |   | ✓ |   |   |
| <i>Executive</i>   |   | ✓ |   |   |
| <i>Information Processing</i>                            |   | ✓ |   |   |
| <i>Legal</i>   |   | ✓ |   |   |
| <i>Medical</i>   |   | ✓ |   |   |
| <i>Office Accounting</i>                                 |   | ✓ |   |   |
| <i>One-Year</i>  | ✓ |   |   |   |
| 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  |   |   |   |   |
| <i>Welding Technology</i>                                | ✓ |   |   |   |
| <i>Welding Fabrication</i>                               |   | ✓ |   |   |
| Zoology  |   |   | ✓ |   |





## 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 CWE instructor, 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, \$1,194; 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 97 credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| BA202         | Personal Effectiveness .....                             | 3            |
| BA211         | Financial Accounting I* .....                            | 4            |
| CS125SS       | Lotus I-Worksheets .....                                 | 3            |
| MTH095        | Intermediate Algebra *<br>(recommended) (or higher)..... | 4            |
|               | or   |              |
| MTH062        | Applied Business Math .....                              | 3            |
| OA085         | Business English II .....                                | 3            |
|               | or   |              |
| WR122         | English Composition-Logic and Style .....                | 3            |

|               |  |
|---------------|--|
| <b>Term 2</b> |  |
| BA101         | Business Environment.....4                   |
| BA203         | Interpersonal Relations in Business.....3    |
| BA212         | Financial Accounting II.....4                |
| BA214         | Business Communications.....3                |
|               | or   |
| WR123         | English Composition-Research Writing.....3   |
|               | Computer Science elective**.....3            |
| <b>Term 3</b> |  |
| BA213         | Managerial Accounting.....4                  |
| BA256         | Income Tax Accounting I.....4                |
| EC200         | Introduction to Economics.....3              |
| OA092         | Payroll Procedures.....3                     |
| WR227         | Technical Writing.....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   |
| OA061A        | Electronic Calculators A.....1               |
| 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.....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.

\*\*Choose from CS125D; CS133VB; CS133C; CS133E; CS133F; CS133R; CS133U; CS135SS; or OA201P.

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

\*\*\*\*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. 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

| .....  |      |     |     |
|--|------|-----|-----|
|  | Term |     |     |
|  | 1    | 2   | 3   |
| <b>First Year</b>  |      |     |     |
| WR121 English Composition and Writing or Speech courses* (WR227 Technical Writing required for some options)   |      |     |     |
|  |      | 3   | 3   |
| Mathematics (per placement test through MTH111 College Algebra for most majors; check OSU catalog for additional math required in some majors)                     | (4)  | 5   | (4) |
| BI101, 102, 103 General Biology or ZOO201, 202, 203 Zoology or CH121, 122, 123 General Chemistry (depending upon major and option)                                 | 4-5  | 4-5 | 4-5 |
| HE231 Human Performance  | 3    |     |     |
| 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>   | 4    | 5   | 6   |
| 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; some options require ZOO201, 202, 203 Zoology and BOT201, 202, 203 Botany) | 4    |     |     |
| Arts and Letters or Social Science elective* (EC201, 202, 203 Principles of Economics required for some majors)  | 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

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|  | 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 (ANTH101 and 102 not required at all schools. UO requires any 2 of the 3 courses.)   | 3        | 3        | 3        |
| Arts and Letters/Humanities courses* 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        | 3        | 0-3      |
| Math or Science electives*   | 3-4      | 3-4      | 3-4      |
| <b>Second Year</b>   | <b>4</b> | <b>5</b> | <b>6</b> |
| Social Science electives* (SOC204, 205, 206 for EOSC and SOSC)   | 3        | 3        | 3        |
| Arts and Letters/Humanities electives* (UO requires Philosophy or Literature)  | 3        | 3        | 3        |
| Second-year Foreign Language (required for graduate studies) or electives*   | 3-4      | 3-4      | 3-4      |
| Math or Science electives**  | 4        | 4        | 4        |
| Electives* (Art courses for OSU)   | 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.

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 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

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|  | Term     |          |          |
|--|----------|----------|----------|
| First Year   | 1        | 2        | 3        |
| WR121, 122 and/or 123 English Composition*   | 3        | 3        | (3)      |
| ART115, 116, 117 Basic Design (not required for Art History majors at UO)  | 3        | 3        | (3)      |
| ART131, 132 Introduction to Drawing, ART234 Figure Drawing (EOSC, UO and WOSC require ART131, 132; OSU requires ART131, 132, and 234; SOSC requires ART131 and 234.)   | 3        | 3        | (3)      |
| Science or Mathematics courses*  | 4        | 4        | 4        |
| Social Science courses* (recommend HST110, 111, 112 World History for OSU and UO)  |          |          | 3-6      |
| Arts and Letters/Humanities (non-art: UO requires two years of French, German, Italian, Chinese, or Japanese 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   | 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 Pottery I, ART221 Graphic Design, ART234 Figure Drawing, ART260 Photography, ART271 Introduction to Printmaking, ART281 Painting, ART291 Sculpture; OSU choose ART291 and 6 hours from ART221, 260, and 281; OSU Art Studio majors need 9 hours of 200-level classes from ART221, 225, 260, 281, 284 Watercolor or 291, 292 Ceramic Sculpture; 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 in drawing, painting, sculpture, or design). | 3        | 3        | 3        |
| Electives (CS course required at EOSC and SOSC.)   |          |          | 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 pro-

gram 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 scientific, 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.

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, \$590; class fees, \$209; 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 Auto 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 Math .....                     | 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 |
| CS101  | Introduction to Microcomputer Applications .....       | 3 |
| MTH052 | Introduction to Algebra and Geometry (or higher) ..... | 3 |

#### Term 3

|        |  |   |
|--------|--|---|
| AUM061 | Manual Drive Trains and Axles I .....            | 5 |
| AUM068 | Automotive Electrical Systems I .....            | 4 |
| AUM078 | Automotive Workplace Procedures and Ethics ..... | 1 |
| AUM092 | Automotive Diesel Engines .....                  | 3 |

#### Term 4

|        |  |   |
|--------|--|---|
| AUM062 | Manual Drive Trains and Axles II .....       | 3 |
| AUM063 | Automotive Transmission and Transaxles ..... | 5 |
| AUM066 | Basic Fuel Systems .....                     | 4 |
| AUM076 | Automotive Electrical Systems II .....       | 4 |

#### Term 5

|        |   |   |
|--------|---|---|
| AUM067 | Advanced Carburetion and Fuel Injection ..... | 5 |
| AUM077 | Automotive Electrical Systems III .....       | 5 |
| AUM082 | New Automotive Developments .....             | 4 |
| AUM086 | Automotive Heating and Air Condition .....    | 5 |

#### Term 6

|        |  |   |
|--------|--|---|
| 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, \$289. 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, \$624; 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 51 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 Communication.....              | 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            |
| OA091         | Computerized Bookkeeping.....                 | 3            |

\*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, \$1,200; 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 99 credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| BA101         | Business Environment .....                       | 4            |
| BA269         | Principles of Banking .....                      | 3            |
| OA084         | Business English 1 .....                         | 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            |
| EC200         | Introduction to Economics .....                  | 3            |
|               | or   |              |
| EC201         | Introduction to Microeconomics .....             | 3            |
| MTH065        | Introduction Algebra .....                       | 4            |
|               | or   |              |
| MTH111        | College Algebra .....                            | 5            |
| OA085         | Business English 2 .....                         | 3            |
|               | or   |              |
| WR122         | English Composition-Logic and Style .....        | 3            |
| <b>Term 3</b> |  |              |
| BAN051        | Introduction to Lending .....                    | 1            |
|               | or   |              |
|               | Banking elective .....                           | 1            |
| BAN067        | Teller Training .....                            | 1            |
|               | or   |              |
|               | Banking elective .....                           | 1            |
| BA212         | Financial Accounting II .....                    | 4            |
| BA214         | Business Communication .....                     | 3            |
| BA284         | Law and Banking Applications .....               | 3            |
| MTH095        | Intermediate Algebra .....                       | 4            |
|               | or   |              |
| MTH243        | Probability and Statistics .....                 | 5            |
| <b>Term 4</b> |  |              |
| BA238         | Sales and Persuasion .....                       | 3            |
| BA270         | Money and Banking .....                          | 3            |
| BA281         | Consumer Lending .....                           | 3            |
| BA213         | Managerial Accounting .....                      | 4            |
| CS101         | Introduction to Microcomputer Applications ..... | 3            |
| OA061A        | Electronic Calculators A .....                   | 1            |
| <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 Communication .....                | 3            |
|               | Speech elective*** .....                         | 3            |
| <b>Term 6</b> |  |              |
| BA202         | Personal Effectiveness .....                     | 3            |
| BAN280        | Cooperative Work Experience .....                | 3            |
|               | or   |              |
|               | Business elective .....                          | 3            |
|               | or   |              |
|               | Banking elective .....                           | 3            |
|               | Banking elective .....                           | 3            |
|               | Humanities/fine arts elective .....              | 3            |
|               | Psychology 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 and 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 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term |   |     |
|--|------|---|-----|
| First Year   | 1    | 2 | 3   |
| WR121, 122 and/or 123 English Composition*   |      |   |     |
| HPE295 Health and Fitness for Life* or elective  | 3    | 3 | (3) |
| CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry is also accepted for OSU [Botany, Entomology, and General Science majors] and UO) |      |   | 3   |
| Mathematics sequence (consult an advisor or four-year college catalog to determine appropriate math; most require some calculus. MTH111 Col-           | 5    | 5 | 5   |



|  |     |     |   |
|--|-----|-----|---|
| lege Algebra and MTH112 Trigonometry for EOSC; MTH111, 112, 251 Differential Calculus, or 243 Probability and Statistics for SOSC; MTH251, 252 Integral Calculus for OSU, PSU, and UO; MTH251 and 252 or MTH241 Elementary Calculus and 243 for Botany, Entomology, and General Science at OSU; WOSC requires MTH251 and MTH252 or MTH243 and CS162)   | 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 or PH211, 212, 213 General Physics for Scientists and Engineers (not required at WOSC or for Entomology and General Science majors at OSU; only PH201, 202 required for Zoology majors; SOSC also accepts G201, 202, 203 Geology; and Botany majors take BOT201, 202, 203 Botany)**  | 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 and UO; CH243 not required at PSU. Take BOT201, 202, 203 for EOSC; Zoology majors take ZOO201, 202, 203)**   | 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; OSU General Science requires CIS120, 121 Computer Information Science I and II; SOSC requires CS101; UO General Science major may substitute CS101 and CS133F Fortran for CS161. | 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. PSU General Science degree allows other science choices. UO General Science needs three sequence from BI101, 102, 103; CH121, 122, 123 or 221, 222, 223; G201, 202, 203; PH201, 202, 203 or 211, 212, 213.

NOTE: Chemeketa's BI101, 102, 103 does not meet biology requirement for biology majors.

## 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 pub-

lic 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, \$866; class fees, \$62; equipment and supplies, \$264. 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            |
| BLD081        | Mechanical Codes I .....                                     | 3            |
| BLD093A       | Building Inspection-Lab .....                                | 1            |
| COM051        | Communication Skills I .....                                 | 3            |
|               | or   |              |
| WR121         | English Composition-Exposition .....                         | 3            |
| MTH052        | Introduction 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            |
| BLD082        | Mechanical Codes II .....                                    | 3            |
| BLD093B       | Building Inspection-Lab .....                                | 1            |
| COM052        | Communication Skills II .....                                | 3            |
|               | or   |              |
| WR122         | English Composition-Logic and Style .....                    | 3            |
| MTH053        | Introduction to Trigonometry with Geometry (or higher) ..... | 3            |
| <b>Term 3</b> |  |              |
| BLD053        | Building Codes III.....                                      | 3            |
| BLD054        | Dwelling Construction under the 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            |

|        |                                     |
|--------|-------------------------------------|
| Term 4 |                                     |
| BLD280 | Cooperative Work Experience*.....12 |

\*Cooperative Work Experience may not be used as a deviation in the one-year program.

### Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program are books, \$1,450; class fees, \$151; equipment and supplies, \$814. 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 109 required credit hours.

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| BLD050        | Introduction to Building Inspection.....                       | 3            |
| BLD051        | Building Codes I.....  | 3            |
| BLD081        | Mechanical Codes I.....  | 3            |
| BLD093A       | Building Inspection-Lab.....                                   | 1            |
| COM051        | Communication Skills I.....                                    | 3            |
|               | or   |              |
| WR121         | English Composition-Exposition.....                            | 3            |
| CS101         | Introduction to Microcomputer Applications<br>(or higher)..... | 3            |
| MTH052        | Introduction to Algebra and Geometry<br>(or higher).....       | 3            |
| <b>Term 2</b> |  |              |
| BLD052        | Building Codes II.....   | 3            |
| BAD           | Material of Construction.....                                  | 2            |
| BLD082        | Mechanical Codes II.....                                       | 3            |
| BLD061        | Structural Inspection-Wood.....                                | 3            |
| BLD093B       | Building Inspection-Lab.....                                   | 1            |
| DRF059        | Print Reading.....   | 2            |
| COM052        | Communication Skills II.....                                   | 3            |
|               | or   |              |
| WR122         | English Composition-Logic and Style.....                       | 3            |
| MTH053        | Introduction to Trigonometry with Geometry<br>(or higher)..... | 3            |
| <b>Term 3</b> |  |              |
| BLD053        | Building Codes III.....  | 3            |
| BLD054        | Dwelling Construction Under the UBC.....                       | 3            |
| BLD055        | Building Department Administration.....                        | 3            |
| BLD062        | Structural Inspection-Masonry.....                             | 3            |
| BLD093C       | Building Inspection-Lab.....                                   | 1            |
| DRF060        | Advanced Print Reading.....                                    | 2            |
| COM053        | Technical Report Writing.....                                  | 3            |
|               | or   |              |
| WR227         | Technical Writing.....   | 3            |
| FE205         | Job Search Techniques.....                                     | 1            |
|               | Cooperative Work Experience.....                               | 12           |
| <b>Term 4</b> |  |              |
| BLD063        | Structural Inspection-Concrete.....                            | 3            |
| BLD071        | Plumbing Codes I.....  | 3            |
| BLD093D       | Building Inspection-Lab.....                                   | 1            |
| BLD069        | Engineering for the Building Inspector.....                    | 3            |
| BLD068        | Foundations, Excavation and Grading.....                       | 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            |
| BLD093E       | Building Inspection-Lab.....                                   | 1            |
| <b>Term 6</b> |  |              |
| BLD091        | One and Two Family Electrical Code.....                        | 3            |
|               | or   |              |
| FRP072        | Fire Codes and Ordinances.....                                 | 3            |
| BLD060        | Fire Protection for Buildings.....                             | 3            |
| BLD067        | Nonstructural Plan Review.....                                 | 3            |
| BLD093F       | Building Inspection-Lab.....                                   | 1            |
| PSY101        | Psychology of Human Relations<br>(or higher).....              | 3            |
| BLD092        | One and Two Family Dwelling Code<br>(optional).....            | 3            |

## 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.

Many colleges have specific requirements for admission to their Business Administration programs. These include specified GPA, completion of specific courses, and deadlines for admission. 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term |     |     |
|---|------|-----|-----|
|   | 1    | 2   | 3   |
| <b>First Year</b>   |      |     |     |
| WR121 English Composition   | 3    |     |     |
| WR122 and 123 English Composition for SOSC; WR122 or 123 English Composition for UO; WR122 and WR123 or WR227 Technical Writing for WOSC; approved writing elective for OSU*                                      |      | (3) |     |
| BA214 Business Communications for PSU   |      |     | (3) |
| Mathematics per placement test (MTH111 College Algebra, MTH243 Probability and Statistics, and MTH241 Elementary Calculus for OSU, UO, and WOSC. MTH241 for EOSC; MTH241 and 243 for PSU; MTH111 and 243 for SOSC | 5    | 4   | 4   |
| CS125 Lotus I-Worksheets recommended for EOSC   |      | (3) |     |
| CS101 Introduction to Microcomputer Applications (CIS120, 121 Computer Information Science I and II for OSU)  | (4)  | (4) | 3   |
| Arts and Letters/Humanities courses* (PHL203 Ethics required for PSU Accounting majors)   | 3    | 3   | 3   |

|  |          |          |          |
|--|----------|----------|----------|
| Social Science courses* (UO requires three courses from Anthropology, Sociology, and Psychology; PSU Accounting majors need one course with ANTH, PSY or SOC prefix.)  | 3        | 3        | 3        |
| HPE295 Health and Fitness for Life* or elective  | 3        |          |          |
| Electives*   |          | (3)      | (3)      |
| <b>Second Year</b>   | <b>4</b> | <b>5</b> | <b>6</b> |
| BA211, 212 Financial Accounting  | 4        | 4        |          |
| BA213 Managerial Accounting  |          |          | 4        |
| EC201, 202, 203 Economics (EC203 not required at OSU or UO but is recommended)   | 3        | 3        | 3        |
| SP111 Fundamentals of Speech for WOSC; SP111 or SP112 Fundamentals of Persuasion for OSU and PSU; choose one from SP111, 112, 113 Fundamentals of Small Group Communication or SP114 Interpersonal Communication for EOSC and SOSC | 3        |          |          |
| BA226 Business Law for EOSC, OSU, and WOSC; BA206 Business Management Principles for UO  |          | 3        |          |
| Elective courses to meet general education requirements:   |          | (3)      | (3)      |
| Arts and Letters/Humanities electives*   | 3        |          | 3        |
| Science courses*   | 4        | 4        | 4        |
| Social Science courses* (accounting majors at PSU need PS201, 202 American Government)   | (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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term |     |     |
|---|------|-----|-----|
|   | 1    | 2   | 3   |
| <b>First Year</b>   |      |     |     |
| WR121, 122, and/or 123 English Composition or WR227 Technical Writing   | 3    | 3   | 3   |
| CH221, 222, 223 General Chemistry   | 5    | 5   | 5   |
| Mathematics per placement test through MTH254 Vector Calculus I (OSU and UO also require MTH256 Applied Differential Equations; EOSC requires through MTH253 Series Calculus; WOSC requires MTH251 Differential Calculus, MTH252 Integral Calculus, and MTH254)                               | 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; PSU recommends a foreign language, particularly for students planning on graduate studies)                                       | 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 (SOSC and UO students may substitute PH201, 202, 203; not required at WOSC)  | 4-5  | 4-5 | 4-5 |
| Social Science courses*   | 3    | 3   | 3   |
| MTH252, 255, 254 Calculus (EOSC requires CS161 Computer Science I-C Language; OSU and UO do not require MTH255. UO recommends 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*  | 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 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 Cheme-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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | 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 English Composition-Exposition, and 6 hours from J216 News-writing; SP111 Fundamentals of Speech; SP112 Fundamentals of Persuasion; SP130 Business and Professional Speaking; WR122, 123 English Composition; WR227 Technical Writing; WR241, 242, 243 Imaginative Writing | 3    | 3   | 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 anthropology, economics, geography, history, political science, psychology, and sociology and 12 hours of arts and humanities chosen from art, English, film arts, music, philosophy, religion, theater arts and writing. (Three of these 12 hours may be in foreign language; an additional 3 hours may be in 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, \$481; class fees, \$79; equipment and supplies, \$355; optional certification exam, \$100. 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 52 required credit hours:

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| DRF065        | Introduction to HP48 Calculators .....                      | 2            |
| CVL060A       | Plane Surveying I-Lecture.....                              | 3            |
| CVL060B       | Plane Surveying I-Lab.....                                  | 2            |
| DRF072        | Introduction to AutoCAD .....                               | 3            |
| CVL078        | Concrete and Concrete Testing.....                          | 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            |
| CVL076        | Soils Testing Laboratory .....                              | 1            |
| DRF073        | Advanced AutoCAD .....                                      | 3            |
| MTH082        | Technical Mathematics II.....                               | 4            |
|               | or  |              |
| MTH112        | College Algebra (or higher).....                            | 5            |
| <b>Term 3</b> |   |              |
| COM051        | Communication Skills I .....                                | 3            |
|               | or  |              |
| WR121         | English Composition-Exposition.....                         | 3            |
| CVL064A       | Construction and Route Surveying-Lecture .....              | 3            |
| CVL064B       | Construction and Route Surveying-Lab .....                  | 2            |
| DRF081        | Mapping and Platting .....                                  | 3            |
| DRF093        | Technical Software Applications.....                        | 3            |
|               | or  |              |
| CS125Q        | Worksheets-Quattro .....                                    | 3            |
| MTH083        | Technical Mathematics III.....                              | 4            |
|               | or  |              |
| MTH251        | Calculus .....  | 5            |

### Associate of Applied Science degree

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,266; class fees, \$126; equipment and supplies, \$355; certification exam, \$100. 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 96 credit hours. As a graduate of the program, you may transfer to Oregon Institute of Technology to complete course work for a B.S. 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> |  |              |
| CVL060A       | Plane Surveying I-Lecture .....                                | 3            |
| CVL060B       | Plane Surveying I-Lab .....                                    | 2            |
| CVL078        | Concrete and Concrete Testing .....                            | 3            |
| DRF065        | Introduction to HP48 Calculators .....                         | 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<br>and Specifications ..... | 4            |
| CVL076        | Soil Testing Laboratory .....                                  | 1            |
| DRF073        | Advanced AutoCAD .....   | 3            |
| MTH082        | Technical Mathematics II.....                                  | 4            |
|               | or   |              |
| MTH112        | Trigonometry (or higher).....                                  | 5            |
| <b>Term 3</b> |  |              |
| COM051        | Communication Skills I.....                                    | 3            |
|               | or   |              |
| WR121         | English Composition-Exposition .....                           | 3            |
| CVL064A       | Construction and Route Surveying-Lecture.....                  | 3            |
| CVL064B       | Construction and Route Surveying-Lab .....                     | 2            |
| DRF081        | Mapping and Platting .....                                     | 3            |
| DRF093        | Technical Software Applications .....                          | 3            |
|               | or   |              |
| CS125SS       | LOTUS I-Worksheets .....                                       | 3            |
| MTH083        | Technical Mathematics III .....                                | 4            |
|               | or   |              |
| MTH251        | Differential Calculus (or higher) .....                        | 5            |
| <b>Term 4</b> |  |              |
| BI131         | Environmental Science .....                                    | 4            |
|               | or   |              |
|               | Laboratory Science Elective .....                              | 4            |
| CVL080        | Applied Mechanics.....   | 3            |
| DRF084        | GIS Applications Lab.....                                      | 1            |
| DRF089        | Structural Drafting .....                                      | 3            |
| GEOG105       | Introductory Geography.....                                    | 3            |
|               | or   |              |
|               | Humanities/fine arts elective.....                             | 3            |
|               | or   |              |
|               | Social Science elective .....                                  | 3            |
| <b>Term 5</b> |  |              |
| CVL082        | Strength of Materials.....                                     | 4            |
| CVL084        | Soil Mechanics and Foundations .....                           | 3            |
|               | or   |              |
| CVL087        | Hydraulics .....   | 4            |
| DRF077        | Introduction to MicroStation PC .....                          | 3            |
| DRF082        | Civil Drafting-Softdesk .....                                  | 3            |
| DRF085        | Geographic Information Systems (GIS) .....                     | 3            |
| <b>Term 6</b> |  |              |
| COM053        | Technical Report Writing.....                                  | 3            |
|               | or   |              |
| WR227         | Technical Writing.....   | 3            |
| CVL069        | Survey Equipment Operations Review.....                        | 1            |
| CVL088        | Environmental and Sanitary Engineering .....                   | 3            |
| CVL094        | Timber and Steel Design and Construction.....                  | 4            |
|               | or   |              |
| CVL092        | Reinforced Concrete Design and Construction.....               | 3            |
| DRF083        | Project Development .....                                      | 3            |

## Computer Electronics Technology

see Electronics Technologies

## Computer Programming

Chemeketa's Computer Programming curriculum is for students who wish to become professional business-application 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, \$1,092; class fees, \$168; equipment and 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        | Introduction to<br>Contemporary Mathematics (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> |  |   |
| CS133E        | Easytrieve Plus.....                     | 3 |
| CS234L        | On-Line Programming Techniques .....     | 4 |
| CS244         | Systems Analysis I.....                  | 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 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.

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

### Microcomputer Support Specialist Option

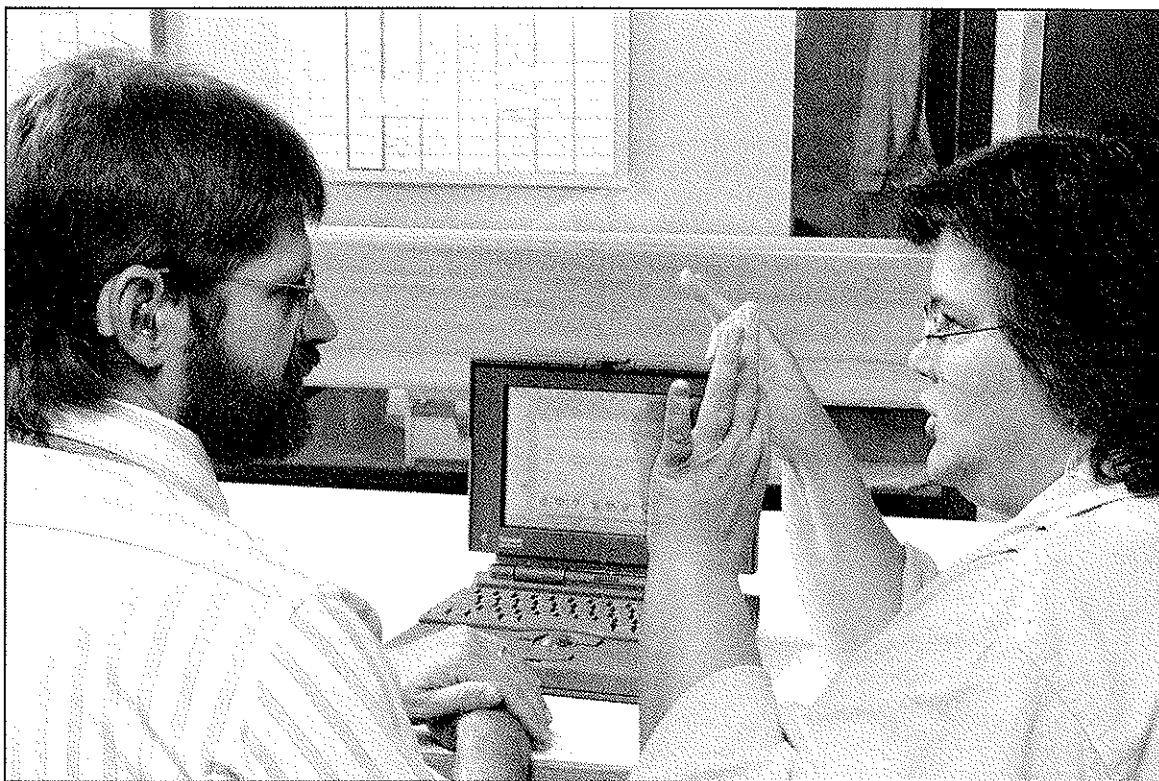
This option emphasizes the horizontal integration of application packages and provides an introduction to microcomputer programming. It includes training in installing and integrat-

ing many of the software packages used by businesses.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$1,092; 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 96 credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| CIS120        | Computer Information Science I.....                        | 4            |
| CIS121        | Computer Information Science II.....                       | 4            |
| MTH105        | Introduction to Contemporary Mathematics (or higher) ..... | 4            |
| WR121         | English Composition-Exposition (or higher)...              | 3            |
| <b>Term 2</b> |  |              |
| BA211         | Financial Accounting I.....                                | 4            |
| CS125SS       | LOTUS I-Worksheets.....                                    | 3            |
| CS133U        | C Language .....   | 4            |
| CS140B        | Microcomputer Operations Systems.....                      | 3            |
|               | Humanities/fine arts elective .....                        | 3            |
|               | or   |              |
|               | Science/applied science elective.....                      | 3            |
| <b>Term 3</b> |  |              |
| BA212         | Financial Accounting II.....                               | 4            |
| CIS122        | Computer Information Science III.....                      | 4            |
| CS135SS       | Lotus II-Macros .....                                      | 3            |
| CS233U        | Advanced U .....   | 4            |
| FE205         | Job Search Techniques.....                                 | 1            |
| <b>Term 4</b> |  |              |
| CS125DB       | Micro Database Software-DBASE .....                        | 3            |
|               | or   |              |
| CS125FX       | Microcomputer Database Software-FoxPro .....               | 3            |
| CS240         | Advanced MS/DOS .....                                      | 3            |
| CS244         | Systems Analysis I.....                                    | 3            |
| CS280         | Cooperative Work Experience.....                           | 3            |
|               | or   |              |
|               | Computer science elective* .....                           | 3            |
| WR227         | Technical Report Writing .....                             | 3            |



|               |   |
|---------------|---|
| <b>Term 5</b> |   |
| CS145         | Microcomputer Hardware/<br>Software Evaluation .....4                         |
| CS171         | Computer Organizations .....4   |
| CS275         | Data Base Management .....3   |
| CS278         | Data Communications .....3  |
| CS280         | Cooperative Work Experience .....3<br>or<br>Computer Science elective* .....3 |

|               |  |
|---------------|--|
| <b>Term 6</b> |  |
| CS050         | Data Communications Lab.....2  |
| CS060         | Techniques of User Training.....2  |
| CS135DB       | Advanced Micro Database-DBASE .....3<br>or<br>CS135FX Advanced FoxPro .....3 |
| CS279         | Network Management .....3  |
| SP111         | Fund of Speech (or higher) .....3<br>Social Science elective .....3          |

\*Computer science elective: Choose courses with CS or CIS prefixes (additional spreadsheet or database classes will not apply as CS elective).

## 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 a computer information science option.

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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  |  |      |   |   |
|--|--|------|---|---|
|  |  | Term |   |   |
| <b>First Year</b>  |  | 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; PH211, 212, 213 for PSU; PH211, 212, 213, PH201, 202, 203 General Physics, BI101, 102, 103 |  |      |   |   |

|   |     |     |     |
|---|-----|-----|-----|
| General Biology or CH121, 122, 123 General Chemistry for UO)  | 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 227 for PSU; WR121 and 122 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.

|   |     |     |     |
|---|-----|-----|-----|
| <b>Second Year</b>  | 4   | 5   | 6   |
| Computer Science course to meet major requirements (CS171 Principles of Computer Organization and CS233U C Language for PSU; CS171, for SOSC; CS271 for WOSC)                         | 3-4 | 3-4 | 3-4 |
| Mathematics to meet major requirements through MTH253 and MTH231, 232 Discrete Mathematics for OSU and UO; through MTH254 Vector Calculus I for PSU and WOSC; through MTH253 for SOSC | 4   | 4   | 4   |
| Social Science courses* (UO requires PSY201, 202 General Psychology)  | 3   | 3   | 3   |
| Arts and Letters/Humanities sequence*   | 3   | 3   | 3   |
| HPE295 Health and Fitness for Life* or elective   | 3   |     |     |
| Electives*  |     | 3-4 | 3-4 |

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

## Construction Skills Training

Chemeketa offers Construction Skills Training 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, and carpentry. 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 90 required credit hours listed below. These include the 57 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 (57 credit hours)**

| Course | Title   | Credit Hours |
|--------|---|--------------|
| CS101  | Introduction to Microcomputer Applications (or higher).....   | 3            |
| WR121  | English Composition-Exposition .....                          | 3            |
| WR122  | English Composition-Logic and Style.....                      | 3            |
| WR227  | Technical Writing.....  | 3            |
|        | or  |              |
| WR123  | English Composition-Research Writing.....                     | 3            |
|        | Speech elective .....   | 3            |
| MTH052 | Introduction to Algebra and Geometry (or higher).....         | 3            |
|        | Physical education elective (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 |
| CJ323 | 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 Commission on Dental Accreditation.

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.

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 Health Care Provider 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 Examinations for Dental Assisting, including radiology.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$453; class fees, \$110; equipment and supplies, \$619; test fees, \$140; physical exami-*



nation, \$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 60 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.....                            | 3            |
| DEN053        | Dental Materials I.....                                       | 4            |
| DEN054        | Preventive Dentistry.....                                     | 1            |
| SP118         | Interpersonal Communication<br>in the Health Professions..... | 3            |
| <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.....                                       | 3            |
| <b>Term 3</b> |   |              |
| CS101         | Introduction to Microcomputer Applications..                  | 3            |
| DEN070        | Dental Office Management.....                                 | 2            |
| DEN071        | Dental Office Practicum II.....                               | 6            |
| DEN072        | Expanded Functions II.....                                    | 3            |
| DEN074        | Dental Radiology II.....                                      | 2            |
| DEN080        | Dental Assistant Seminar.....                                 | 2            |
| <b>Term 4</b> |   |              |
| DEN081        | Dental Assisting Practicum III.....                           | 5            |

### Alert!

If you plan to begin this program *after* fall term 1995, you will need to take part in an assessment to determine your readiness to begin the program. If you do not have the prerequisites to enter the program, you may need to complete an individualized plan. The plan may include one or more of the following preparatory courses:

| Course  | Title   | Credit Hours |
|---------|---|--------------|
| AH051   | Health Occupations Overview A.....                            | 2            |
| MED050A | Introduction to Medical Terminology A.....                    | 1            |
| MTH065  | Introductory Algebra.....                                     | 4            |
| RD090   | College Textbook Reading.....                                 | 3            |
| WR040   | Writing Skills.....   | 3            |
| AH052   | Health Occupations Overview B.....                            | 2            |
| CS101   | Introduction to Microcomputer Applications..                  | 3            |
| MED050B | Introduction to Medical Terminology B.....                    | 1            |
| SP118   | Interpersonal Communication<br>in the Health Professions..... | 3            |
| WR115   | Introduction to Composition.....                              | 3            |

In addition to tuition, estimated costs for students who complete the preparatory courses listed above are books, \$93; class fees, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.

## 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 program 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term |     |     |
|--|------|-----|-----|
|  | 1    | 2   | 3   |
| <b>First Year</b>  |      |     |     |
| BI231, 232, 233 Anatomy and Physiology (ZOO201, 202, 203 General Zoology may be substituted for OHSU)  | 4    | 4   | 4   |
| CH121, 122, 123 College Chemistry (CH104, 105, 106 Chemistry for Allied Health may be substituted for OHSU**)  | 4-5  | 4-5 | 4-5 |
| PSY201 General Psychology for OHSU (6 credit hours from PSY100 Introduction to Psychology, PSY201, 202, 203 General Psychology, PSY211 Brain, Mind, and Behavior, and PSY219 The Mind for OIT) | 3    | 3   |     |
| ANTH103 Cultural Anthropology for OHSU   |      |     | 3   |
| WR121, 122 English Composition (or WR123 English Composition or WR227 Technical Writing for OHSU)  | 3    | 3   |     |
| SP111 Fundamentals of Speech (SP111 or other speech classes for OHSU)  |      |     | 3   |
| CS101 Introduction to Microcomputer Applications or CS131 Introduction to Data Processing for OIT  | 3    |     |     |
| BI234 Microbiology for OIT   |      |     | 4   |
| MTH095 Intermediate Algebra for OIT (prerequisite for CH121)   |      | 4   |     |
| PE185 Any Physical Education elective for OIT  |      |     | 1   |
| Elective (3 hours for OIT)   | (3)  | (3) | 3   |
| <b>Second Year</b>   | 4    | 5   | 6   |
| FN225 Nutrition  |      | 4   |     |
| SOC204 General Sociology   | 3    |     |     |
| WR227 Technical Writing for OIT  |      |     | (3) |
| Humanities electives* (9 hours for OIT; 6 hours from Art, Literature,  |      |     |     |

Philosophy, Religion, Speech, Theater Arts, or second year Foreign Language for OHSU) 3 3 3  
 PE185 Physical activity (1 credit for OHSU)  
 MTH111 College Algebra for OHSU Social Science electives\*. 3 hours from Anthropology, History, Economics, Geography, Psychology, Social Science, or Political Science for OHSU 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, \$803; class fees, \$138; 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 required 95 credit hours:

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| DRF050        | Sketching.....                                  | 1            |
| DRF051        | Machine Drafting I.....                         | 3            |
| DRF065        | Introduction to HP-48 Calculators.....          | 2            |
| DRF072        | Introduction to AutoCAD.....                    | 3            |
| MG053         | Manufacturing Processes.....                    | 3            |
| MTH081        | Technical Mathematics I.....                    | 4            |
| MTH111        | College Algebra (or higher).....                | 5            |
| <b>Term 2</b> |   |              |
| CS101         | Introduction to Microcomputer Applications..... | 3            |
| DRF053        | Machine Drafting II.....                        | 1            |
| DRF056        | Architectural Drafting.....                     | 3            |
| DRF073        | Advanced AutoCAD.....                           | 3            |
| MTH082        | Technical Mathematics II.....                   | 4            |
| MTH112        | Trigonometry (or higher).....                   | 5            |
| <b>Term 3</b> |   |              |
| CVI066A       | Surveying for Drafters-Lecture.....             | 3            |
| CVI066B       | Surveying for Drafters-Lab.....                 | 1            |
| DRF074        | Descriptive Geometry.....                       | 3            |
| DRF075        | AutoCAD 3-D.....                                | 2            |
| DRF081        | Mapping and Plotting.....                       | 3            |
| DRF093        | Technical Software Applications.....            | 3            |
| CS125Q        | Worksheets-Quattro.....                         | 3            |
| <b>Term 4</b> |   |              |
| BLD069        | Engineering for the Building Inspector.....     | 3            |
| DRF078        | AutoLISP Programming.....                       | 3            |
| DRF084        | GIS Applications Lab.....                       | 1            |
| DRF089        | Structural Drafting.....                        | 3            |
| ELE060        | Electronic Fundamentals.....                    | 3            |
| GEOG105       | Introductory Geography.....                     | 3            |
|               | or  |              |
|               | Humanities elective.....                        | 3            |
|               | or  |              |
|               | Social science elective.....                    | 3            |
| <b>Term 5</b> |   |              |
| COM051        | Communication Skills 1.....                     | 3            |
| or            |   |              |
| WR121         | English Composition-Exposition.....             | 3            |
| DRF077        | Introduction to MicroStation PC.....            | 3            |
| DRF082        | Civil Drafting-Softdesk.....                    | 3            |
| DRF085        | Geographic Information Systems (GIS).....       | 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            |
|               | General education elective.....                 | 3            |
|               | or  |              |
|               | Cooperative Work Experience.....                | 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, \$1,143; class fees, \$170; equipment and supplies, \$319. 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> |   |              |
| 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> |   |              |
| CS101         | Introduction to Microcomputer Applications*.... | 3            |
| COM051        | Communication Skills I .....                    | 3            |
|               | or  |              |
| WR121         | English Composition-Exposition .....            | 3            |
| DRF053        | Machine Drafting II .....                       | 1            |
| DRF068        | Geometric Tolerancing .....                     | 1            |
| DRF073        | Advanced AutoCAD .....                          | 3            |
| MFG054        | Geometric Tolerancing Lab .....                 | 1            |
| MTH082        | Technical Mathematics II .....                  | 4            |
|               | or  |              |
| MTH112        | Trigonometry (or higher).....                   | 5            |
| <b>Term 3</b> |   |              |
| DRF074        | Descriptive Geometry .....                      | 3            |
| DRF075        | AutoCAD 3-D .....                               | 2            |
| DRF076        | CAD Mechanical .....                            | 2            |
| DRF093        | Technical Software Applications* .....          | 3            |
|               | or  |              |
| CS104Q        | Worksheets-Quattro .....                        | 4            |
| MTH083        | Technical Mathematics III .....                 | 4            |
|               | or  |              |
| MTH251        | Differential Calculus (or higher) .....         | 5            |
| <b>Term 4</b> |   |              |
| CVL080        | Applied Mechanics.....                          | 3            |
| DRF078        | AutoLISP Programming*.....                      | 3            |
| DRF086        | Power Transmission Design.....                  | 3            |
| DRF089        | Structural Drafting*.....                       | 3            |
| ELE060        | Electronic Fundamentals .....                   | 4            |
| <b>Term 5</b> |   |              |
| CVL082        | Strength of Materials I .....                   | 4            |
| DRF071        | Machine Design Lab I .....                      | 3            |
| DRF077        | Introduction to MicroStation PC* .....          | 3            |
| PSY246        | Introduction to Industrial Psychology.....      | 3            |
|               | or  |              |
| PH081         | Humanities/Social Science elective .....        | 3            |
|               | or  |              |
| PH201         | Applied Physics .....                           | 4            |
|               | or  |              |
| PH201         | General Physics .....                           | 4            |
| <b>Term 6</b> |   |              |
| COM053        | Technical Report Writing .....                  | 3            |
|               | or  |              |
| WR227         | Technical Writing.....                          | 3            |
| DRF061        | Technical Illustration* .....                   | 3            |
| DRF070        | CAD Pipe Systems*.....                          | 2            |
| DRF079        | CAD Electronics*.....                           | 3            |
| DRF087        | Flexible Manufacturing Systems.....             | 3            |
| DRF066        | Tool Design Lab I .....                         | 3            |

\*Courses above 200 in math, physics, chemistry, and engineering 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, \$1,143; class fees, \$170; and equipment and supplies, \$319. 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            |
| CS101         | Introduction to Microcomputer Applications.... | 3            |
| <b>Term 2</b> |  |              |
| DRF053        | Machine Drafting II.....                       | 1            |
| DRF068        | Geometric Tolerancing.....                     | 1            |
| DRF073        | Advanced AutoCAD .....                         | 3            |
| MFG054        | Geometric Tolerancing Lab.....                 | 1            |
| MFG093        | CNC Machine Tool Operations .....              | 5            |
| MTH082        | Technical Mathematics II .....                 | 4            |
|               | or   |              |
| MTH112        | Trigonometry (or higher).....                  | 5            |
| <b>Term 3</b> |  |              |
| DRF074        | Descriptive Geometry.....                      | 3            |
| DRF075        | Auto CAD 3-D.....                              | 2            |
| DRF076        | CAD Mechanical.....                            | 2            |
| DRF093        | Technical Software Applications.....           | 3            |
|               | or   |              |
| CS104Q        | Worksheets-Quattro .....                       | 4            |
| WR121         | English Composition-Exposition.....            | 3            |
|               | or   |              |
| COM051        | Communication Skills I .....                   | 3            |
| PSY246        | Introduction to Industrial Psychology .....    | 3            |
| <b>Term 4</b> |  |              |
| CVL080        | Applied Mechanics.....                         | 3            |
| DRF086        | Power Transmission.....                        | 3            |
| ELE060        | Electronic Fundamentals.....                   | 4            |
| MFG094        | Manufacturing Programming .....                | 5            |
| PH081         | Applied Physics .....                          | 4            |
|               | or   |              |
| PH201         | General Physics.....                           | 4            |
| <b>Term 5</b> |  |              |
| CVL082        | Strength of Materials I.....                   | 4            |
| DRF071        | Machine Design Lab I.....                      | 3            |

|        |   |   |
|--------|---|---|
| CS145  | Microcomputer Software/Hardware Evaluation..... | 4 |
|        | or  |   |
| MFG069 | QC Fundamentals/CMM Operation .....             | 4 |
| MFG095 | CAM Applications .....                          | 5 |
| Term 6 |   |   |
| COM053 | Technical Report Writing .....                  | 3 |
|        | or  |   |
| WR227  | Technical Writing.....                          | 3 |
| DRF066 | Tool Design Lab I.....                          | 3 |
| DRF087 | Flexible Manufacturing Systems.....             | 3 |
| MFG096 | CAD-CAM Integrations.....                       | 5 |

## 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 preschools, 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.

### Child Development Certificate

The Child Development Certificate program is for students seeking to enter the early childhood education field, but particularly Head Start teachers and other employed teachers who seek "on-the-job" training. This two-term certificate provides introductory training only and may not be suitable for everyone. (Please contact program chair Bruce Stam at 399-6071 for further information.) Students completing the Child Development Certificate may apply their credits toward completion of the one-year Early Childhood Education Certificate and the two-year associate degree. Students completing this program may also be employed as classroom aides in preschools, day care centers, family day care homes, and Head Start programs.



Participants will be enrolled in 13 credits of classroom instruction and 18 credits of Cooperative Work Experience.

*In addition to tuition, estimated costs for students who complete the one-year program are books, \$170; and class fees, \$5. 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> |  |              |
| ECE068A       | Observing the Preschool Experience.....                | 1            |
| ECE151        | Observing and Guiding Behavior.....                    | 3            |
| ECE280I       | Cooperative Work Experience.....                       | 9            |
| HDFS247       | Preschool Child Development.....                       | 3            |
|               | or   |              |
| HDFS249       | Introduction to Working with Infants and Toddlers..... | 3            |
| <b>Term 2</b> |  |              |
| ECE068B       | Observing the Preschool Experience.....                | 1            |
| ECE068C       | Observing the Preschool Experience.....                | 1            |
| ECE280I       | Cooperative Work Experience.....                       | 9            |
| HDFS248       | Learning Experiences for Young Children.....           | 4            |

### 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; immunization fees, \$10; basic first aid card, \$25; conference registration, \$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 51 required credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| ECE068A       | Observing Preschool Experiences.....                           | 1            |
| ECE150        | Introduction and Observation in Early Childhood Education..... | 3            |
| ECE161        | Infant/Toddler Practicum.....                                  | 3            |
| HDFS222       | Family Relationships.....                                      | 3            |
| HDFS225       | Prenatal, Infant and Toddler Development.....                  | 3            |
| HDFS249       | Introduction to Working with Infants and Toddlers.....         | 3            |
| <b>Term 2</b> |  |              |
| ECE068B       | Observing Preschool Experiences.....                           | 1            |
| ECE151        | Observing and Guiding Behavior.....                            | 3            |
| ECE152        | Creative Activities.....                                       | 3            |
| ECE155        | Child Nutrition.....   | 2            |
|               | or   |              |
| FN225         | Nutrition.....   | 4            |
| ECE162        | Early Child Educator Orientation.....                          | 2            |
| HDFS247       | Preschool Child Development.....                               | 3            |
| WR121         | English Composition-Exposition (or higher)....                 | 3            |
| <b>Term 3</b> |  |              |
| ECE068C       | Observing Preschool Experiences.....                           | 1            |
| ECE153        | Music and Movement for Young Children.....                     | 3            |
| ECE154        | Children's Literature and Literacy.....                        | 3            |
| ECE163        | Preschool Practicum.....                                       | 4            |
| HDFS229       | Development in Middle Childhood.....                           | 3            |
| HDFS248       | Learning Experiences for Young Children.....                   | 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; immunization fees, \$10; basic first aid card, \$25; conference registration, \$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 94 credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| ECE068A       | Observing Preschool Experiences.....                           | 1            |
| ECE150        | Introduction and Observation in Early Childhood Education..... | 3            |
| ECE161        | Infant/Toddler Practicum.....                                  | 3            |
| HDFS222       | Family Relationships.....                                      | 3            |
| HDFS225       | Prenatal, Infant and Toddler Development.....                  | 3            |
| HDFS249       | Introduction to Working with Infants and Toddlers.....         | 3            |
| <b>Term 2</b> |  |              |
| ECE068B       | Observing Preschool Experiences.....                           | 1            |
| ECE151        | Observing and Guiding Behavior.....                            | 3            |
| ECE152        | Creative Activities.....                                       | 3            |
| ECE155        | Child Nutrition.....   | 2            |
|               | or   |              |
| FN225         | Nutrition.....   | 4            |
| ECE162        | Early Child Educator Orientation.....                          | 2            |
| HDFS247       | Preschool Child Development.....                               | 3            |
| WR121         | English Composition-Exposition (or higher)....                 | 3            |
| <b>Term 3</b> |  |              |
| ECE068C       | Observing Preschool Experiences.....                           | 1            |
| ECE153        | Music and Movement for Young Children.....                     | 3            |
| ECE154        | Children's Literature and Literacy.....                        | 3            |
| ECE163        | Preschool Practicum.....                                       | 4            |
| HDFS229       | Development in Middle Childhood.....                           | 3            |
| HDFS248       | Learning Experiences for Young Children.....                   | 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> |  |              |
| ECE280D       | Cooperative Work Experience.....                               | 4            |
| ED258         | Multicultural Education.....                                   | 3            |
|               | or   |              |
| ED268         | Educating the Mildly and Severely Handicapped.....             | 3            |
| 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 undergradu-

ate 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

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|  | Term |     |     |
|--|------|-----|-----|
|  | 1    | 2   | 3   |
| <b>First Year</b>  |      |     |     |
| 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 (at UO), 243 or MTH251, 252, 253 Calculus; SOSC recommends MTH251, 252, 253 for graduate work.)* | 5    | 4   | 4   |
| HPE295 Health and Fitness for Life* or electives   | 3    |     |     |
| Electives*   |      | 3   | 3-6 |
| <b>Second Year</b>   | 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.

\*\*OSU recommends three or more calculus courses for students interested in graduate study.

## 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). EOSC requires passing California Basic Educational Skills Test (CBEST) in addition to 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>  | 1    | 2   | 3   |
| 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) or Life Science or Earth Science sequence for EOSC  | 3-4  | 3-4 | 3-4 |
| Literature sequence (ENG104, 105, 106 Introduction to Literature or ENG107, 108, 109 World Literature recommended for WOSC; EOSC requires only ENG104)*  | 3    | 3   | 3   |
| Social Science courses (EOSC requires 20-26 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)*   |      | 3   |     |
| Speech elective (SP111 recommended)*   |      |     | 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>   | 4    | 5   | 6   |
| MTH211, 212, 213 Foundations of Elementary Mathematics (if not taken first year)   | (3)  | (3) | (3) |
| Creative Arts Electives (for WOSC courses in ART, MUS or TA)*  | 3    | 3   | 3   |
| Science Sequence (BI101, 102, 103 General Biology; BI231, 232, 233 Human Anatomy and Physiology; or G201, 202, 203 Geology and a chemistry sequence; or GS104, 105, 106 Physical Science or PH201, 202, 203 General Physics for EOSC)* | 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; HST257, 258, or 259 Introduction to Ethnic History for EOSC)*   | 3    | 3   |     |
| Electives in an academic specialty and/or support area for WOSC or 2 minor areas for EOSC. 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 Eastern Oregon State College and Western Oregon State College, which offer Bachelor of Science and Bachelor of Arts degrees in secondary education. Eastern Oregon State College, Oregon State University, Portland State University, Southern Oregon State College, and University of Oregon, 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 California

Basic Educational Skills Test (CBEST) or 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 CBEST.

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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

## Electronics Technologies

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

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 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 department 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 Electronics Engineering Technician, Computer Electronics, and Microelectronics/Industrial Electronics programs have 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 these programs will depend on your skills in these areas.

For tours of the electronics laboratory or career information, contact 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. 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 a DOS/Windows-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; DOS/Windows-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            |

|               |  |   |
|---------------|--|---|
| ESO71         | Work Place Safety Skills.....                  | 1 |
| MTH081        | Technical Mathematics I.....                   | 4 |
|               | or   |   |
| MTH111        | College Algebra.....                           | 5 |
| <b>Term 2</b> |  |   |
| 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 |
| <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 Circuits Fundamentals.....               | 3 |
| ELT071        | Linear IC Fundamentals.....                    | 4 |
| <b>Term 4</b> |  |   |
| 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 Communication..... | 3 |
|               | and  |   |
| FE205         | Job Search Techniques.....                     | 1 |
| <b>Term 5</b> |  |   |
| 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 |
| <b>Term 6</b> |  |   |
| 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 microelectronics and semiconductor manufacturing systems, 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. 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            |
| 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<br>Small Group Communication ..... | 3            |
|               | and  |              |
| FE205         | Job Search Techniques .....                        | 1            |
| CS133U        | C Language.....                                    | 4            |
|               | or   |              |
| ELT091        | Programming Concepts I (recommended) .....         | 4            |
| ELT067        | Digital Circuit Applications.....                  | 3            |
| 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 electronics 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<br>(for second-year students with prior<br>approval of the program chair) |   |
| MTH252 | Integral Calculus.....  | 5 |
| PH203  | General Physics.....  | 4 |
| PH213  | General Physics for Engineers and Scientists .....  | 5 |

## Microelectronics/Industrial Electronics Option

Graduates of this option may begin a career assisting in the development, manufacturing, installation, and service of computer-integrated manufacturing systems, semiconductor and microelectronic manufacturing equipment, 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). For additional information, contact the industrial electronics advisor, Frank Knight, at 399-5046.

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. If you intend to transfer, declare your intent before the first term and work closely with the industrial electronics advisor 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            |
| 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<br>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 Pneumatics/Hydraulics .....       | 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            |

\*Approved chemistry, mechanical, hydraulics, vacuum technology, microelectronics theory, or statistical process control experience or courses may be substituted for some or all of the Cooperative Work Experience credits.

### Advanced Technology Endorsement

If you already have an associate degree in electronics or are a journeyman electronics technician, this endorsement can help you get the skills needed to advance your career. This endorsement can also build on your past experience and help you obtain the skills needed by

Oregon's new, high-growth, microelectronics/semiconductor industry. To be admitted to this program you must be interviewed by the electronics program chair Gary Boyington, 399-5218, and have your past experience evaluated. Your past experience must include writing, science, math, and technical expertise similar to the A.A.S. degrees in electronics offered by Chemeketa. If you are lacking equivalent experience in any of these areas, a program of study will be developed for you during the interview. This program will not begin until fall of 1996; however, students needing to enhance their portfolio before entering the program may do so beginning this fall.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$500; class fees, \$109; equipment and supplies, \$77. 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 49 credit hours:

|               |   |   |
|---------------|---|---|
| <b>Term 1</b> |   |   |
| CH201         | Chemistry for Engineers .....                     | 4 |
|               | or  |   |
| CH121         | College Chemistry.....                            | 5 |
| DRF086        | Power Transmission Design*.....                   | 3 |
| ELE080        | Introduction to Microelectronics*.....            | 3 |
| MTH243        | Probability and Statistics .....                  | 4 |
|               | or  |   |
| MTH241        | Elementary Calculus.....                          | 4 |
|               | or  |   |
| MTH251        | Differential Calculus (or higher).....            | 5 |
|               | or  |   |
| MTH231        | Discrete Mathematics .....                        | 4 |
| WR122         | English Composition-Logic and Style .....         | 3 |
| <b>Term 2</b> |   |   |
| SP113         | Fundamentals of<br>Small Group Communication..... | 3 |
| CH202         | Chemistry for Engineers .....                     | 4 |
|               | or  |   |
| CH122         | College Chemistry .....                           | 5 |
| ELE090        | High Vacuum Systems*.....                         | 3 |
| MFG079        | Industrial Systems*.....                          | 3 |
| CS060         | Techniques of User Training .....                 | 2 |
|               | or  |   |
| BA224         | Personnel Management .....                        | 3 |
|               | or  |   |
| BA199C        | Entrepreneurship.....                             | 3 |
|               | or  |   |
| MFG079        | Total Quality Manufacturing .....                 | 4 |
| <b>Term 3</b> |   |   |
| PSY246        | Industrial Psychology .....                       | 3 |
|               | or  |   |
| PSY101        | Psychology of Human Relations.....                | 3 |
| CH203         | Chemistry for Engineers .....                     | 4 |
|               | or  |   |
| CH123         | College Chemistry .....                           | 5 |
|               | or  |   |
| PH203         | General Physics.....                              | 4 |
| DRF089        | Flexible Manufacturing*.....                      | 3 |
| ELT079        | Introduction to Pneumatics/Hydraulics * .....     | 3 |
| ELT075        | Advanced Industrial Electronics*.....             | 4 |

\*Cooperative Work Experience or advanced technical electives may be substituted.

## Emergency Medical Technology—Paramedic

The Emergency Medical Technology—Paramedic (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, \$221; 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 ...                   | 5            |
| EMT075  | Introduction to Emergency Medical Service ...                    | 3            |
| MED051  | Medical Terminology I .....                                      | 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            |
| MTH070  | Elementary Algebra (or higher) .....                             | 4            |
| AH080   | Crisis Intervention.....   | 3            |
| <b>Term 3</b>                                 |  |              |
| BI233   | Human Anatomy and Physiology (or higher) .                       | 4            |
| EMT069  | EMT Rescue.....  | 3            |
| EMT070  | Emergency Communication<br>and Patient Transportation .....      | 3            |
|   | Social Science elective .....                                    | 3            |
|   | or<br>Humanities/fine arts elective .....                        | 3            |
| <b>Term 4</b>                                 |  |              |
| CS101   | Introduction to Microcomputer Applications .                     | 3            |
| EMT090  | Emergency Medical Technician Paramedic,<br>Part 1 .....          | 8            |
| EMT091  | Emergency Medical Technician Paramedic,<br>Part 1 Clinical ..... | 2            |
| SP111   | Fundamentals of Speech .....                                     | 3            |
| <b>Term 5</b>                                 |  |              |
| EMT092  | Emergency Medical Technician Paramedic,<br>Part 2 .....          | 8            |
| EMT093  | Emergency Medical Technician Paramedic,<br>Part 2 Clinical ..... | 3            |
| EMT280B                                       | Cooperative Work Experience.....                                 | 2            |
|   | Social Science elective .....                                    | 3            |
|   | or<br>Humanities/fine arts elective .....                        | 3            |
| <b>Term 6</b>                                 |  |              |
| EMT094  | Emergency Medical Technician Paramedic,<br>Part 3 .....          | 4            |
| EMT095  | Emergency Medical Technician Paramedic,<br>Part 3 Clinical ..... | 3            |
| EMT280D                                       | Cooperative Work Experience.....                                 | 4            |
| HPE295  | Health and Fitness for Life .....                                | 3            |
|   | Approved elective (may be taken any term) ....                   | 3            |
| <b>*Approved electives (3 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            |
| ASL101  | 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 |

|                    |   |       |     |     |
|--------------------|---|-------|-----|-----|
| CS161              | Computer Science I required for Electrical Engineering)   | (3-4) |     |     |
| GE102              | Engineering Computations (not required for Electrical Engineering; CS162 Computer Science II-C Language required for Electrical Engineering)                              | 3-4   |     |     |
| GE103              | Engineering Computations  |       |     | 3   |
| MTH251, 252        | Calculus and Calculus with Analytic Geometry; MTH254 Vector Calculus I  | 5     | 5   | 4   |
| CH201, 202         | Chemistry for Engineers Biological Science course*  | 4     | 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   |
| <b>Second Year</b> |   |       |     |     |
| ENGR211            | Statics   | 4     | 5   | 6   |
| ENGR212            | Dynamics  | 4     | 4   |     |
| ENGR213            | Strength of Materials (not required for Electrical Engineers)   |       |     | (4) |
| ENGR201, 202       | Electrical Fundamentals I & II (ENGR202 not required for Civil Engineering)   | 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 (not required for Mechanical or Civil 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* | 5     | 5   | 5   |
|                    |   |       | 0-6 | 0-6 |

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

Note: The above requirements are for the fields of Civil, Mechanical, and Electrical Engineering. For other fields of Engineering contact the program advisor.

## 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 OSU, 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 OSU, 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.

The two-year program outlined below is designed to meet prerequisite requirements for OSU. 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, 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term |   |   |
|--|------|---|---|
| First Year   | 1    | 2 | 3 |
| GE101 Engineering Orientation  | 2    |   |   |
| GE115 Engineering Graphics (not required for Electrical Engineering; |      |   |   |

## 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | 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)   | 1    | 2   | 3   |
| Literature sequence (ENG204, 205, 206 Introduction to English Literature and ENG253, 254, 255 Introduction to American Literature for EOSC; choose two sequences from ENG107, 108, 109 World Literature, ENG204, 205, 206, or ENG253, 254, 255 for OSU; PSU recommends ENG204, 205, 206; SOSC requires one sequence from ENG104, 105, 106 Introduction to Literature, or ENG107, 108, 109, or ENG201, 202, 203 Introduction to Shakespeare; choose three courses from ENG107, 108, 109, ENG204, 205, 206, ENG253, 254, 255 for UO) | 3    | 3   | 3   |
| First-year Foreign Language (required at EOSC, OSU, PSU, and UO; required for B.A. degree at SOSC and WOSC but not for B.S. degree)  | 4    | 4   | 4   |
| Social Science courses   | 3    | 3   | 3   |
| Science or Math* (SOSC requires three courses in math, computer science, statistics or logic for BS degree)  | 4    | 4   | 4   |
| <b>Second Year</b>   | 4    | 5   | 6   |
| ENG201, 202, 203 Introduction to Shakespeare; EOSC requires ENG201; OSU and UO require any one course; PSU and WOSC do not require any)  | 3    | 3   | 3   |
| Second-year Foreign Language sequence (required at EOSC, OSU, PSU, and UO) or electives  | 4    | 4   | 4   |
| Arts and Letters/Humanities 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 courses to meet major requirements or electives (J216 News-writing and WR241, 242, or 243 Imaginative Writing for EOSC)   | 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 Campus, 472-9482.*

The program includes the following:

### 9801 Farm Management I

Includes a survey of business principles, farm management skills, farm 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 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 farm 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.

*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 99 required credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| EMT051        | Emergency Medical Technician Basic, Part 1             | 5            |
| 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         | Introduction to Microcomputer Applications (or higher) | 3            |
| EMT052        | Emergency Medical Technician Basic, Part 2             | 3            |

|   |   |   |
|---|---|---|
| EMT280A   | Cooperative Work Experience                             | 1 |
| FRP052  | Fire Incident Related Experience                        | 3 |
| PH111   | Physical Science for Fire Science and Emergency Service | 5 |
| WR121   | English Composition-Exposition (or higher)              | 3 |
| <b>Term 3</b>                                   |   |   |
| CH111   | Chemistry for Fire Science and Emergency Services       | 5 |
| FRP053  | Fire Incident Related Experience                        | 3 |
| FRP054  | Water Supply Operations                                 | 3 |
| FRP058  | Fire Pump Construction and Operation                    | 3 |
| FRP069  | Fire Department Leadership                              | 3 |
| <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*                                     | 5 |
| <b>Term 6</b>                                   |   |   |
| FRP063  | Fire Incident Related Experience                        | 3 |
| FRP079  | Wildland Urban Interface                                | 3 |
| PSY101  | Psychology Human Relations (or higher)                  | 3 |
| WR227   | Technical Writing                                       | 3 |
|   | Approved electives*                                     | 3 |
| <b>*Approved electives (18 hours required):</b> |   |   |
| BA255   | Elements of Supervision                                 | 3 |
| BLD050  | Introduction to Building Inspection                     | 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 Tactics and Strategy                    | 3 |
| FRP066  | Building Construction for Fire Suppression              | 3 |
| FRP070  | Fire Fighting Tactics and Strategy                      | 3 |
| FRP071  | Fire Protection Systems and Extinguishers               | 3 |
| FRP072  | Fire Codes and Ordinances                               | 3 |
| FRP073  | Firefighters Law  | 3 |
| FRP074  | Fire Investigation                                      | 3 |
| FRP075  | Aircraft Crash/Fire Rescue                              | 1 |
| FRP077  | Fire Service Instructor Training                        | 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 informa-

tion, 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 100 credit hours:

| Course   | Title   | Credit Hours |
|--|---|--------------|
| <b>Term 1</b>                                  |   |              |
| CS101  | Introduction Microcomputer Applications (or higher).....      | 3            |
| FRP050   | Introduction to Fire Protection .....                         | 3            |
| FRP060   | Fundamentals of Fire Prevention .....                         | 3            |
| MTH095   | Intermediate Algebra .....                                    | 4            |
|  | or  |              |
| MTH111   | College Algebra (or higher).....                              | 5            |
| WR121  | English Composition-Exposition (or higher) ...                | 3            |
| <b>Term 2</b>                                  |   |              |
| FRP066   | Building Construction for Fire Suppression.....               | 3            |
| FRP072   | Fire Codes and Ordinances.....                                | 3            |
| FRP081   | Fire Prevention Inspection .....                              | 3            |
| PH111  | Physical Science for Fire Science and Emergency Services..... | 5            |
| PSY101   | Psychology of Human Relations (or higher).....                | 3            |
| <b>Term 3</b>                                  |   |              |
| CH111  | Chemistry for Fire Science and Emergency Services.....        | 5            |
| FRP071   | Fire Protection Systems and Extinguishers .....               | 3            |
| FRP089   | Fire Codes and Ordinances 2.....                              | 3            |
| SP111  | Fundamentals of Speech (or higher) .....                      | 3            |
| WR227  | Technical Writing.....  | 3            |
| <b>Term 4</b>                                  |   |              |
| BLD051   | Building Codes 1 .....  | 3            |
| DRP059   | Print Reading.....  | 3            |
| FRP074   | Fire Investigation .....                                      | 3            |
| FRP080   | Hazardous Materials for Inspection.....                       | 3            |
| FRP280C  | Cooperative Work Experience .....                             | 3            |
|  | Approved electives*.....                                      | 3            |
| <b>Term 5</b>                                  |   |              |
| BLD052   | Building Codes 2 .....  | 3            |
| FRP073   | Fire Fighter's Law .....                                      | 3            |
| FRP086   | Advanced Detection and Protection Systems .....               | 3            |
| FRP088   | Fire Prevention Education Programs .....                      | 3            |
| FRP280C  | Cooperative Work Experience .....                             | 3            |
| <b>Term 6</b>                                  |   |              |
| BLD067   | Nonstructural Plan Review .....                               | 3            |
| FRP054   | Water Supply Operations.....                                  | 3            |
| FRP084   | Public Information for the Fire Service .....                 | 2            |
| FRP087   | Fire Insurance Fundamentals .....                             | 3            |
| FRP280C  | Cooperative Work Experience .....                             | 3            |
|  | Approved electives*.....                                      | 3            |
| <b>*Approved electives (6 hours required):</b> |   |              |
| BLD081   | Mechanical Codes I.....                                       | 3            |
| FRP064   | Hazardous Materials Operations .....                          | 3            |
| FRP065   | Interface Fire Prevention and Mitigation.....                 | 2            |
| FRP067   | Hazardous Materials Regulations .....                         | 3            |
| FRP068   | Law Enforcement for Fire Protection .....                     | 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            |
| FRP083   | Incident Report Writing.....                                  | 2            |
| FRP086   | Advanced Detection and Protection Systems .....               | 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, Univer-

sity 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; UO offers degrees in Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, and Spanish; and SOSC and WOSC offer a degree in Spanish. Eastern Oregon State College offers a degree in Liberal Studies with a concentration in French, German, or Spanish.

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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | 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* (PSU recommends history and geography classes of countries in which the language is spoken)  | 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*(SOSC recommends SP115 Introduction to Intercultural Communication)   | 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 CS101 Introduction to Microcomputers) | 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 or complete an alternative prescribed by the faculty.

## 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, \$607; class fees, \$152; equipment and supplies, \$255. 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> |   |              |
| COM051        | Communication Skills I.....                           | 3            |
|               | or  |              |
| WR121         | English Composition-Exposition .....                  | 3            |
| FRT051        | Introduction to Natural Resources .....               | 3            |
| FRT052        | Leadership Seminar .....                              | 1            |
| FRT053        | Computer Applications/Natural Resources .....         | 3            |
| FRT055        | Elementary Forest Surveying .....                     | 3            |
| MTH052        | Introduction to Algebra and Geometry (or higher)..... | 3            |
| <b>Term 2</b> |   |              |
| ES071         | Work Place Safety Skills.....                         | 1            |
| FRT052        | Leadership Seminar .....                              | 1            |
| FRT061        | Western Oregon Tree and Shrub Identification 1.....   | 3            |

|        |  |   |
|--------|--|---|
| FRT063 | Photo Interpretation .....                                   | 3 |
| FRT065 | Forest Resource Protection .....                             | 4 |
| MTH053 | Introduction to Trigonometry with Geometry (or higher) ..... | 3 |

| <b>Term 3</b> |  |   |
|---------------|--|---|
| AUM091        | Power Systems .....                                  | 4 |
| DRP072        | Introduction to AutoCAD .....                        | 3 |
| FRT052        | Leadership Seminar .....                             | 1 |
| FRT062        | Western Oregon Tree and Shrub Identification 2 ..... | 3 |
| FRT071A       | Forest Resources Inventory 1-Lecture .....           | 3 |
| FRT071B       | Forest Resources Inventory 2-Lab .....               | 2 |

| <b>Term 4</b> |  |   |
|---------------|--|---|
| CVL060A       | Plane Surveying 1-Lecture.....             | 3 |
| CVL060B       | Plane Surveying 1-Lab .....                | 2 |
| FRT052        | Leadership Seminar .....                   | 1 |
| FRT072A       | Forest Resources Inventory 2-Lecture ..... | 3 |
| FRT072B       | Forest Resources Inventory 2-Lab .....     | 2 |
| BI131         | Environmental Science 1 .....              | 4 |
| FRT081        | Natural Resource Management 1 .....        | 3 |

| <b>Term 5</b> |                                 |   |
|---------------|---------------------------------|---|
| BI132         | Environmental Science 2 .....   | 4 |
| CVL061A       | Plane Surveying 2-Lecture ..... | 3 |
| CVL061B       | Plane Surveying 2-Lab .....     | 2 |
| COM052        | Communication Skills II .....   | 3 |
|               | or                              |   |
| SP111         | Fundamentals of Speech .....    | 3 |
| FRT052        | Leadership Seminar .....        | 1 |
| FRT086        | Methods of Supervision .....    | 3 |

| <b>Term 6</b> |  |   |
|---------------|--|---|
| FRT052        | Leadership Seminar .....                       | 1 |
| FRT075        | Forestry Reports and Contracts.....            | 3 |
| FRT082        | Natural Resource Management 2.....             | 3 |
| FRT087        | Forest Field Study .....                       | 4 |
| PSY101        | Psychology of Human Relations (or higher) .... | 3 |

## Forestry

(college transfer)

Oregon State University offers degrees in Forest Engineering, Forest Management, Forest Products, and Forest Recreation Resources and Natural 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, Forest Recreation Resources or Natural 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 contact with an advisor at OSU to learn of any possible changes in a program.



Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term |     |     |
|---|------|-----|-----|
|   | 1    | 2   | 3   |
| <b>First Year</b>   |      |     |     |
| BI101, 102, 103 General Biology (not required for Forest Recreation Resources-choose 8 hours of science electives)*                               |      |     |     |
| CH121 College Chemistry for Forest Management   | 4    | 4   | 4   |
| Mathematics (per placement test through MTH241 Elementary Calculus; Forest Management also requires MTH243 Probability and Statistics)            | 5    |     |     |
| WR121 English Composition Writing and/or Speech* (SP111 Fundamentals of Speech or SP112 Fundamentals of Persuasion for Forest Management)         | 4-5  | 4-5 | 4-5 |
| HPE295 Health and Fitness for Life or elective  | 3    |     |     |
| Electives* (EC201 Introduction to Microeconomics, 202 Introduction to Macroeconomics for Forest Management; EC201 for Forest Recreation Resource) |      | 3   | 3   |
|   |      | 0-3 |     |
|   | 3    | 3   | 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27. Chemeketa also offers an Associate of General Studies

Degree. Specific requirements are listed on Page 32.

|   | 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*   | 3    | 3   | 3   |
| Mathematics per placement test* 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* Electives (UO requires one sequence chosen from ART204, 205, 206 Art History; TA121, 122, 123 Fundamentals of Acting; or MUS201, 202, 203 Introduction to Music and Its Literature)   | (3)  |     |     |
|   | 0-3  | 0-3 | 0-3 |
| <b>Second Year</b>  | 4    | 5   | 6   |
| Arts and Letters/Humanities*  | 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 EOCS and SOCS; UO requires PHIL201, 202, 203 Problems of Philosophy and Elementary Ethics; WOSC requires study from two or more academic areas with a minimum of 27 hours in each.) |      |     |     |
|   | 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas,

Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term     |          |          |
|--|----------|----------|----------|
| First Year   | 1        | 2        | 3        |
| WR121, 122 and/or 123 English Composition  | 3        | 3        | (3)      |
| GEOG105, 106, 107 Introductory Geography (not all schools require all three courses; GEOG 105, 201, 202 The Developed World and the Developing World for PSU)  | 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; MTH243 Probability & Statistics for PSU; UO has four choices to meet requirements [see UO catalog for courses.]) | 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>   | <b>4</b> | <b>5</b> | <b>6</b> |
| Social Science electives* (EOSC requires EC201 Introduction to Microeconomics and PS201, 202 American Government)  | 3        | 3        | 3        |
| Science electives* (EOSC requires G201, 202 Geology; recommended for OSU)  | 4        | 4        | 4        |
| Arts and Letters/Humanities electives* Electives (CS101 Introduction to Microcomputer Applications required for EOSC and SOSC; CS113 Understanding Computers for PSU)  | 3        | 3        | 3        |
|  | 6        | 6        | 6        |

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

\*\*A three-term sequence in calculus or MTH241, 243, (and 242 at UO) 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | 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>   | <b>4</b> | <b>5</b> | <b>6</b> |
| PH201, 202, 203 General Physics or PH211, 212, 213 General Physics for Engineers and Scientists (OSU recommends PH211, 212, 213; UO allows BI101, 102, 103 General Biology in place of Physics)  | 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 Introduction to Microcomputer Applications required for OSU)  |          |          | (3)      |
| Electives (OSU requires four credits of a biological science; CCC recommends a CS course)  | 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, and Western Oregon State College. EOSC's degree is in Physical Education and Health. OSU offers options in Environmental Health and Safety, Health Promotion and Education, and Health Care Administration; PSU offers options in Community Health Education and Health and Fitness Promotion. SOSC offers a Health and Physical Education degree, WOSC offers a degree in Education with a non-teaching and a teaching option.

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 con-

sult 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

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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 and Occupational Safety at OSU and SP111 Fundamentals of Speech for Occupational Safety at OSU)  | 3    | 3 | (3) |
| BI231, 232, 233 Anatomy and Physiology for EOSC, OSU and SOSC except Health Care Administration at OSU (BI101, 102, 103 General Biology prerequisite for several required courses at WOSC and required for some OSU options)  | 4    | 4 | 4   |
| 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 MTH243 Probability and Statistics; MTH111 for Health and Fitness at PSU; Occupational Safety and Environmental Health at OSU require MTH241; MTH111 for PSU.) | 4    | 4 | 4   |
| HPE295 Health and Fitness for Life* (required for major at EOSC)  | 3    |   |     |
| HE250 Personal Health (required at EOSC, OSU, SOSC, and WOSC)   |      | 3 |     |
| Arts and Letters/Humanities*  | 3    | 3 | 3   |
| Electives** (BI234 Microbiology for OSU and WOSC and for Community Health at PSU; BA101 Business Environment and BA226 Business Law for Occupational Safety at OSU.)  |      |   | 3   |
| <b>Second Year</b>  | 4    | 5 | 6   |
| CH121, 122, 123 College Chemistry (not required at SOSC and WOSC or for Health Care Administration at OSU)  | 5    | 5 | 5   |
| Social Science courses to meet four-year college general education or major requirements (Some OSU options require EC201, 202 Introduction to Microeconomics and Macroeconomics and/or PSY201, 202 General Psychology and/or SOC204 General Sociology; PSY201 for PSU; WOSC requires PSY201, 202)   | 6    | 6 | 6   |
| SP111 Fundamentals of Speech* (required for Occupational Safety at OSU and for WOSC; SP111 and 114 Interpersonal Communication for Health and Fitness at PSU)   | 3    |   |     |
| Electives* to meet four-year college general education or major require-  |      |   |     |

ments (Some OSU options require FN225 Nutrition and CS101 Introduction to Microcomputer Applications; Occupational Safety at OSU requires PH201, 202, 203 General Physics; and Environmental Health and Safety requires PH201, BA101 Business Environment and BA226 Business Law; PSU requires CS101 and HE209 Human Sexuality and HPE295 Health and Fitness for Life for some options; PE131 Introduction to Physical Education for non-teaching option at WOSC.)

6 3-6 6

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

\*\*See OSU catalog for Health Care Administration requirement.

## Health Services Management

The Health Services Management 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. Short-term programs must be taken as a block; requirements may not be fulfilled by individual courses. The one-year program allows you to be trained as a 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            |
| MED061        | Health Information Systems Procedures I..... | 4            |
| MED066        | Medical Reimbursement Management .....       | 3            |
| OA121         | Keyboarding .....                            | 3            |
| <b>Term 2</b> |  |              |
| AH199C        | Health Care Issues .....                     | 3            |
| FE205         | Job Search Techniques .....                  | 1            |
| MED052        | Medical Terminology II.....                  | 3            |
| MED065        | Introduction Medical Coding System .....     | 3            |
| MED280E       | Cooperative Work Experience .....            | 4            |
| OA061A,B      | Electronic Calculators.....                  | 1 ea.        |
| 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 33 required credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| MED011        | Health Care Skills .....                         | 1            |
| MED051        | Medical Terminology I.....                       | 3            |
| MED061        | Health Information Systems Procedures I.....     | 4            |
| MED066        | Medical Reimbursement Management .....           | 3            |
| OA121         | Keyboarding .....                                | 3            |
| <b>Term 2</b> |  |              |
| FE205         | Job Search Technique.....                        | 1            |
| MED052        | Medical Terminology II.....                      | 3            |
| MED062        | Health Information Systems Procedures II .....   | 5            |
| MED065        | Introduction to Medical Coding Applications..... | 3            |
| MED280D       | Cooperative Work Experience .....                | 4            |
| OA210         | Office Microcomputer Applications.....           | 3            |

## One-Year Program

### Alert!

If you plan to begin this program *after* fall term 1995, see the "Alert" section on Page 79 (first column).

## Health Information Technician

As a graduate of the Health Information Technician program, you may become a health information or administrative medical office technician, or you may continue your education in medical record technology and administration programs at other schools.

As a health information or administrative medical office 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> |   |              |
| BI071         | Body Structure and Function I.....            | 3            |
|               | or  |              |
| BI231         | Human Anatomy and Physiology .....            | 4            |
| MED051        | Medical Terminology .....                     | 3            |
| MED055        | Medical Law and Ethics.....                   | 3            |
| MED061        | Health Information Systems Procedures I.....  | 4            |
| MED075A       | Professional Development .....                | 1            |
| 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 .....          | 3            |
|               | or  |              |
| BI232         | Human Anatomy and Physiology .....            | 4            |
|               | or  |              |
| BI233         | Human Anatomy and Physiology .....            | 4            |
| MED052        | Medical Terminology II.....                   | 3            |
| MED060        | Medical Transcription .....                   | 3            |
| MED062        | Health Information System Procedures II ..... | 5            |
| MED066        | Medical Reimbursement Management.....         | 3            |
| MED075B       | Professional Development .....                | 1            |
| <b>Term 3</b> |   |              |
| FE205         | Job Search Techniques.....                    | 1            |
| MED064        | Introduction to Medical Science.....          | 3            |
| MED065        | Introduction to Medical Coding Systems.....   | 3            |
| MED075C       | Professional Development .....                | 1            |
| MED077        | Health Information Systems Practices.....     | 6            |
| MED078        | Medical Practice Seminar .....                | 1            |

**Two-Year Programs**

**Alert!**

If you plan to begin this program *after* fall term 1995, see the "Alert" section on Page 79 (first column).

**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 transfer to a four-year institution to continue coursework in public health care administration. The combination of technical/professional courses and lower division transfer courses will give you a wide variety of options.

*In addition to tuition, estimated costs for students who complete the entire second year are books, \$400; class fees, \$25; equipment and 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 the required 91 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.

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| BI071         | Body Structure and Function I .....                         | 3            |
|               | or  |              |
| BI231         | Human Anatomy and Physiology .....                          | 4            |
| PSY101        | Psychology of Human Relations (or higher).....              | 3            |
| MED051        | Medical Terminology I.....                                  | 3            |
| MED055        | Medical Law and Ethics .....                                | 3            |
| MED061        | Health Information Systems Procedures I.....                | 4            |
|               | or  |              |
| MED056        | Medical Assisting, Basic Procedures.....                    | 4            |
|               | or  |              |
| CPL120        | Credit for Prior Learning .....                             | 3            |
| <b>Term 2</b> |   |              |
| BI072         | Body Structure and Function II .....                        | 3            |
|               | or  |              |
| BI232         | Human Anatomy and Physiology .....                          | 4            |
|               | or  |              |
| BI233         | Human Anatomy and Physiology .....                          | 4            |
| MED052        | Medical Terminology II.....                                 | 3            |
| MED062        | Health Information Systems Procedures II .....              | 5            |
| MED066        | Medical Reimbursement Management .....                      | 3            |
| SOC204        | General Sociology .....                                     | 3            |
| <b>Term 3</b> |   |              |
| CS101         | Introduction to Microcomputer Applications (or higher)..... | 3            |
| MED053        | Medical Terminology III .....                               | 3            |
| MED064        | Introduction to Medical Science .....                       | 3            |
| MTH105        | Introduction to Contemporary Mathematics (or higher).....   | 4            |
| WR121         | English Composition-Exposition (or higher) ...              | 3            |
| <b>Term 4</b> |   |              |
| BA206         | Business Management Principles (or higher)....              | 3            |

|               |  |   |
|---------------|--|---|
| EC200         | Introduction to Economics (or higher) .....              | 3 |
| H210          | Introduction to Health Services .....                    | 3 |
| WR227         | Technical Writing .....                                  | 3 |
| <b>Term 5</b> |  |   |
| H250          | Health Service Management I .....                        | 3 |
| OA200         | Introduction to Information Processing (or higher) ..... | 3 |
| SP111         | Fundamentals of Speech (or higher) .....                 | 3 |
|               | Business elective** .....                                | 3 |
|               | Humanities elective .....                                | 3 |
| <b>Term 6</b> |  |   |
| H251          | Health Services Management II .....                      | 3 |
| MED083        | Introduction to Health Care Monitoring .....             | 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 for BA222 and BA223)

**Alert!**

If you plan to begin this program *after* fall term 1995, see the "Alert" section on Page 79 (first column).

**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 fees, \$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 these 95 required 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 Procedures ..... | 3            |
|               | or   |              |
| OA210         | Office Microcomputer Applications .....      | 3            |

|               |   |    |
|---------------|---|----|
| <b>Term 2</b> |   |    |
| BI072         | Body Structure and Function II .....            | 3  |
|               | or  |    |
| BI232         | Human Anatomy and Physiology .....              | 4  |
|               | 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  |
| MED075B       | Professional Development .....                  | 1  |
| MED053        | Medical Terminology III .....                   | 3  |
| MED064        | Introduction to Medical Science .....           | 3  |
| MED070        | Advanced Transcription I .....                  | 3  |
| OA099         | Proofreading/Editing .....                      | 3  |
| <b>Term 4</b> |   |    |
| MED055        | Medical Law and Ethics .....                    | 3  |
| MED061        | Health Information System Procedures I .....    | 4  |
| MED071        | Advanced Transcriptionist .....                 | 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 Mathematics .....                      | 3  |
| SP114         | Interpersonal Communications .....              | 3  |
| <b>Term 6</b> |   |    |
| MED073        | Medical Transcription Seminar .....             | 1  |
| MED280        | Cooperative Work Experience .....               | 12 |
|               | Humanities elective .....                       | 3  |
|               | or  |    |
|               | Social Science elective .....                   | 3  |

### Alert!

If you plan to begin this program *after* fall term 1995, you will need to take part in an assessment to determine your readiness to begin the program. If you do not have the prerequisites to enter the program, you may need to complete an individualized plan. The plan may include one or more of the following preparatory courses:

| Course  | Title  | Credit Hours |
|---------|--|--------------|
| AH051   | Health Occupations Overview A .....                            | 2            |
| BI071   | Body Structure and Function I .....                            | 3            |
| MED050A | Introduction to Medical Terminology A .....                    | 1            |
| MTH065  | Introductory Algebra .....                                     | 4            |
| RD090   | College Textbook Reading .....                                 | 3            |
| WR040   | Writing Skills .....   | 3            |
| AH052   | Health Occupations Overview B .....                            | 2            |
| BI072   | Body Structure and Function II .....                           | 3            |
| CS101   | Introduction to Microcomputer Applications .....               | 3            |
| MED050B | Introduction to Medical Terminology B .....                    | 1            |
| SP118   | Interpersonal Communication<br>in the Health Professions ..... | 3            |
| WR115   | Introduction to Composition .....                              | 3            |

*In addition to tuition, estimated costs for students who complete the preparatory courses listed above are books, \$850; class fees, \$140; equipment and supplies, \$150. Contact the Financial Aid Office to find out if you qualify for help with these costs.*

## 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term     |          |          |
|---|----------|----------|----------|
| First Year  | 1        | 2        | 3        |
| WR121, 122 and/or 123 English Composition   | 3        | 3        | (3)      |
| HST110, 111, 112 World History (not required at UO)   | 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. and recommended by OSU) | 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 I; SOSOC requires CS101)  |          | 3        | 6        |
| <b>Second Year</b>  | <b>4</b> | <b>5</b> | <b>6</b> |
| HST201, 202, 203 History of the United States (not required at OSU and UO)  | 3        | 3        | 3        |
| Mathematics per placement test*   | 4        | 4-5      |          |
| Arts and Letters/Humanities* (EOSC and OSU recommend 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*  | 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)

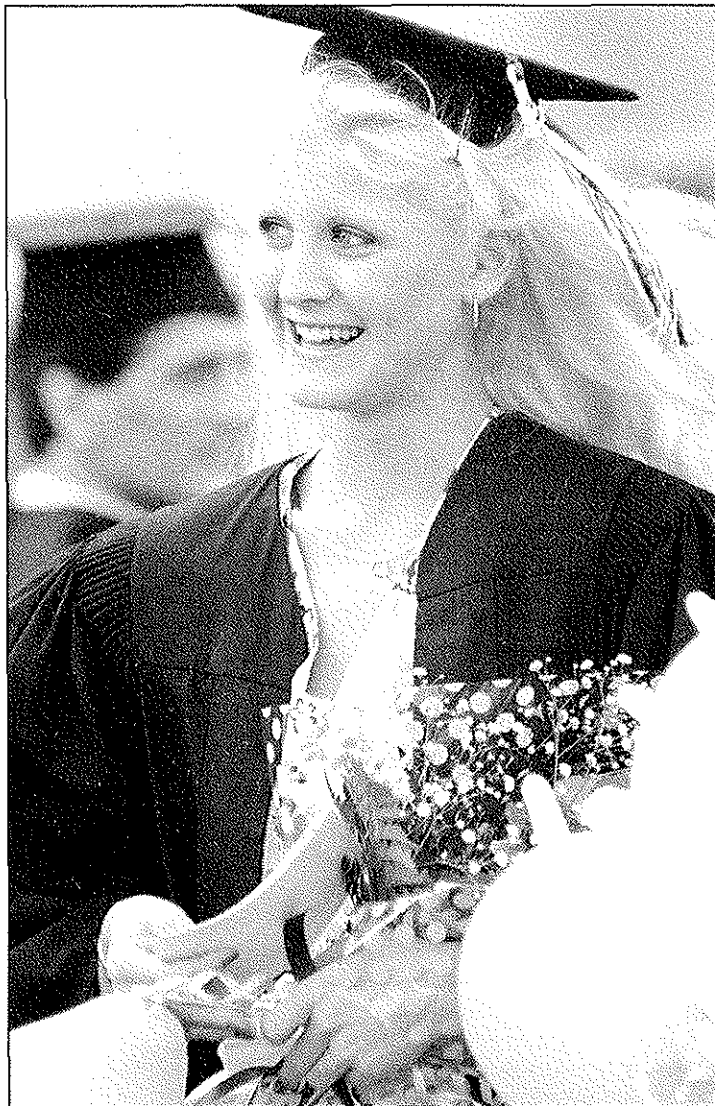
Oregon State University offers a Bachelor of Science degree in Home Economics. Students major in Apparel, Interiors, Housing, Merchandising, or Human Development and Family Science; or Nutrition and Food Management. There are several options for each major. It is

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 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 OSU to learn of any possible changes in a program.

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.



|  | Term |     |     |
|--|------|-----|-----|
|  | 1    | 2   | 3   |
| <b>First Year</b>  |      |     |     |
| WR121 English Composition  | 3    |     |     |
| Writing or Speech electives* or **   |      | 3   | 3   |
| Mathematics per placement (through MTH105 Introduction to Contemporary Mathematics or MTH111 College Algebra or MTH2111, 212, 213 Foundations of Elementary Mathematics depending on major; some majors require higher math) | (4)  | 4-5 |     |
| HPE295 Health and Fitness for Life   |      |     | 3   |
| Biological and Physical Science**  | 4-5  | 4-5 | 4-5 |
| Social Science**(PSY 201, 202 General Psychology and HST111, 112 World History required in most options)   | 6    | 3   | 6   |
| Literature and Arts elective* (ART115 Basic Design required in most majors)  | 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 these 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<br>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            |
| WR122         | English Composition-Logic and Style<br>(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<br>Professional Speaking (or higher) .....         | 3            |
| <b>Term 5</b> |   |              |
| BA051         | Accounting Procedures I.....                                    | 4            |
|               | or  |              |
| BA211         | Financial Accounting I.....                                     | 4            |
| BA224         | Personnel Management .....                                      | 3            |
| HSM070        | Travel Agent Basics I .....                                     | 3            |
| HSM083        | Hotel, Restaurant and Travel Law.....                           | 3            |
| HSM087        | Foundations in Resource<br>Recreation Management .....          | 3            |
| <b>Term 6</b> |   |              |
| BA052         | Accounting Procedures II.....                                   | 4            |
|               | or  |              |
| BA212         | Financial Accounting II .....                                   | 4            |
| CS101         | Introduction to<br>Microcomputer Applications (or higher) ..... | 3            |
| FS073         | Hospitality Systems Management .....                            | 3            |
| HSM280C       | Cooperative Work Experience.....                                | 3            |
| WR227         | Technical Writing.....  | 3            |

### Travel Agency Operations

The Travel Agency Operations program offers technical training to persons who wish to work in the travel and tourism industry.

The curriculum covers technical and general education courses. Classes on the role, structure, and components of the travel industry; geography; and computer reservation systems are complemented by courses in verbal and written communication skills, human resources, and career management. The program combines classroom instruction with internships which offer students the opportunity to gain practical experience at travel industry job sites.

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 HSM280 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 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 addition to tuition, estimated costs for students who complete the entire program are books, \$285; class fees, \$20. 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> |  |              |
| HSM070        | Travel Agency Basics.....                                | 3            |
| HSM071        | Travel Agency Sales and Marketing .....                  | 3            |
| HRTM104       | Introduction to the<br>Travel and Tourism Industry ..... | 3            |
| <b>Term 2</b> |  |              |
| HSM072        | Travel Agency Management.....                            | 3            |
| HSM073        | Travel Destination Geography.....                        | 3            |
| SP113         | Fundamentals of Small<br>Group Communication.....        | 3            |
|               | or   |              |
| SP114         | Interpersonal Communication .....                        | 3            |
|               | or   |              |
| SP115         | Intercultural Communication .....                        | 3            |
| <b>Term 3</b> |  |              |
| FE205         | Job Search Techniques.....                               | 1            |
| HSM074        | Computer Reservation Systems .....                       | 3            |
| HSM280I       | Cooperative Work Experience.....                         | 9            |

## 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 SOSC 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 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 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

| Course        | Title                                      | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| CS101         | Introduction to Microcomputer Applications | 3            |
| ENG104        | Introduction to Fiction                    | 3            |
| HSM080        | Introduction to the Hospitality Industry   | 3            |
| WR121         | English Composition-Exposition             | 3            |
|               | Science sequence                           | 4            |
| <b>Term 2</b> |  |              |
| ENG105        | Introduction to Dramatic Literature        | 3            |
| HRTM105       | Introduction to the 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 social service agencies. It is a two-year program which combines academic course work with five quarters of supervised field work in two different sites. Students specialize in one of three options: Alco-

hol and Drug, Gerontology, or Social Services training.

This program has special admissions requirements and enrollment limits. For additional information, 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.

WR121 and all Human Services courses used to meet degree requirements must be completed with a grade of C or better.

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.

### Alcohol and Drug Option

The Alcohol and Drug option trains students to work in public and private agencies treating chemically dependent people and their families. Training sites include both inpatient and outpatient programs.

The curriculum includes courses in alcohol and drug information, family dynamics, youth addiction, criminality, and counseling skills for individual and group work.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$745; class fees, \$17; 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 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            |
| HS292A-       |  |              |
| HS296A        | Practicum: Human Services                        | 4-8          |
| SP112         | Fundamentals of Persuasion                       | 3            |
|               | or   |              |
| SP130         | Business and Professional Speaking               | 3            |
| <b>Term 3</b> |  |              |
| HS201         | Family Alcoholism                                | 3            |
| HS155         | Interviewing Theory and Techniques               | 3            |
| HS292A-       |  |              |

|   |  |     |
|---|--|-----|
| HS296A  | Practicum: Human Services .....                                  | 4-8 |
| MTH052  | Introduction to Algebra and Geometry<br>(or higher).....         | 3   |
| PSY201  | General Psychology .....   | 3   |
| <b>Term 4</b>                                       |  |     |
| HS202   | Counseling the Chemically Dependent<br>Client I.....             | 3   |
| HS292A-<br>HS296A                                   | Practicum: Human Services .....                                  | 4-8 |
| CS101   | Introduction to Microcomputer Applications .....                 | 3   |
| SOC204  | General Sociology .....  | 3   |
|   | Alcohol and drug elective* .....                                 | 3   |
| <b>Term 5</b>                                       |  |     |
| FE205   | Job Search Techniques .....                                      | 1   |
| HS203   | Counseling the Chemically Dependent<br>Client II.....            | 3   |
| HS292A-<br>HS296A                                   | Practicum: Human Services .....                                  | 4-8 |
| PSY202  | General Psychology .....   | 3   |
| SOC205  | General Sociology .....  | 3   |
|   | Humanities/fine arts elective.....                               | 3   |
|   | or<br>Science/applied science elective .....                     | 3   |
| <b>Term 6</b>                                       |  |     |
| HS204   | Counseling the Chemically Dependent<br>Client III .....          | 3   |
| HS267   | Systems Strategies.....  | 3   |
| HS292A-<br>HS296A                                   | Practicum: Human Services .....                                  | 4-8 |
| PSY237  | Growth and Development.....                                      | 3   |
| SSC150  | Ethnic Cultures of the Willamette Valley .....                   | 3   |
| <b>*Alcohol and drug electives (3 hours total):</b> |  |     |
| 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<br>and Offenders.....          | 3   |
| HS262   | Misuse and Abuse of Alcohol<br>and Drugs Among the Elderly ..... | 1   |
| MS259   | Death and Dying.....   | 3   |
| PSY239  | Introduction to Abnormal Behavior .....                          | 3   |

## Gerontology Option

The Gerontology option trains students for employment in programs for older citizens. These programs include recreation, protective services, housing, mental health, and long-term care.

The curriculum 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 program are books, \$877; class fees, \$27; 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 a gerontology placement.

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| HS150         | Personal Effectiveness<br>for Human Service Workers ..... | 3            |
| HS154         | Community Resources .....                                 | 3            |



|                   |  |     |
|-------------------|--|-----|
| HS170             | Introduction to Practicum .....                          | 3   |
| HS220             | Aging and Society.....                                   | 3   |
| WR121             | English Composition-Exposition.....                      | 3   |
| <b>Term 2</b>     |  |     |
| HS152             | Stress Management.....                                   | 1   |
| HS221             | Physical Aging .....                                     | 3   |
| HS260             | Group Dynamics .....                                     | 3   |
| HS292G-<br>HS296G | Practicum: Human Services.....                           | 4-8 |
| SP112             | Fundamentals of Persuasion .....                         | 3   |
|                   | or<br>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   |
| HS292G-<br>HS296G | Practicum: Human Services.....                           | 4-8 |
| MTH052            | Introduction to Algebra and Geometry<br>(or higher)..... | 3   |
| <b>Term 4</b>     |  |     |
| CS101             | Introduction Microcomputer Applications.....             | 3   |
| HS265             | Casework Interviewing.....                               | 3   |
| HS292G-<br>HS296G | Practicum: Human Services .....                          | 4-8 |
| PSY201            | General Psychology.....                                  | 3   |
| SOC204            | General Sociology.....                                   | 3   |
| <b>Term 5</b>     |  |     |
| FE205             | Job Search Techniques.....                               | 1   |
| HS292G-<br>HS296G | Practicum: Human Services.....                           | 4-8 |
| PSY202            | General Psychology.....                                  | 3   |
| SOC205            | General Sociology.....                                   | 3   |
|                   | Gerontology elective*.....                               | 3   |
|                   | Humanities/fine arts elective .....                      | 3   |
|                   | or<br>Science/applied science elective.....              | 3   |
| <b>Term 6</b>     |  |     |
| HS267             | Systems Strategies.....                                  | 3   |
| HS292G-<br>HS296G | Practicum: Human Services.....                           | 4-8 |
| PSY237            | Growth and Development .....                             | 3   |
| SSC150            | Ethnic Cultures of the Willamette Valley.....            | 3   |

|  |  |   |
|--|--|---|
|  | Gerontology elective* .....                                  | 3 |
| <b>*Gerontology electives (6 hours total):</b> |  |   |
| BA299D   | Introduction to Elder Law .....                              | 3 |
| ES071  | Workplace Safety Skills .....                                | 1 |
| HS165  | Activity Director Training/Long-Term Care .....              | 3 |
| HS262  | Misuse and Abuse of Alcohol and Drugs<br>Among Elderly ..... | 1 |
| HS266  | Case Management .....  | 3 |
| MS259  | Death and Dying .....  | 3 |
| PE185DA  | Beginning Low Impact-Aerobics .....                          | 1 |
| PE185DB  | Intermediate Low Impact-Aerobics .....                       | 1 |
| PE185DC  | Advanced Low Impact-Aerobics .....                           | 1 |
| PHL205   | Biomedical Ethics .....                                      | 3 |

## Social Services Option

The Social Services option trains students for employment in social welfare agencies. These agencies provide services in areas such as crisis counseling, employment services, children's protective services, public welfare, housing, mental health, corrections and advocacy.

The curriculum includes courses in interviewing, counseling, assessment, and case management.

*In addition to tuition, estimated costs for students who complete the entire program are books, \$822; class fees, \$17; 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<br>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            |
| HS292S-<br>HS296S | Practicum: Human Services .....                           | 4-8          |
| PSY202            | General Psychology .....                                  | 3            |
| SP112             | Fundamentals of Persuasion .....                          | 3            |
|                   | or  |              |
| SP130             | Business and Professional Speaking .....                  | 3            |
| <b>Term 3</b>     |   |              |
| HS101             | Alcohol Use, Misuse and Addiction .....                   | 3            |
| HS155             | Interviewing Theory and Techniques .....                  | 3            |
| HS292S-<br>HS296S | Practicum: Human Services .....                           | 4-8          |
| MTH052            | Introduction to Algebra and Geometry<br>(or higher) ..... | 3            |
| PSY237            | Growth and Development .....                              | 3            |
| <b>Term 4</b>     |   |              |
| CS101             | Introduction to Microcomputer Applications .....          | 3            |
| HS265             | Casework Interviewing .....                               | 3            |
| HS292S-<br>HS296S | Practicum: Human Services .....                           | 4-8          |
| SOC204            | General Sociology .....                                   | 3            |
|                   | Social services elective* .....                           | 3            |
| <b>Term 5</b>     |   |              |
| FE205             | Job Search Techniques .....                               | 1            |
| HS266             | Intervention Strategies II .....                          | 3            |
| HS292S-<br>HS296S | Practicum: Human Services .....                           | 4-8          |
| SOC205            | General Sociology .....                                   | 3            |
|                   | Social services elective* .....                           | 3            |

|                   |  |
|-------------------|--|
| <b>Term 6</b>     |  |
| HS267             | Systems Strategies .....                       |
| HS292S-<br>HS296S | Practicum: Human Services .....                |
| SSC150            | Ethnic Cultures of the Willamette Valley ..... |
|                   | Social services elective* .....                |
|                   | Humanities/fine arts elective .....            |
|                   | or   |
|                   | Science/applied science elective .....         |

**\*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.

## 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. Achieve journeyman status in a skilled occupation.
2. Complete a minimum of 30 credit hours or equivalent at Chemeketa.
3. Complete general education requirements for an Associate of Applied Science degree. (See Page 31 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 offers 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 help you become a teacher's assistant in public schools and institutions. Students complete a one-year certificate program and then may work towards an Associate of General Studies degree (see requirements on Page 32. Completion of degree requirements enables you to transfer to Portland State University, where you may complete a Bachelor of Arts degree and are then able to apply to a teacher licensing program.

Students take a core of required courses, including practicum. Classes are offered in four general areas: instruction, non-instructional support, human relations, and communication. In addition, you will receive training in working with bilingual/multicultural children, assisting children who are in special education programs, and acquire the skills necessary to help children via computer-assisted instruction. Each term you will participate in worksite practicums to gain valuable experience and to practice skills learned in classes. You are required to earn a grade of C or higher in all courses in order to participate in a practicum.

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 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.

## Certificate of Completion

*In addition to tuition, estimated costs for students who complete the two-year program are books, \$410; class fees, \$78; 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 46 required credit hours:

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| CS101         | Introduction to Microcomputer Applications (or higher)..... | 3            |
| ED101         | Introductory Observation and Experience .....               | 3            |
| ED110         | Psychology of Learning .....                                | 3            |
| ED258         | Multi-Cultural Education .....                              | 3            |
| WR115         | Introduction to Composition (or higher).....                | 3            |
| <b>Term 2</b> |   |              |
| ED102         | Practicum .....   | 3            |
| ED111         | Teaching Lab.....   | 1            |
| ED123         | Classroom Techniques in Reading and Language .....          | 3            |
| ED131         | Teaching Techniques.....                                    | 3            |
| ED133         | Instructional Media and Materials .....                     | 3            |
| ED217         | Comprehensive Classroom Management.....                     | 3            |
| <b>Term 3</b> |   |              |
| ED103         | Practicum .....   | 6            |

|        |   |   |
|--------|---|---|
| ED124  | Classroom Techniques in Mathematics and Science ..... | 3 |
| MTH051 | Basic Mathematics (or higher) .....                   | 3 |
| SP114  | Interpersonal Communication .....                     | 3 |

# Journalism

(college transfer)

The University of Oregon offers Bachelor of Arts and Bachelor of Science degrees in Journalism. Southern Oregon State College offers Bachelor of Arts and Bachelor of Science degrees in Communication: Journalism with concentration in News-Editorial, Public Relations, Photojournalism, Sports Information, and Secondary Teaching.

The program outlined below is designed to meet requirements at these institutions. 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, 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term |   |     |
|---|------|---|-----|
|   | 1    | 2 | 3   |
| <b>First Year</b>   |      |   |     |
| WR121, 122 and/or 123 English Composition* (WR227 Technical Writing for SOSC)   | 3    | 3 |     |
| Humanities courses* (SOSC recommends two years of literature and foreign language)  | 3    | 3 | 3   |
| Social Science courses (HST110, 111, 112 History of World Civilization or HST201, 202, 203 History of the United States recommended at SOSC)  | 3    | 3 | 3   |
| Mathematics per placement test*   | (4)  | 5 | (4) |
| J224 Introduction to Journalism   | 3    |   |     |
| Electives (Chemeketa recommends two additional Journalism classes as electives chosen from J215 Publications Lab, J216 Newswriting, J217 Feature Writing, J225 Advertising/Public Relations, J226 Layout/Production; J216 required and QA205 Desktop Publishing I recommended for SOSC)** | 3    | 3 | 6   |

|   |     |     |     |
|---|-----|-----|-----|
| <b>Second Year</b>  | 4   | 5   | 6   |
| Social Science or other elective courses* (SOSC recommends one year of political science)   | 3-4 | 3-4 | 3-4 |
| Humanities or Social Science courses* (EC201 Introduction to Microeconomics, EC202 Introduction to Macroeconomics, EC203 Applications to Economic Issues recommended at SOSC)   | 3   | 3   | 3   |
| Science courses*  | 4   | 4   | 4   |
| Electives (Check SOSC for electives for each option; ART260 General Photography and SP115 Introduction to Intercultural Communication; choose courses for general education requirement at UO required in most options) | 6   | 6   | 6   |

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

\*\*UO will only accept two journalism courses besides J224 from a community college.



## 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, \$1,211; 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 96 credit hours:

| Course        | Title                                     | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| BA101         | Business Environment .....                | 4            |
| BA202         | Personal Effectiveness .....              | 3            |
| BA211         | Financial Accounting I* .....             | 4            |
| OA085         | Business English II** .....               | 3            |
|               | Approved Social Science elective*** ..... | 3            |
| <b>Term 2</b> |   |              |
| BA203         | Interpersonal Relations in Business.....  | 3            |
| BA212         | Financial Accounting II* .....            | 4            |

|        |                                 |   |
|--------|---------------------------------|---|
| BA214  | Business Communications** ..... | 3 |
| MTH095 | Intermediate Algebra** .....    | 4 |

### Term 3

|         |                                      |   |
|---------|--------------------------------------|---|
| BA204   | Teamwork Dynamics .....              | 3 |
| BA206   | Business Management Principles ..... | 3 |
| BA213   | Managerial Accounting .....          | 4 |
| BA238   | Sales and Persuasion .....           | 3 |
| CS125SS | LOTUS I-Worksheets.....              | 3 |

### Term 4

|       |                                     |   |
|-------|-------------------------------------|---|
| BA215 | Cost Accounting .....               | 3 |
| BA223 | Principles of Marketing .....       | 3 |
| BA226 | Business Law I .....                | 3 |
| EC200 | Introduction to Economics.....      | 3 |
| FE205 | Job Search Techniques.....          | 1 |
|       | Humanities/fine arts elective ..... | 3 |

### Term 5

|       |   |   |
|-------|---|---|
| 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 |

### Term 6

|       |  |   |
|-------|--|---|
| 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 MTH070 or higher math placement.

\*\*Placement in math and English determined by testing. MTH062 may be substituted for MTH070. 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, \$555; class fees, \$145; equipment and supplies, \$250. 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 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        | Introduction to Algebra<br>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        | Introduction to Trigonometry<br>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 several 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, \$974; class fees, \$310; equipment and supplies, \$265. 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        | Introduction to Algebra<br>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        | Introduction to Trigonometry<br>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 level Physics) .....              | 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term     |          |          |
|--|----------|----------|----------|
| First Year   | 1        | 2        | 3        |
| WR121, 122 and/or 123, English Composition and/or WR227 Technical Writing*   | 3        | 3        | (3)      |
| Mathematics per placement test*<br>MTH251, 252, 254 Calculus required (EOSC requires MTH253 Series Calculus and Linear Algebra instead of MTH254; UO requires MTH231 Discrete Mathematics, or other math at UO.) 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**<br>(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<br>(EOSC requires at least 7 hours of computer science; CS161 Computer Science I-C Language or other higher-level language for OSU; CS161 or CS133F FORTRAN IV for PSU; CS133F 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>   | <b>4</b> | <b>5</b> | <b>6</b> |
| Mathematics through MTH255 Vector Calculus II and MTH253 Series and Linear Algebra (OSU also requires MTH256; PSU and UO require MTH256 instead of MTH255; MTH255 not required at SOSC and WOSC.)  | 4        | (4)      | (4)      |
| Science courses* (OSU requires PH211 General Physics for Engineers and Scientists and 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 the Ph.D. program.

## Medical Office Assisting

The Medical Office Assisting program prepares you for a wide range of duties in medical offices. Administrative 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 administrative functions and processing insurance claims, accounts, fees, and collections.

Your clinical duties may include assisting with examinations and treatments, obtaining medical histories, sterilizing instruments and equipment, and performing certain diagnostic tests and laboratory procedures in a health care facility.

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.

Medical Office Assisting is a fall-term entry program with 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, \$603; class fees, \$102; equipment and supplies, \$375; physical examination, \$100; 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 51 required credit hours:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| AH050         | Health Care Delivery Systems .....             | 1            |
| BI071         | Body Structure and Functions I .....           | 3            |
|               | or   |              |
| BI231         | Human Anatomy and Physiology .....             | 4            |
| 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 .....           | 3            |
|               | or   |              |
| BI232         | Human Anatomy and Physiology .....             | 4            |
|               | or   |              |
| BI233         | Human Anatomy and Physiology .....             | 4            |
| 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 .....                | 5 |
| OA090         | Bookkeeping .....                            | 3 |
| PSY101        | Psychology of Human Relations .....          | 3 |

### Alert!

If you plan to begin this program *after* fall term 1995, you will need to take part in an assessment to determine your readiness to begin the program. If you do not have the prerequisites to enter the program, you may need to complete an individualized plan. The plan may include one or more of the following preparatory courses:

| Course  | Title  | Credit Hours |
|---------|--|--------------|
| AH051   | Health Occupations Overview A .....                            | 2            |
| BI071   | Body Structure and Function I .....                            | 3            |
| MED050A | Introduction to Medical Terminology A .....                    | 1            |
| MTH065  | Introductory Algebra .....                                     | 4            |
| RD090   | College Textbook Reading .....                                 | 3            |
| WR040   | Writing Skills .....   | 3            |
| AH052   | Health Occupations Overview B .....                            | 2            |
| BI072   | Body Structure and Function II .....                           | 3            |
| CS101   | Introduction to Microcomputer Applications .....               | 3            |
| MED050B | Introduction to Medical Terminology B .....                    | 1            |
| SP118   | Interpersonal Communication<br>in the Health Professions ..... | 3            |
| WR115   | Introduction to Composition .....                              | 3            |

*In addition to tuition, estimated costs for students who complete the preparatory courses listed above are books, \$93 and class fees, \$22. Contact the Financial Aid Office to find out if you qualify for help with these costs.*



## 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).

Completion of the following four subject areas and courses is required for application to the Nursing program:

1. Algebra (MTH065 or MTH070), or one year of high school algebra, or placement in MTH095 based upon the results of a Chemeketa placement test.
2. Chemistry (CH100, CH104, or CH121, or CH221), or one year of high school chemistry. A full sequence of chemistry is recommended for students planning to pursue a four-year degree.
3. Anatomy and Physiology, BI231.

### 4. Nursing Success Strategies, NUR060.

These requirements must be completed by the end of spring term of the application year with a grade C or higher, and within five years prior to submitting an application.

In addition to the four prerequisite subject areas and courses, most pre-nursing students complete some general education and science courses required for the Nursing program in order to enhance their chance of admission. Specific entry requirements are outlined in a pre-nursing packet that you may obtain from the Advising and Counseling Center. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact the Admissions Office at 399-5006, or the Advising and Counseling Center 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 certification 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, \$862; class fees, \$138; equipment and supplies, \$320; testing fee, \$88. 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> |                                      |              |
| BI232         | Human Anatomy and Physiology .....   | 4            |
| NUR106        | Nursing .....                        | 9            |
| PSY201        | General Psychology .....             | 3            |
| <b>Term 2</b> |                                      |              |
| BI233         | Human Anatomy and Physiology .....   | 4            |
| NUR108        | Nursing .....                        | 9            |
| PSY237        | Growth and Development .....         | 3            |
| <b>Term 3</b> |                                      |              |
| BI234         | Medical Microbiology .....           | 4            |
| NUR109        | Nursing .....                        | 10           |
| 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, \$309; class fees, \$57; equipment and supplies, \$100; testing fee, \$88. 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 associate 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> |   |              |
| CS101         | Introduction to Microcomputer Applications*       | 3            |
| NUR206        | Nursing .....                                     | 10           |
| <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 Refresher Courses

The college also offers specialized and refresher courses to help registered nurses, licensed practical nurses, and other health care personnel keep abreast of current knowledge and new developments in nursing. Refresher 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 requirements before being admitted to the nursing major. A 2.5 GPA is required. Deadline for admission to the programs is February 15, 1996. 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 programs, 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 |     |     |
|--|------|-----|-----|
| First Year   | 1    | 2   | 3   |
| CH104, 105, 106 Chemistry for Allied Health or CH121, 122, 123 General Chemistry | 4-5  | 4-5 | 4-5 |

|   |     |     |     |
|---|-----|-----|-----|
| MTH11 College Algebra (begin math per placement test)   | 5   |     |     |
| MTH243 Probability and Statistics   | 4   |     |     |
| FN225 Nutrition   |     |     | 4   |
| WR121, 122, 123 English Composition or WR227 Technical Writing  | 3   | 3   | 3   |
| Humanities elective (Foreign Language, Philosophy, SP115 Intercultural Communication or ASL101, 102, 103 American Sign Language strongly recommended)         | 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   |     |
| Humanities electives  |     |     |     |
| SOC204 General Sociology (SOC205, SOC206 General Sociology may be substituted)  | 3   |     |     |
| PSY201 General Psychology   | 3   |     |     |
| PSY237 Growth and Development   |     | 3   |     |
| Literature elective   |     |     | 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 Administration elective preferred) |     | 3   |     |
| Electives (to total 91 transferable credit hours; CS101 Introduction to Microcomputers recommended.)  | 3   | 3   |     |

## Occupational Skills Training

The Occupational Skills Training program offers agency-sponsored students the opportunity to earn college credit for work-site-based training at an approved community training site. When you enroll in this short-term program (up to four terms), you will receive instruction based on a curriculum personalized for your chosen occupation and your individual abilities, skills, and interests. A suitable training site and curriculum will be determined jointly with your sponsoring agency and 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.

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.

*In addition to tuition of \$495 per term (\$1,980 for four terms), estimated costs for books and supplies for related classes are up to \$150 per term (\$600 for four terms). Consult with your sponsoring agency counselor regarding funding or contact the Financial Aid Office to find out if you qualify for help with these costs. NOTE: Some sites may receive an additional \$336 per term employer/trainer incentive in addition to the above tuition costs if approved by the sponsoring agency.*

You may earn a Certificate of Completion by successfully completing up to 60 credit hours of ST050 Occupational Skills Training and related prescribed courses based upon the ap-

proved length of your training plan. Up to 12 credit hours may be applied toward the Oregon Associate of Arts Transfer degree. Up to 36 credit hours may be applied toward the Associate of General Studies degree, and variable credits may be applied toward the Associate of Applied Science degree as determined by each professional-technical program area.

Interested agencies should contact the Occupational Skills Training Coordinator in the Cooperative Work Experience Office, Building 17, 399-5026 extension 3, 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 clerical basics 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 Expe-

rience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

### Clerical Basics Program

The clerical basics program allows you to concentrate on developing the basic skills required of receptionists, file clerks, bookkeepers, typists, and employees in other related positions. Independent study and individualized instruction can give you a comprehensive review of keyboarding, filing, business English, mathematics, calculators, machine transcription, bookkeeping, and proofreading. 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 campuses 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, \$427; class fees, \$56; equipment and supplies, \$35. 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 the required 27 credit hours listed below. Successful completion requires that you earn a grade C or higher in all courses.

#### 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                 | 1ea          |
| 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 I-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      |
| OA091  | Computerized Bookkeeping    | 3      |
| OA092  | Payroll Procedures          | 3      |
| 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, \$579; class fees, \$84; equipment and supplies, \$30. For students who complete the general clerical required courses: books, \$564; class fees, \$72; equipment and supplies, \$30. For students who complete the word processing required courses: books, \$501; 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 47 to 48 required credit hours in any of the three specialty areas. Successful completion requires that you earn a grade of C or better in all courses.

| 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        | 3            |
| <b>Term 3 (Bookkeeping)</b>                               |  |              |
| BA052   | Accounting Procedures II                 | 4            |
| BA214   | Business Communications                  | 3            |
| OA089   | Filing                                   | 2            |
| OA091   | Computer Bookkeeping                     | 3            |
| OA092   | Payroll Procedures                       | 3            |
| 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            |

|                                 |   |   |
|---------------------------------|---|---|
| OA202P                          | Word Processing Procedures II-WordPerfect                   | 3 |
| OA203                           | Advanced Formatting   | 1 |
| OA210                           | Office Microcomputer Applications                           | 3 |
|                                 | Business elective*  | 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 |
| OA202P                          | Word Processing Procedures II-WordPerfect                   | 3 |
| OA203                           | Advanced Formatting   | 1 |
| OA210                           | Office Microcomputer Applications                           | 3 |
| OA225ABC                        | Machine Transcription I                                     | 3 |
|                                 | Business elective* (OA119, OA204P,<br>or OA205 recommended) | 3 |

\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

## Two-Year Programs

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 want to increase your skills in order to advance 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. Successful completion requires that you earn a grade of C or better in all courses.

### 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, \$1,372; 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 97 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| CVL045        | Engineering Orientation<br>for the Office Professional                 | 1            |
| MTH061        | Business Mathematics   | 3            |
| MTH070        | Beginning Algebra  | 4            |
| OA084         | Business English I   | 3            |
| OA116         | Office Procedures I  | 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            |
| OA202P        | Word Processing Procedures II-WordPerfect                              | 3            |
| OA119         | Exploring Office Desktop Publishing                                    | 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        | Construction Estimating, Contracts<br>and Specifications               | 4            |
| OA210         | Office Microcomputer Applications                                      | 3            |
| <b>Term 6</b> |  |              |
| OA230         | Executive Office Simulations   | 3            |
|               | Business elective** (OA280 Cooperative<br>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 Communication  | 3            |
| OA203         | Advanced Formatting  | 1            |

\*If you select BA211, you may not use BA051 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, \$1,129; class fees, \$108; 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. Successful completion requires that you earn a grade of C or better in all courses.

| 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            |
| OA202P        | Word Processing Procedures II-WordPerfect .....                           | 3            |
|               | Business elective** .....   | 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 IA,B,C .....  | 3            |
| <b>Term 5</b> |   |              |
| BA212         | Financial Accounting II* .....  | 4            |
|               | or  |              |
| BA052         | Accounting Procedures II .....  | 4            |
| BA226         | Business Law I .....  | 3            |
| OA204P        | Advanced WordPerfect .....  | 3            |
| OA210         | Office Microcomputer Applications .....                                   | 3            |
|               | Business elective** .....   | 3            |
| <b>Term 6</b> |   |              |
| BA251         | Office Management .....   | 3            |
| OA203         | Advanced Formatting .....   | 1            |
| OA230         | Executive Office Simulation .....   | 3            |
|               | Business elective** (OA280 Cooperative Work Experience recommended) ..... | 4            |
|               | Humanities/fine arts elective .....                                       | 3            |
|               | or  |              |
|               | Science/applied science elective .....                                    | 3            |
|               | Social Science elective .....   | 3            |

\*If you select BA211 or BA212, you may not use BA051 or BA052 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, \$1,066; class fees, \$156; 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. Successful completion requires that you earn a grade of C or better in all courses.

| 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            |
|               | Business elective** .....   | 2            |
| <b>Term 3</b> |   |              |
| BA214         | Business Communications .....   | 3            |
| OA061         | Electronic Calculators .....  | 2            |
| OA089         | Filing .....  | 2            |
| OA201D        | Word for Windows .....  | 3            |
|               | or  |              |
|               | Business elective** .....   | 3            |
| OA202P        | Word Processing Procedures II-WordPerfect .....   | 3            |
| <b>Term 4</b> |   |              |
| BA101         | Business Environment .....  | 4            |
| BA244         | Records Management .....  | 3            |
| OA205         | Desktop Publishing I .....  | 3            |
| OA225ABC      | Machine Transcription I .....   | 1ea          |
|               | Business elective** .....   | 3            |
| <b>Term 5</b> |   |              |
| BA211         | Financial Accounting I* .....   | 4            |
|               | or  |              |
| BA051         | Accounting Procedures I .....   | 4            |
| BA251         | Office Management .....   | 3            |
| OA204         | Advanced WordPerfect .....  | 3            |
| OA230         | Executive Office Simulation .....   | 3            |
|               | Business elective** (CS125SS LOTUS I-Worksheets or OA206 Desktop Publishing II recommended) ..... | 3            |
| <b>Term 6</b> |   |              |
| OA203         | Advanced Formatting .....   | 1            |
| 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 BA211, you may not use BA051 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, and typing from machine transcription. 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, \$1,061; class fees, \$180; 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. Successful completion requires that you earn a grade of C or better in all courses.

| Course        | Title   | Credit Hours |
|---------------|---|--------------|
| <b>Term 1</b> |   |              |
| BA101         | Business Environment .....  | 4            |
| OA084         | Business English I .....  | 3            |
| OA116         | Office Procedures I .....   | 3            |
| OA122         | Keyboard Skillbuilding .....  | 3            |
| OA200         | Introduction to Information Processing .....                              | 3            |
| <b>Term 2</b> |   |              |
| BA226         | Business Law I .....  | 3            |
| MTH061        | Business Math .....   | 3            |
| OA085         | Business English II .....   | 3            |
| OA130         | Introduction to the Law Office .....                                      | 4            |
| OA201P        | Word Processing Procedures I-WordPerfect .....                            | 3            |
| <b>Term 3</b> |   |              |
| BA214         | Business Communications .....   | 3            |
| OA119         | Exploring Office Desktop Publishing .....                                 | 3            |
| OA131         | Legal Office Procedures I .....   | 3            |
| OA202P        | Word Processing Procedures II-WordPerfect .....                           | 3            |
|               | Business elective** .....   | 3            |
| <b>Term 4</b> |   |              |
| BA244         | Records Management .....  | 3            |
| OA099         | Proofreading/Editing .....  | 3            |
| OA132         | Legal Office Procedures II .....  | 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            |
| OA061         | Electronic Calculators .....  | 2            |
| OA089         | Filing .....  | 2            |
| OA133         | Legal Machine Transcription .....   | 3            |
| OA210         | Office Microcomputer Applications .....                                   | 3            |
| OA204P        | Advanced WordPerfect .....  | 3            |
| <b>Term 6</b> |   |              |
| BA251         | Office Management .....   | 3            |
| OA203         | Advanced Formatting .....   | 1            |
| OA230         | Executive Office Simulation .....   | 3            |
|               | Business elective** (OA280 Cooperative Work Experience recommended) ..... | 4            |
|               | Social Science elective .....   | 3            |
|               | Humanities/fine arts elective .....                                       | 3            |
|               | or  |              |
|               | Science/applied science elective .....                                    | 3            |

\*If you select BA211, you may not use BA051 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, \$1,108; 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 96 credit hours. Successful completion

requires that you earn a grade of C or better in all courses.

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| MED051        | Medical Terminology I .....  | 3            |
| OA084         | Business English I .....   | 3            |
| OA116         | Office Procedures .....  | 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            |
| MED055        | Medical Law and Ethics .....   | 3            |
| OA099         | Proofread/Editing A .....  | 3            |
| OA119         | Exploring Office Desktop Publishing .....                                  | 3            |
| OA202P        | Word Processing Procedures I-WordPerfect .....                             | 3            |
|               | Business elective** .....  | 1            |
| <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            |
|               | or   |              |
| BI231         | Human Anatomy and Physiology .....   | 4            |
| OA210         | Office Microcomputer Applications .....                                    | 3            |
| OA225ABC      | Machine Transcription I .....  | 1ea          |
| <b>Term 5</b> |  |              |
| BA101         | Business Environment .....   | 4            |
| BA251         | Office Management .....  | 3            |
| BI072         | Body Structure and Function II .....                                       | 3            |
|               | or   |              |
| BI232         | Human Anatomy and Physiology .....   | 4            |
|               | or   |              |
| BI233         | Human Anatomy and Physiology .....   | 4            |
| MED054        | Medical Office Procedures .....  | 4            |
| MED060        | Medical Transcription .....  | 3            |
|               | or   |              |
| OA080         | Medical Machine Transcription .....  | 3            |
| <b>Term 6</b> |  |              |
| MED064        | Introduction to Medical Science .....                                      | 3            |
| OA203         | Advanced Formatting .....  | 1            |
| OA230         | Executive Office Simulation .....  | 3            |
| SP111         | Fundamentals of Speech .....   | 3            |
|               | or   |              |
| SP114         | Interpersonal Communication .....  | 3            |
|               | Business elective** (OA280, Cooperative Work Experience recommended) ..... | 3            |
|               | Social Science elective .....  | 3            |

\*If you select BA211, you may not use BA051 as a business elective.

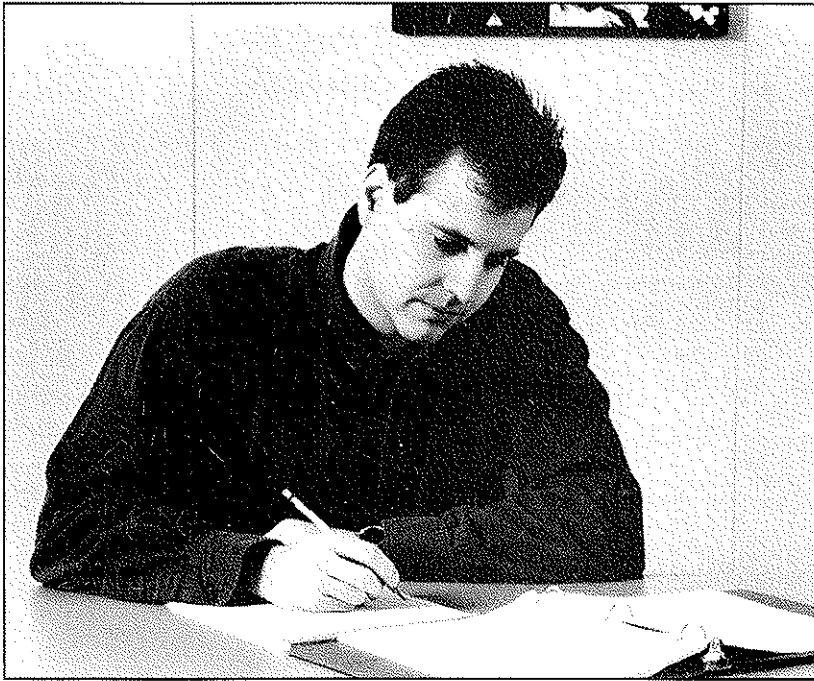
\*\*Business electives: Choose courses with prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121.

## 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, \$1,092; 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 97 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| BA211         | Financial Accounting I.....  | 4            |
|               | or   |              |
| BA051         | Accounting Procedures .....  | 4            |
| MTH061        | Business Mathematics.....  | 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            |
| OA091         | Computerized Bookkeeping .....                                     | 3            |
| 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            |
| OA092         | Payroll Procedures.....  | 3            |
| OA099         | Proofreading/Editing.....  | 3            |
| OA203         | Advanced Formatting .....  | 1            |
| <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            |
| OA230         | Executive Office Simulation .....                                  | 3            |
|               | Business elective** (CS125SS Lotus I-Worksheets recommended) ..... | 3            |
| <b>Term 6</b> |  |              |
| BA226         | Business Law I .....   | 3            |
| OA203         | Advanced Formatting .....  | 1            |
| 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 BA212, you may not use BA052 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 two-year program outlined below is designed to meet requirements at these institutions in two years. 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term |     |     |
|---|------|-----|-----|
|   | 1    | 2   | 3   |
| <b>First Year</b>   |      |     |     |
| WR121, 122 and/or 123 English Composition*  | 3    | 3   | (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 (OSU requires 12 credits in computer science and quantitative studies; UO requires two years of foreign language)   | 3    | 3   | 3   |
| <b>Second Year</b>  | 4    | 5   | 6   |
| PHI201, 202 Problems of Philosophy, PHI203 Elementary Ethics and/or PH204 Introduction to Logic (PHI201, 203, and 204 Introduction to Logic required at PSU; none required at OSU; UO requires 9 credits from PHI201, 202, 203, 204) 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, University of Oregon, and Western Oregon State College. OSU 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. WOSC has teaching and non-teaching options. 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | 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 and UO; 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 (not required at all schools)  | 2        | 2        | 2        |
| CH121, 122, 123 College Chemistry or CH221, 222, 223 General Chemistry required at EOSC, OSU and UO; choose electives for other colleges   | (5)      | (5)      | (5)      |
| PE131 Introduction to Physical Education (recommended; required at WOSC)   | 3        |          |          |
| Elective (PH201, 202, 203 General Physics required at UO)  |          |          | (3)      |
| <b>Second Year</b>   | <b>4</b> | <b>5</b> | <b>6</b> |
| Social Science courses (PSY201, 202 General Psychology for OSU and UO; PSY201, 202 for Athletic Training option at SOSC; SOC204 General Sociology for Sports Leadership at OSU)* | 3        | 3        | 3        |
| HPE295 Health and Fitness for Life* (EOSC, OSU, WOSC)  |          | 3        |          |
| HE250 Personal Health (not required at UO or for some options at OSU)  | 3        |          |          |
| Science courses* (BI231, 232, 233 Human Anatomy and Physiology for EOSC, OSU, and SOSC; BI101, 102, 103 General Biology for UO and WOSC)   | 4        | 4        | 4        |
| Social Science or other electives*   | 3        | 3        | 3        |
| Arts and Letters/Humanities* or electives (FN225 Nutrition required for some options at 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.



|   | Term  |       |       |
|---|-------|-------|-------|
|   | 1     | 2     | 3     |
| <b>First Year</b>   |       |       |       |
| Mathematics per placement test (Math through MTH254 Vector Calculus I recommended; 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; CH121, 122, 123 also accepted at UO)   | 5     | 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 (OSU requires MTH251 Differential Calculus through MTH256 Applied Differential Equation; EOSC, PSU and UO require MTH253 Series Calculus and MTH254 Linear Algebra, and 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 CS161 Computer Science I-C Language; OSU requires CS161 and BI101, 102, or 103 General Biology; PSU requires BI101, 102, 103; G201, 202, 203 Geology; or other approved courses in a related area of science or computer 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 and/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. 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | 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 required for OSU; CS101 Introduction to Microcomputer Applications for SOSC; Foreign Language or MTH105 Contemporary Math, MTH111 College Algebra, MTH243 Probability and Statistics for UO) | 3    | 3   | 3   |
| <b>Second Year</b>  | 4    | 5   | 6   |
| PS201, 202 American Government (required at OSU, SOSC, and UO; 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; PS205 required at SOSC)   |      |     | (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; second year foreign language for UO if foreign language is chosen rather than three terms of math)  | 3-4  | 3-4 | 3-4 |

\*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 under-

standing, to think logically, and to perform research and analysis competently.

University of Oregon recommends the following courses: BA211, 212, 213 Financial Accounting and Managerial Accounting; EC201, 202, 203 Economics; HST201, 202, 203 History of the United States; WR121, 122, 123 English Composition; as well as Literature, Philosophy, Psychology, and Sociology courses.

## 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 at Chemeketa. 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.

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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term |     |     |
|--|------|-----|-----|
| First Year   | 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 is designed for people who have gained professional skills from business and industry who now desire to share their knowledge and experience as teachers. Graduates of this program will be eligible for a special license enabling them to teach in Oregon's public high schools. Additional upper division coursework is required for a bachelor's degree and basic teaching certificate.

The one-year certificate option offers training for those who wish to apply through a school district for a special three-year non-renewable professional-technical certificate. Students who complete the two-year Associate of Applied Science degree, combined with one-year of successful teaching, will be eligible to apply through a school district for a five-year renewable professional-technical teacher certificate. Both the certificate and degree programs are designed for students who may wish to transfer to Oregon State University or Portland State University to continue work towards a baccalaureate degree.

To be accepted into these programs, students 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. They 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.

### Certificate of Completion

*In addition to tuition, estimated costs for students who complete the one-year program are books, \$400; class fee, \$70; 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 46 required credit hours, plus any additional professional-technical coursework determined necessary by your appraisal/advisory committee:

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 1</b> |  |              |
| ED110         | Psychology of Learning.....                  | 3            |
| 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            |

|               |  |
|---------------|--|
| <b>Term 2</b> |  |
| ED131         | Teaching Techniques.....3                                  |
| ED133         | Instructional Media and Materials .....3                   |
| ED209C        | Professional-Technical Practicum I.....6                   |
| ED217         | Comprehensive Classroom Management.....3                   |
| <b>Term 3</b> |  |
| ED209D        | Professional-Technical Practicum II .....9                 |
| ED292         | Occupational Analysis, Curriculum<br>and Evaluation .....3 |
| ED293         | Applied Integrated Academics.....3                         |

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### Associate of Applied Science Degree

*In addition to tuition, estimated costs for students who complete the entire program are books, \$650; class fee, \$75; measles vaccination, \$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 by successfully completing the courses listed below, in addition to the courses listed under the Certificate of Completion option plus any additional professional-technical coursework determined necessary by your appraisal/advisory committee. To meet graduation requirements you must earn a total of 94 credit hours.

| Course        | Title  | Credit Hours |
|---------------|--|--------------|
| <b>Term 4</b> |  |              |
| CS101         | Introduction to<br>Microcomputer Applications (or higher) .... | 3            |
| SP111         | Fundamentals of Speech.....                                    | 3            |
|               | or   |              |
| SP114         | Interpersonal Communication (or higher).....                   | 3            |
| WR121         | English Composition-Exposition (or higher) ...                 | 3            |
|               | Professional-technical elective* .....                         | 6            |
| <b>Term 5</b> |  |              |
| HPE295        | Health and Fitness for Life.....                               | 3            |
|               | Science elective.....  | 3            |
|               | Approved Social Science* .....                                 | 3            |
|               | or   |              |
|               | Humanities/fine arts elective* .....                           | 3            |
|               | Professional-technical electives* .....                        | 6            |
| <b>Term 6</b> |  |              |
|               | Math elective* (MTH052 or higher) .....                        | 3            |
|               | General education elective .....                               | 3            |
|               | Professional-technical electives* .....                        | 12           |

\*As approved by appraisal/advisory committee.

## 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 Counsel-

ing Center or a Chemeketa advisor in your program.

Some colleges have limited enrollment to the psychology major, including application deadlines and prerequisite requirements.

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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

.....

|  | Term |     |     |
|--|------|-----|-----|
|  | 1    | 2   | 3   |
| <b>First Year</b>  |      |     |     |
| WR121, 122, and/or 123 English Composition (WR227 Technical Writing required by SOSC)*   | 3    | 3   | (3) |
| PSY201, 202, 203 General Psychology (PSY201, 202 for OSU, UO, and WOSC)  | 3    | 3   | 3   |
| Mathematics per placement test* (Mathematics through MTH111 College Algebra required by EOSC, UO; PSU requires MTH241 Elementary Calculus or MTH251 Calculus 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 five hours in 200 level biology, chemistry or physics; SOSC requires BI101 and 102 or 103 General Biology; UO requires biology, chemistry, or physics)               | 4-5  | 4-5 | 4-5 |
| Electives (PSU requires CS113 Understanding Computers; SOSC requires 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 af-

fairs 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, \$1,023; 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 95 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         | Introduction to<br>Microcomputer Applications (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 |

#### Term 4

|         |   |   |
|---------|---|---|
| CS125SS | LOTUS I-Worksheets.....                 | 3 |
| RE056   | Escrow Procedures I.....                | 3 |
| RE062   | Real Estate Appraisal II .....          | 3 |
| RE066   | Real Estate Investment Analysis I ..... | 3 |
|         | Humanities/Science elective*.....       | 3 |

#### Term 5

|        |   |   |
|--------|---|---|
| BA199D | Appraisal Standards of Practice (USPAP).....                                | 2 |
| BA232  | Introduction to Business Statistics.....                                    | 3 |
| RE063  | Real Estate Appraisal III .....   | 3 |
| RE070  | Zoning, Subdivision<br>and Community Planning .....                         | 3 |
|        | Business elective** (RE280/Cooperative Work<br>Experience recommended)..... | 6 |

#### Term 6

|        |   |   |
|--------|---|---|
| BLD054 | Dwelling Construction Under UBC.....  | 3 |
| RE069  | Elements of Design and Construction.....                                    | 3 |
| RE064  | Mass Appraising of Real Estate.....   | 3 |
|        | Business elective** (RE280 Cooperative Work<br>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; Southern Oregon State College offers a degree 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|  | Term     |          |          |
|--|----------|----------|----------|
|  | 1        | 2        | 3        |
| <b>First Year</b>  | <b>1</b> | <b>2</b> | <b>3</b> |
| 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 and UO require only SOC204; SOSC and PSU require 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 electives) | 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 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, 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 Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 27.

|   | Term     |          |          |
|---|----------|----------|----------|
|   | 1        | 2        | 3        |
| <b>First Year</b>   | <b>1</b> | <b>2</b> | <b>3</b> |
| WR121, 122, and/or 123 English Composition  | 3        | 3        | (3)      |
| SP111 Fundamentals of Speech  | 3        |          |          |
| SP112 Fundamentals of Persuasion (SP111 or 112 required at PSU; not required at SOSC and WOSC)  |          | 3        |          |
| SP113 Fundamentals of Small Group Communication (not required at OSU, PSU, or WOSC)   |          |          | 3        |
| SP114 Interpersonal Communication   |          |          | 3        |
| Arts and Letters/Humanities courses*  | 3        | 3        | 3        |
| Social Science courses*   | 3        | 3        | 3        |
| Math or Science* (MTH243 Probability and Statistics for PSU)  | 4        | 4        | 4        |
| <b>Second Year</b>  | <b>4</b> | <b>5</b> | <b>6</b> |
| Social Science electives*   | 3        | 3        | 3        |
| Arts and Letters/Humanities electives* (SP115 Intercultural Communications recommended for PSU and SOSC)  | 3        | 3        | 3        |
| Science courses*  | 4        | 4        | 4        |
| HPE295 Health and Fitness for Life* or elective   | 3        |          |          |
| Electives (SOSC recommends PHL203 Elementary Ethics and PHL204 Introduction to Logic for Human Communications majors and J224 for Broadcasting majors; WOSC requires 15 hours as electives in Journalism, Speech, and Writing; J224 Introduction to Journalism recommended) | 3        | 6        | 6        |

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

# Visual Communications

The Visual Communications program offers students opportunities to become graphic designers, electronic pre-press technicians and press operators. You may learn about electronic publishing and the operation of a variety of equipment, including computers and graphic arts software, digital scanners, image-setters, platemakers and printing presses. 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 information, 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, \$300; class fees, \$100; equipment and supplies, \$150. A 35mm camera is required for the photography courses. 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 (or higher) ...           | 3            |
| MTH052        | Introduction to Algebra and Geometry<br>(or higher)..... | 3            |
| VC090         | Visual Communication Operations .....                    | 1            |
| VC081         | Introduction to Graphic Arts.....                        | 2            |
| VC082         | Basic Macintosh for the Visual Arts.....                 | 2            |
| VC067A        | Basic Photography .....                                  | 3            |
| <b>Term 2</b> |  |              |
| COM052        | Communication Skills II.....                             | 3            |
|               | or   |              |
| SP111         | Fundamentals of Speech.....                              | 3            |
|               | or   |              |
| SP114         | Interpersonal Communication.....                         | 3            |
| VC051A        | Layout and Design 1 .....                                | 3            |
| VC052A        | Prepress Production 1 .....                              | 3            |
| VC053A        | Small Press Operations.....                              | 3            |
| VC090         | Visual Communication Operations .....                    | 1            |
|               | Approved elective* .....                                 | 3            |
| <b>Term 3</b> |  |              |
| PSY100        | Introduction to Psychology.....                          | 3            |
|               | or   |              |
| PSY201        | General Psychology .....                                 | 3            |
|               | or   |              |
| PSY246        | Introduction to Industrial Psychology.....               | 3            |

|                             |   |   |
|-----------------------------|---|---|
| VC051B                      | Layout and Design 2 .....   | 3 |
|                             | or  |   |
| VC052B                      | Electronic Imaging 1 .....  | 3 |
|                             | or  |   |
| VC053B                      | Large Press Operations .....  | 3 |
| VC067B                      | Technical Photography .....   | 3 |
| VC051B                      | Layout and Design 2 .....   | 3 |
|                             | or  |   |
| VC052B                      | Electronic Imaging 1 .....  | 3 |
|                             | or  |   |
| VC053B                      | Large Press Operations .....  | 3 |
| VC090                       | Visual Communication Operations.....                                | 1 |
|                             | Humanities/fine arts elective .....                                 | 3 |
|                             | or  |   |
|                             | Science/applied science elective.....                               | 3 |
| <b>Term 4</b>               |   |   |
| VC061                       | Advanced Graphic Design.....  | 6 |
|                             | or  |   |
| VC062                       | Image Conversion and Image Carriers<br>for Offset Lithography.....  | 6 |
|                             | or  |   |
| VC063                       | Advanced Presswork.....   | 6 |
| VC073                       | Special Problems .....  | 3 |
|                             | or  |   |
|                             | Approved elective*.....   | 3 |
| VC068                       | Intermediate Technical Photography .....                            | 6 |
| VC090                       | Visual Communication Operations.....                                | 1 |
| <b>Term 5</b>               |   |   |
| VC061                       | Advanced Graphic Design .....                                       | 6 |
|                             | or  |   |
| VC062                       | Image Conversion and Image Carriers<br>for Offset Lithography ..... | 6 |
|                             | or  |   |
| VC063                       | Advanced Presswork.....   | 6 |
| VC073                       | Special Problems .....  | 3 |
|                             | or  |   |
|                             | Approved elective*.....   | 3 |
| VC083                       | Cost Accounting for Printers .....                                  | 3 |
| VC090                       | Visual Communication Operations.....                                | 1 |
|                             | General education elective.....                                     | 3 |
| <b>Term 6</b>               |   |   |
| VC073                       | Special Problems .....  | 3 |
| VC077                       | Special Problems .....  | 7 |
| VC090                       | Visual Communication Operations.....                                | 1 |
|                             | Approved elective*.....   | 3 |
| <b>*Approved electives:</b> |   |   |
| ART115                      | Basic Design .....  | 3 |
| ART116                      | Basic Design .....  | 3 |
| ART117                      | Basic Design.....   | 3 |
| ART221                      | Graphic Design 1 .....  | 3 |
| ART222                      | Graphic Design 2 .....  | 3 |
| ART223                      | Graphic Design 3.....   | 3 |
| ART261                      | Intermediate Photography.....                                       | 3 |
| ART270                      | Introduction to Printmaking: Screen Print 1 ...                     | 3 |
| J226                        | Layout/Production .....   | 3 |
| OA205                       | Desktop Publishing I-PageMaker .....                                | 3 |

# 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, \$181; class fees, \$285; equipment and supplies, \$305; certification test \$200 (optional). 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 46 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.....          | 2            |
| WLD061        | Basic Gas Metal Arc Welding (MIG).....        | 3            |
| WLD071        | Basic Oxyacetylene Welding.....               | 2            |
| <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).....     | 3            |
| 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, in-

cluding 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, \$575; class fees, \$462; equipment and supplies, \$305; certification test \$200 (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 92 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.....            | 2            |
| WLD061        | Basic Gas Metal Arc Welding (MIG).....          | 3            |
| WLD071        | Basic Oxyacetylene Welding.....                 | 2            |
| <b>Term 2</b> |   |              |
| MTH052        | Introduction to Algebra and Geometry.....       | 3            |
| WLD052        | Intermediate Arc Welding.....                   | 5            |
| WLD057        | Layout Practices.....                           | 1            |
| WLD062        | Intermediate MIG Welding.....                   | 3            |
| WLD072        | Oxyacetylene Cutting.....                       | 2            |
| WLD073        | Basic Gas Tungsten Arc Welding (TIG).....       | 3            |
| WLD081        | Welding Metallurgy I.....                       | 2            |
| <b>Term 3</b> |   |              |
| MTH053        | Introduction to Trigonometry with Geometry..... | 3            |
| WLD053        | Advanced Arc Welding.....                       | 3            |
| WLD063        | Advanced MIG Welding.....                       | 3            |
| WLD058        | Weld Shop Problems.....                         | 7            |
| WLD082        | Welding Metallurgy II.....                      | 2            |
| <b>Term 4</b> |   |              |
| DRF072        | Introduction to Computer Drawing.....           | 3            |
| GS104         | Physical Science.....                           | 4            |
| MFG064        | Manufacturing Fundamentals.....                 | 5            |
| MFG092        | Introduction to Computers in Manufacturing..... | 3            |
| <b>Term 5</b> |   |              |
| COM051        | Communication Skills I (or higher).....         | 3            |
| MFG079        | Industrial Systems.....                         | 3            |
| MFG095        | CAM Applications.....                           | 5            |
| WFB087        | Fabrication Practices III.....                  | 3            |
| <b>Term 6</b> |   |              |
| COM052        | Communication Skills II (or higher).....        | 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 at Chemeketa.

**100 to 199 Freshman-level college courses.** Normally, these credits may be applied to an Associate of Arts degree and transferred to higher-education institutions in Oregon.

**200 to 299 Sophomore-level college courses.** Normally, these credits may be applied to an Associate of Arts degree and 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 the information listed below helpful in choosing the classes necessary to fulfill your Associate of Applied Science, Associate of Arts, and Associate of General Studies degree requirements. The general area of study is followed by the course prefixes which satisfy the elective requirements in those areas. (All courses selected must be numbered 050 or higher.)

**Communications Electives:** COM (Communication Skills), ENL (English as a Non-Native Language), J (Journalism), SP (Speech), WR (Writing), plus these specific classes: RD115, RD116, and HD112

**Humanities/Fine Arts Electives:** ART (Art), ASL (American Sign Language), ENG (English), FA (Film Arts), FR (French), GER (German), JPN (Japanese), HUM (Humanities), MS (Multidisciplinary Studies), MUS (Music), MUP (Music Performance), PHL (Philosophy), R (Religion), RUS (Russian), SPAN (Spanish), TA (Theater Arts)

**Science/Applied Science Electives:** BI (Biology), BOT (Botany), CH (Chemistry), FN (Foods and Nutrition), G (Geology), GS (General Sciences), GE (General Engineering), OC (Oceanography), PH (Physics), ZOO (Zoology)

**Social Science Electives:** 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)

## Accounting

see Business Administration

## AS

### Aerospace Science

**AS111, 112, 113 The Air Force Today**  
1 class hr/wk, 1 cr. each

A study of the U.S. Air Force in the contemporary world through an examination of the total force structure, strategic offensive and defensive forces, general purpose forces, and aerospace support forces. Offered as needed.

**AS120 Leadership Laboratory**

3 lab hrs/wk, 1 cr.

Covers officership, leadership, drill and ceremony, and customs and courtesies for cadets. Prerequisite: AS111, 112, and 113. Offered as needed.

**AS211, 212, 213 Air Power Development**  
2 class hrs/wk, 2 cr. each

Study of air power from balloons and dirigibles through the jet age; a historical review of airpower employment in military and non-military operations in support of national objectives; a study of changes in the nature of military conflict; a look at the evolution of air power concepts and doctrine; and the changing mission of the defense establishment with emphasis on the U.S. Air Force. Offered as needed.

**AS220 Leadership Laboratory**

3 lab hrs/wk, 1 cr.

ROTC Cadets are placed in elementary leadership positions in order to learn Air Force concepts of command, discipline, tradition, and courtesies. Prerequisite: AS211, 212, and 213. Offered as needed.

**AS280A Preprofessional Officer Course**

3 lab hrs/wk, 1 cr.

Air Force ROTC leadership laboratory for cadets who have completed AS100 and AS200 sequence and are not eligible for immediate entry into the Professional Officer course. Instruction is conducted within the framework of an organized cadet corps and includes a study of Air Force customs and courtesies; drill and ceremonies; career opportunities in the Air Force; and the life and work of an Air Force junior officer. Cadets develop their leadership style in a practical and supervised laboratory. Offered as needed.

## AH

### Allied Health

See also Chemistry, Dental Assisting, Emergency Medical Technology, Emergency Services, Health Education, Health Services Management, and Nursing

**AH05G 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

**AH051 Health Occupations**

Overview A

2 class hrs/wk, 2 cr.

Surveys essential aspects of health occupations. Emphasizes health care delivery systems, societal issues, consumer health decisions, health promotion and wellness, and worker rights and responsibilities. W

**AH052 Health Occupations**

Overview B

2 class hrs/wk, 2 cr.

Continuation of AH051 with emphasis on legal and ethical concepts, death and dying, medical asepsis, safety, and job-seeking skills. Prerequisite: Grade C or higher in AH051. Sp

**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

## ASL

### American Sign Language

**ASL101 American Sign Language,**

Term 1

3 class hrs/wk, 3 cr.

An introduction to American Sign Language and deaf culture. Introduces expressive signing skills, while emphasizing reception skills. F, W, Sp, Su

**ASL102 American Sign Language,**

Term 2

3 class hrs/wk, 3 cr.

Continuation of ASL101. Receptive skills are emphasized, and expressive signing skills are incorporated in more depth. Prerequisite: ASL101. F, W, Sp

**ASL103 American Sign Language,**

Term 3

3 class hrs/wk, 3 cr.

Continuation of ASL102. Stresses increased understanding of American Sign Language and Deaf culture. Emphasis on receptive and expressive skills. Prerequisite: ASL102. Sp

## 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 tech-

niques 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.

Familiarizes 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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 National Electrical Code. **Prerequisite:** APR053B. Class fee \$10. F

**APR053D Inside Wire Electricians Apprenticeship II-B**

4 class and 2 lab hrs/wk, 5 cr.  
Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses and over current 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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/wk, 5 cr.  
Includes an introduction to plumbing, basic math, related science, codes, blue-

print 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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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

**FAPR066A Sheetmetal Apprentice I-A**

4 class and 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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 2 lab hrs/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.  
Designed to provide a student with the tools to look at, think about, and communicate ideas about the visual arts. Focuses on purposes of art; subject, form, and content; media and techniques; critical, historical, analytical, and interpretive approaches to art; artists; and intentions. **Prerequisite:** College-level writing skills. 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, visual perception, and organization of visual elements in works of art. **ART115:** Explores black and white two-dimensional design. **ART116:** Focuses on color and two-dimensional design. **ART117:** A study of three-dimensional design. **ART115:** Su, F, Sp; **116:** W; **117:** Sp

**ART131 Introduction to Drawing 1**

6 class hrs/wk, 3 cr.  
Introduces fundamental gesture, contour, and value approaches to drawing, using a variety of monochromatic media. Covers traditional methods of representing shape and space on a two-dimensional surface. F, W, Sp, Su

**ART132 Introduction to Drawing 2**

6 class hrs/wk, 3 cr.  
Covers basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasizes composition and the understanding of visual form, and introduces style as a means to personal expression. **Prerequisite:** ART131 or consent of instructor (based on portfolio review). W, Sp

**ART133 Introduction to Drawing 3**

6 class hrs/wk, 3 cr.  
Continued training in skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasizes composition and understanding drawing as a visual form of communication and expression. **Prerequisite:** ART131 and ART132, or consent of instructor (based on portfolio review). W, Sp

**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

**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. F, W, Sp

**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. **Offered as needed.**

**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.**

**ART199A,B,C Special Studies**

variable 1-3 credits

Offers topics of study with individual research or field study. **Offered as needed.**

**ART199E Special Studies: European Foreign Study Tour**

3 cr.

Designed to prepare students for a college-sponsored European foreign study tour. Pretour classroom sessions include a series of lectures on the specific countries, peoples, cultures and places to be visited. Participants then travel together, following the tour itinerary as outlined, to obtain first-hand experience in the art and culture of the countries studied. **Offered as needed.**

**ART204 Introduction to Art History**

3 class hrs/wk, 3 cr.

Examines art in the Western tradition from its beginnings in the prehistoric era through the early Christian/ Byzantine period. F

**ART205 Introduction to Art History**

3 class hrs/wk, 3 cr.

Examines art in the Western tradition from the Middle Ages to A.D. 1500. W

**ART206 Introduction to Art History**

3 class hrs/wk, 3 cr.

Examines art in the Western tradition from A.D. 1500 to the present. Sp

**ART210 Topics in Art History**

3 class hrs/wk, 3 cr.

Covers specific historical art topics. Topics will vary and may include historical styles and periods, genres, women artists, and media. **Offered as needed.**

**ART221 Graphic Design 1**

2 class and 2 lab hrs/wk, 3 cr.

Introduces the use of illustration software on the Macintosh computer as a tool in the production of graphic design. Work is primarily in black and white and includes both communication and decoration graphics. **Prerequisite:** ART115 or consent of instructor. Basic knowledge of Macintosh computers. Specific software knowledge is not

required. Class fee \$15. F, W; offered as needed.

**ART222 Graphic Design 2**

2 class and 2 lab hrs/wk, 3 cr.

Continues exploration of graphic design with multiple colors, using the Macintosh computer and illustration software as a design and production tool. **Prerequisite:** ART115, 221, or consent of instructor. Class fee \$15. W, **Offered as needed.**

**ART223 Graphic Design 3**

2 class and 2 lab hrs/wk, 3 cr.

Continues exploration of graphic design using the Macintosh computer as design and production tool to create advanced projects. **Prerequisite:** ART115, 221, 222, or consent of instructor. Class fee \$15. Sp, **Offered as needed.**

**ART230 Drawing: Anatomy for Artists**

1 class and 4 lab hrs/wk, 3 cr.

An introductory anatomy course designed specifically for art students. Includes a brief overview of body organization and terminology, an examination of body proportions and of the skeletal and musculature systems, and a summary of surface features (e.g. skin, superficial vessels). Expands on basic skills developed in beginning drawing classes. **Prerequisite:** Grade C or better in a college-level drawing class. No previous science course required. W

**ART233 Contemporary Drawing Media**

6 lab hrs/wk, 3 cr.

Continuation of ART131. Emphasizes the development of personal style and expressive exploration of personal imagery; contemporary, color, and mixed media approaches will be introduced. **Prerequisite:** ART131 or consent of instructor. ART234 recommended. Sp

**ART234 Figure Drawing 1**

6 lab hrs/wk, 3 cr.

An intensive study of the problems the human figure presents to the arts. Proportion, composition, and dynamic representation are emphasized. **Prerequisite:** ART131 or consent of instructor. Class fee \$9. W, 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. Class fee \$9. 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. Class fee \$9. 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. Class fee \$9. 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 \$15. F, W, Sp

**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 \$15. Sp

**ART270 Introduction to Printmaking: Screen Printing 1, Beginning**

6 lab hrs/wk, 3 cr.

Introduction to the methods, materials, and techniques of silkscreen printing including the photostencil process. Offers lecture, demonstration, and studio experience. Students will design and pull their own prints. **Prerequisite:** ART131, ART115, or consent of instructor. Class fee \$9. F

**ART271 Introduction to Printmaking: Press Process 1**

6 lab hrs/wk, 3 cr.

Demonstrates methods, materials and techniques of printmaking with an intaglio press, using media such as intaglio (etching), relief (woodcut and linocut), and monotypes. Offers lectures, demonstrations, and studio experience. **Prerequisite:** ART131, ART115, or consent of instructor. Class fee \$9. W

**ART272 Introduction to Printmaking: Press Processes 2**

6 lab hrs/wk, 3 cr.

Demonstrates advanced techniques, methods, and materials of printmaking using media such as relief (woodcut, linocut, embossing), intaglio (etching, engraving, collography), monotype/monoprint, and lithography. Emphasizes studio practice and experimentation with all printmaking processes and style development as a means of personal expression. Relates historical and modern contexts. **Prerequisite:** ART271. Class fee \$9. Sp

**ART273 Printmaking: Press Processes 3**

6 lab hrs/wk, 3 cr.

An integration of the methods and materials introduced in ART271 and ART272 to create mixed media prints.

Emphasizes collage plate printmaking and mixed media monoprinting. Offers lectures, demonstrations, and studio experience. **Prerequisite:** ART271 and ART272. Class fee \$9. Sp

**ART274 Printmaking: Screen Printing 2, Intermediate**  
6 lab hrs/wk, 3 cr.

Skill building in techniques of silk-screen printing introduced in ART270, including photographic processes. **Prerequisite:** ART270. Class fee \$9. Offered as needed.

**ART275 Printmaking: Screen Printing 3, Advanced**  
6 lab hrs/wk, 3 cr.

Studio practice in the expressive and technical principles of screen printing. Emphasizes skill development and use of composition, color, and various stencil processes to achieve an expressive visual form. **Prerequisite:** ART274. Class fee \$9. Offered as needed.

**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:** ART131 or consent of instructor based upon demonstration in drawing. 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:** ART131 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. **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 finishing 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. Offered as needed.

**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 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 electro-mechanical (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 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, automotive instrumentation, and accessory systems. **Prerequisite:** AUM068 or consent of program chair. 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 hr/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 systems relating to brake systems and suspensions. 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.

Fundamental principles of carburetion and the basics of the fuel system. Includes detailed instruction and assignments on the carburetor circuits. Emphasizes the location, identification, and function of the various components of single-barrel, two-barrel, and four-barrel carburetors, and the basic principles of fuel injection, superchargers, diesel, and liquefied petroleum (LP) gas. 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 hrs/wk, for 5 weeks, 1 cr.  
A continuation of BA049. Class fee \$49. W

**BA051 Accounting Procedures I**

4 class hrs/wk, 4 cr.  
A study of the accounting cycle using the double-entry system 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 Accounting program. Prerequisite: MTH061 or MTH070. F, W, Sp, Su

**BA052 Accounting Procedures II**

4 class hrs/wk, 4 cr.  
Basic procedures and theory of business accounting using the double-entry system to study the business accounting cycle. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's Accounting program. Prerequisite: BA051 and MTH061. W, Sp

**BA053 Accounting Procedures III**

4 class hrs/wk, 4 cr.  
A study of 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 program. 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

**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 non-profit 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, Sp

**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. F, 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, W

**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. Offered as needed.

**BA061 AMA Accounting for Managers**

2.5 class hrs/wk, 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 hrs/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.

**BA093 Reconciliations/Verifications**

1 class hrs/wk, 1 cr.  
Introduces reconciliation procedures used between outside sources and an agency's records. Covers verification of account balances, problem-solving techniques, and the identification of reconciling items and the steps necessary to correct them. Prerequisite: Six credit hours of accounting or consent of instructor. Offered as needed.

**BA094 Fixed Assets Accounting and Reporting**

2 class hrs/wk, 2 cr.  
Accounting for fixed assets in governmental and proprietary funds. Includes study of capitalization policy, property disposition, and generally accepted accounting principles (GAAP) and financial reporting requirements. Prerequisite: Six credit hours of accounting or consent of instructor. Offered as needed.

**BA095 Oregon Statewide Financial Management System**

3 class hrs/wk, 3 cr.  
The course will cover the Relational Statewide Accounting and Reporting System (RSTARS) General User Training Manual, a manual developed by KPMG Peat Marwick and the State of Oregon, specifically for the Oregon Statewide Financial Management System. Prerequisite: BA211 and BA054. Sp

**BA097 Supervisory Communication**

1 class hrs/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. **Offered as needed.**

**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. **Offered as needed.**

**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**

**BA199F Introduction to Statistical Process Control**

3 class hrs/wk, 3 cr.

Designed to enable workers and managers to use basic probability and statistics for quality improvement. Uses elementary statistical techniques, such as control charts, to analyze a process or its outputs to achieve, maintain, or improve process capability. **Prerequisite:** Basic knowledge of math operations. **Offered as needed.**

**BA199G Residential Real Estate Appraisal Practice**

3 class hrs/wk, 3 cr.

Focuses on the use of Uniform Residential Appraisal Report (URAR) forms. Presents and explains the appraisal products, techniques, and requirements demanded by institutional lenders and the secondary mortgage market. **Prerequisite:** RE061 and CS101. **Sp**

**BA200K Conflict Resolution at Work**

1 class hrs/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.**

**BA202 Personal Effectiveness**

3 class hrs/wk, 3 cr.

Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, and individual problem-solving. Presents strategies to assist the student in maintaining employment and in demonstrating a professional image and work behavior. **F, W, Sp, Su**

**BA203 Interpersonal Relations in Business**

3 class hrs/wk, 3 cr.

Fundamentals of interpersonal relations in an organization. Includes effective verbal and nonverbal communication styles, interviewing skills, coworker relations considering individual and cultural differences, customer relationships, conflict management, and coaching/teaching. **Prerequisite:** BA202. **W, Sp**

**BA204 Teamwork Dynamics**

3 class hrs/wk, 3 cr.

Fundamentals of effective work team relationships. Includes team building, and the development of self-directed teams, group problem solving, and team management, as well as a study of cultural diversity in the Northwest, and the challenges of managing diversity. **Prerequisite:** BA202. **Sp**

**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.

A 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.

An 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.

The principles of planning, acquiring, and using funds in an organization.



Includes investment analysis, budgeting, ratio analysis, capital investments (using present value and internal rate of return), cost of capital, and cash and credit management. **Prerequisite:** BA212. **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**

### **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.

Introduces computer-based accounting for small businesses and provides hands-on experience with business applications including general ledger, accounts receivable, accounts payable, payroll, inventory management processing, sales invoicing, check reconciliation, and financial statements. **Prerequisite:** CS125SS or equivalent microcomputer experience, and BA212. 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 populations and variances, indexes, estimating, hypotheses testing, analysis of variances, time series, and correlation. **Prerequisite:** MTH095. **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 interpreta-

tion 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. **Offered as needed.**

### **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. Sp

### **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

#### **BAN051 Introduction to Lending**

3 lab hrs/wk, 5 wk, 1 cr.

Provides a basic understanding of lending and associated career opportunities in the banking field. Sp

#### **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 enroll-

ment 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 opportunities, and laws and legislation affecting Vietnam-era veterans. Offered as needed.

**BAN064A Understanding and Selling Bank Services**  
3 class hrs/wk, 3 cr.  
Covers 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.  
Covers the skills necessary for effective communication with co-workers and customers. W

**BAN065A Writing Skills for Bankers**  
3 class hrs/wk for 5 weeks, 1 cr.  
Covers 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. Includes basic functions of job supervision. Offered as needed.

**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 activ-

ities, 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, determining 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 the system rather than the 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 carry-over 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

**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

**BI131 Environmental Science 1**

3 class and 3 lab hrs/wk, 4 cr.  
Introduces basic principles of ecology and environmental science and examines environmental problems and issues concerning human population growth. Class fee \$12. F

**BI132 Environmental Science 2**

3 class and 3 lab hrs/wk, 4 cr.  
Examines environmental problems and issues related to resource use and management such as deforestation, global warming, soil erosion, water and food shortages, the loss of biodiversity, and energy issues. **Prerequisite:** BI131 or BI101. Class fee \$12. W

**BI133 Environmental Science 3**

3 class and 3 lab hrs/wk, 4 cr.  
Examines environmental problems and issues related to environmental contamination such as air and water pollution, solid waste disposal, and pesticide use, and explores relationships between environmental problems and other

aspects of society. **Prerequisite:** BI132. Class fee \$12. Sp

**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 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:** CH100 or CH104 and CH105 (CH105 must be taken concurrently with BI231 if not completed previously) 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 providing an in-depth examination of the structure and function of the human body. Includes the study of the muscular, circulatory, and respiratory systems. **Prerequisite:** BI231 with a grade of C or higher; CH100 or CH105 and CH106 (CH106 must be taken concurrently with BI232 if not completed previously) 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 providing an in-depth examination of the structure of the human body. Includes the study of the endocrine, digestive, urinary, and reproductive systems, as well as an examination of body fluids, electrolytes, pH balance, and medical genetics. **Prerequisite:** BI232 with a grade of C or higher; CH100 or CH104, CH105, and CH106; 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; CH104 and CH105 recommended. 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:** BLD069. W

### **BLD067 Nonstructural Plan Review**

2 class and 3 lab hrs/wk, 3 cr.

Introduces techniques of examining nonstructural plans by becoming familiar with plan and construction documents and specifications. Covers applications of code requirements. **Prerequisite:** BLD051 and BLD052. Sp

### **BLD068 Foundations, Excavation and Grading**

3 class hrs/wk, 3 cr.

Covers fundamentals and code requirements of regulating excavation and fills for any building or structure, construction of foundation and retaining structures, and general grading. Emphasizes code requirements for application to plan review and inspection functions. Grading and building plans and soils reports will be used to complement the code. **Prerequisite:** MTH052. F

### **BLD069 Engineering for the Building Inspector**

3 class hrs/wk, 3 cr.

A study of static forces and their effect upon rigid bodies at rest, including a study of stresses and strains that occur in these bodies when subjected to tensile, compressive, and shearing forces. **Prerequisite:** MTH053 or equivalent. F

### **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 each. 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**

#### **CH100 Chemical Bridges to Life Science**

4 class and 2 lab hrs/wk, 5 cr.

A one-term survey course designed to introduce students to the inorganic, organic, and biological chemistry needed to understand the functions of living organisms. This course is intended to serve as a minimum prerequisite for students entering beginning anatomy and physiology courses. **Prerequisite:** MTH065 or MTH070. Class fee \$8. F, W, Sp, Su

#### **CH104 Chemistry for Allied Health**

4 class and 2 lab hrs/wk, 5 cr.

First course in a three-term sequence for nursing and allied health students. Covers the applications of chemical principles to the life sciences and as a prerequisite to understanding the function of living organisms. Includes: matter, atomic structure, chemical bonds, gas laws reactions, molecules, and solutions. **Prerequisite:** MTH065 or MTH070. Class fee \$8. F, W, Sp, Su

#### **CH105 Chemistry for Allied Health**

4 class and 2 lab hrs/wk, 5 cr.

Continuation of CH104. Intended for nursing and allied health students. Introduces and investigates organic reactions. Includes: energy, radiation, acids, bases, and organic compounds. **Prerequisite:** CH104. Class fee \$8. F, W, Sp, Su

#### **CH106 Chemistry for Allied Health**

4 class and 2 lab hrs/wk, 5 cr.

Continuation of CH105. Covers the chemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids. **Prerequisite:** CH105. Class fee \$8. Sp

#### **CH111 Chemistry for Fire Science and Emergency Services**

4 class and 2 lab hrs/wk, 5 cr.

Presents basic information about general inorganic and organic chemistry. Covers elements, compounds, atomic structure, electronic configuration, periodic table, enthalpy, entropy, kinetic molecular theory, ionic and covalent bonding, chemical formulas, nomenclature, acids, bases, gases, hydrocarbons, aromatics, functional groups, carbohydrates, fats, proteins, enzymes, and nucleic acids. **Prerequisite:**

site: MTH095. Class fee \$8. Offered as needed.

### 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 or consent of instructor. 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 or consent of instructor. Class fee \$8. Sp

### CH121 College Chemistry

4 class and 2 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: MTH095 or equivalent as determined by instructor. Class fee \$12. F, W

### CH122 College Chemistry

4 class and 2 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, and salts. Introduces chemical equilibrium and reinforces the interrelations of chemistry to all science disciplines. Prerequisite: CH121. Class fee \$12. W, Sp

### CH123 College Chemistry

4 class and 2 lab hrs/wk, 5 cr.

Continues with acid/base theory, oxidation-reduction reactions, nuclear chemistry, chemical equilibrium, organic chemistry including aliphatics, aromatics, and function groups. Organic reactions are included. Prerequisite: CH122. Class fee \$12. 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: MTH111 or consent of instructor. 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

## 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 communi-

ty 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 United States 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**

4 class 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**

4 class hrs/wk, 4 cr.

Second in a three-course sequence. Introduction to the fundamental logic in designing specific algorithms for processing information typified by management 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**

4 class 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. 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

#### **CS100 Beginning Microcomputer Use**

1 class hrs/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

### **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

### **CS125A1, A2, A3 Micro Database Software-Access**

5 class hrs/ 3 wks, 1 cr. each

**CS125A1:** Navigation through Windows and Access menus, PC relational database concepts, as well as creating and updating of a relational database. **CS125A2:** Simple queries, reports, and forms. **CS125A3:** Complex queries, reports, and forms. **Prerequisite:** CS125A1: CS101 or consent of instructor; CS125A2: CS125A1; CS125A3: CS125A2. Class fee \$4 each. W, Sp

### **CS125DB Micro Database Software-DBASE**

3 class hrs/wk, 3 cr.

Covers the use of the relational database language. The DBASE language is used to introduce personal computer database language concepts. The student may, with the instructor's approval, use other XBASE language dialects. **Prerequisite:** CS101 or equivalent experience. Class fee \$12. W

### **CS125E Worksheets-Excel**

3 class hrs/wk, 3 cr.

A course in the use of the Excel electronic spreadsheet software in a multi-worksheet environment. **Prerequisite:** CS101 or equivalent as determined by the instructor. Class fee \$12. Sp

### **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. Class fee \$12. W

### **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

### **CS125Q Worksheets-Quattro**

3 class hrs/wk, 3 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

### **CS125SS Lotus I-Worksheets**

3 class hrs/wk, 3 cr.

Use of electronic spreadsheets 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. As needed.

### **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. As needed.

### **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. As needed.

### **CS133U C Language**

4 class 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

### **CS133VB Visual Basic—Event-Driven Programming**

4 class hrs/wk, 4 cr.

An introduction to the Visual Basic programming environment. Emphasizes application of event-driven and structured problem-solving and programming techniques to develop software. Students will design, code, test, and debug several programs. **Prerequisite:** CIS121 or equivalent programming experience as determined by the instructor. Class fee \$12. Offered as needed.

### **CS135DB Advanced Micro Database-DBASE**

3 class hrs/wk, 3 cr.

Advanced course in development of an application system using DBASE for Windows. At a minimum, the system is to include 1) a menu program which involves multiple menu levels and which may involve passing information between programs; 2) update program which interacts with at least two files and has options to add, changes, and delete records; and 3) inquiry and reporting programs. **Prerequisite:** CS125DB or CS125FX, and word processing skills. Some programming experience would be helpful. Class fee \$12. Sp

### **CS135FX Advanced Micro Database-FOXPRO**

3 class hrs/wk, 3 cr.

Advanced course in development of an application system using FoxPro. At a minimum, the system is to include 1) a menu program which involves multiple menu levels and which may involve passing information between programs; 2) update program which interacts with at least two files and has options to add, change, and delete records; and 3) inquiry and reporting programs. **Prerequisite:** CS125DB or CS125FX, and word processing skills. Some programming experience would be helpful. Class fee \$12. Sp

### **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. Sp

### **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 hrs/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. Class fee \$3. Offered as needed.

### CS140U UNIX

1 class hrs/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. Class fee \$3. Offered as needed.

### CS144 Problem Solving with Computers

4 class hrs/wk, 4 cr.

Presents techniques for improving students' problem-solving and learning skills in order to make the student a more effective computer user and able to learn how to use new computer systems and software packages. Includes exercises in learning skills, problem-solving, cooperative learning, and critical thinking. **Prerequisite:** MTH095 or higher, CS101. Class fee \$12. F

### 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 and concurrent enrollment in MTH231, 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

### CS199B Introduction to MS Windows

3 class hrs/wk, 3 cr.

Introduces the Graphical User Interface (GUI) environment with an emphasis on the operation of Microsoft Windows. Focuses on the multi-tasking environment, including multiple window interface, common user access (CUA) pull-down menus, and the interaction of RAM memory and PC hardware. **Prerequisite:** CS101. Class fee \$12. Offered as needed.

### CS199D Internet

3 class hrs/wk, 3 cr.

Examines the structure and culture of the Internet. Covers how to connect, communicate, find, and retrieve information. Compares access tools and providers. Class fee \$40. 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. As needed.

### 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

### CS233U Advanced C

4 class hrs/wk, 4 cr.

A continuation of CS133U. Studies features and instructions of the C language. Emphasizes application-oriented programs that produce printed reports, maintain files, and modify an operating system. Class fee \$12. **Prerequisite:** CS133U. Sp

### CS234C COBOL

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

### 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-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. F

### 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. 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

### 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 imple-

menting 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. W

### **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

## **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. Class fee \$452. F, W, Sp

#### **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 or consent of instructor. Class fee \$452. F, W, Sp

## **CVL**

### **Civil-Structural Technology**

#### **CVL053 Calculator Proficiency**

**2 class hrs/wk, 2 cr.**

Instruction in operation of HP48GX hand-held engineering calculator. Covers simple and complex mathematical operations including trigonometry. **Prerequisite:** Introduction to trigonometry and completion of two years of high school algebra. 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; concurrent enrollment in MTH082 and CVL061B. 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 coordinates 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

#### **CVL069 Survey Equipment Operation Review**

**3 lab hrs/wk, 1 cr.**

A sixth-term course for Civil-Structural Engineering Technology students. Reviews and practices the operation of surveying equipment and surveying/drafting-oriented computer software. **Prerequisite:** CVL064. 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. F

#### **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. F

#### **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 com-

bined stresses and columns. **Prerequisite:** MTH082, CVL080, or consent of instructor. W

### **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:** Concurrent enrollment in CVL082; MTH081. W

### **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**

2 class and 3 lab 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. Class fee \$10. **Prerequisite:** MTH082 and CVL087. Sp

### **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. Sp

### **CVL094 Timber and Steel Design and Construction**

4 class hrs/wk, 4 cr.

A study of the fundamentals of design and construction practices in timber and steel structures. Beams, columns, and connections are analyzed and designed using the parameters of the UBI, AISC, National Design Specifics, and the Recommended Practice for Structural Design by the National Forest Products Associations (NFPA). **Prerequisite:** MTH082 or equivalent, and CVL082. Sp

### **CVL280 Cooperative Work Experience**

see AUM280.

### **Dance**

see Physical Education

## **DEN**

### **Dental Assisting**

#### **DEN050 Dental Sciences I**

3 class hrs/wk, 3 cr.

A study of the sciences associated with the practice of dentistry. Includes oral microbiology, oral pathology, sterilization and disinfection principles, OSHA bloodborne pathogen and hazard communication standard, anesthesia, dental office emergencies and pharmacology. **Prerequisite:** Current enrollment in the Dental Assisting program, or consent of instructor. F

#### **DEN051 Introductory Concepts in Dental Assisting**

2 class and 3 lab hrs/wk, 3 cr.

A basic study of the dental assistant's role with emphasis on terminology, instruments and equipment, personal regimen, chairside techniques, and patient communication. Emphasis is placed on 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**

2 class and 2 lab hrs/wk, 3 cr.

Designed to introduce the student to basic general and oral anatomy. Particular attention is directed toward physiological processes of the body, the oral cavity and its associated structures, and anatomical terminology. Discussion will include the skeletal system, organ systems, head and neck anatomy, musculature, nervous, and circulatory systems and their innervation, and anatomical and functional structures of the oral cavity. **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.

Designed to introduce the student to the various materials and laboratory equipment used in the dental office. This includes the chemical and physical properties, manipulation, and uses of restorative materials, medications, impression materials, gypsums, and dental cements. Lectures include an overview of restorative and crown preparation procedures. Use of the materials and accompanying instruments will be supplemented by instructional demonstration. **Prerequisite:** Enrollment in the Dental Assisting program or consent of instructor. Class fee \$15. F

#### **DEN054 Preventive Dentistry**

1 class hrs/wk, 1 cr.

Introduces the student to basic techniques and information relevant to prevention of plaque-related disease. Includes causative factor, nutritional influences, prevention products and their uses, patient motivation, and public health programs. **Prerequisite:** Enrollment in the Dental Assisting program or consent of instructor. F

#### **DEN060 Dental Sciences II**

3 class and 3 lab hrs/wk, 4 cr.

A study of the various fields of specialized dentistry recognized by the American Dental Association, and the sciences associated with them. Includes operative dentistry, pedodontics, periodontics, oral surgery, endodontics, prosthodontics, orthodontics, and public health dentistry. Applied psychology and communication skills are integrated throughout the content to develop abilities in patient management. **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, including materials manipulation, oral evacuation, instrument transfer, charting, and patient management at the Oregon Health Sciences University School of Dentistry. **Prerequisite:** Second-term standing in Dental Assisting program and proof of current Health Care Provider CPR card. Class fee \$10. 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 the following: 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.

Designed to introduce the student to the principles of laboratory procedures related to fixed and removable prosthetics. The use of appropriate laboratory equipment by the student will be supplemented by instructional demonstration 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, 3 cr.

Provides information pertinent to the principles of dental radiology, and legal aspects regarding the use of radiation. Includes the history of dental radiology; terminology; radiation physics; machine operation and equipment use; biological effects of x-rays; principles of radiation health, safety, and protection; anatomical landmarks; and dental films, and darkroom processing techniques. Students use x-ray manikins to practice film placement and exposure techniques. 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 hrs/wk, 2 cr.

Designed to prepare students for management of the dental office, including

business office procedures and techniques, written communications, keyboarding, bookkeeping and banking, inventory control, office maintenance, equipment, and patient and personnel rapport. **Prerequisite:** Third-term standing in the Dental Assisting program. Sp

**DEN071 Dental Office Practicum II**  
1 class and 16 lab hrs/wk, 6 cr.

Observation and practice in an ethical dental office. Students develop communication rapport with the dental team and patients, perform specified chairside procedures, complete reception tasks, apply skills in laboratory procedures, and expose and process patient x-rays as directed by the dentist. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$10. Sp

**DEN072 Expanded Functions II**  
2 class and 3 lab hrs/wk, 3 cr.

A continuation of DEN062. Includes discussion, demonstration, and practical application of the following: 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.

A continuation of DEN064. Course allows students to take one manikin full-mouth series using low-dose technique. Students then develop skills in patient management and perfect radiographic techniques by completing three full-mouth patient x-ray series. Lectures include information to assist the student in taking pedodontic films, film in edentulous areas, films taken while the patient is in a supine position, endodontic films, occlusal films, and extra-oral films. Students learn use of automatic film processors. Students process and evaluate all exposed films and are eligible to take the Dental Assisting National Board x-ray examination upon successful 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.

Designed to prepare the student for the Dental Assisting National Board Certification Examination and for successful employment by incorporating resume writing, completion of a job application, and interview techniques into the course. **Prerequisite:** Third-term standing in the Dental Assisting program. Sp

**DEN081 Dental Assisting Practicum III**

1 class and 12 lab hrs/wk, 5 cr. for 8 wks

Covers observation, advanced clinical and laboratory practice, and business office management in an ethical general or speciality dental practice. Emphasis is placed on the individual's ability to work in the professional setting with minimal direction. **Prerequisite:** DEN071. Class fee \$10. 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 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. W

**DRF060 Advanced Print Reading**

1 class and 3 lab hrs/wk, 2 cr.

Develops the student's ability to read and interpret architectural drawings and specifications for complex building construction using the Uniform Building Code (UBC) as a basis for plan review. **Prerequisite:** DRF059 or consent of instructor. Sp

**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

**DRF066 Tool Design**

1 class and 6 lab hrs/wk, 3 cr.

Introduction to modern principles of tool design including gauging, locating, clamping, 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 hrs/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

**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, DRF076, 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.**

Covers graphic solutions to mathematical and space relationship problems. Includes auxiliary views, point line plane problems, and revolutions. **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. Class fee \$5. W, Su

**Prerequisite:** DRF051 and DRF072. Class fee \$5. W, Su

**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.**

Covers map components, legal descriptions, plot plans and contours. Introduces Geographic Information System (GIS) and Global Positioning System (GPS). **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:** DRF073 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, DRF073, 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.**

Application of hydraulic, pneumatic, and electronic circuits for automated control of industrial systems. Includes digital design, boolean algebra, combinational logic, and sequential logic. Lab exercises cover programming of industrial robots and programmable logic controllers. **Prerequisite:** ELE060 or consent of instructor.

**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 Auto-CAD 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:** DRF073. 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. **Prerequisite:** MTH070. F, W

**EC201 Introduction to Microeconomics**  
3 class hrs/wk, 3 cr.

A study of price elasticity, production costs, the competitive firm, monopoly, imperfect competition, market power and antitrust, (de)regulation of business, and the labor market. **Prerequisite:** MTH095. F, W

**EC202 Introduction to Macroeconomics**  
3 class hrs/wk, 3 cr.

A study of aggregate spending, fiscal and monetary policies, money and banking, Federal Reserve, business cycle, unemployment, and inflation. **Prerequisite:** MTH095. W, Sp

**EC203 Applications to Economic Issues**  
3 class hrs/wk, 3 cr.

Emphasizes global macroeconomics, economic growth, environmental protection, rent, interest and profit, international trade and finance, international development, and the collapse of communism. **Prerequisite:** EC201 or EC202. Sp

## ECE

### Early Childhood Education

see also Education, Human Development and Family Studies

**ECE068A Observing Preschool Experiences**  
1 class hrs/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 hrs/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 hrs/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 hrs/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 hrs/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. 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**  
1 class and 6 lab hrs/wk, 3 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 \$10. 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 \$10. 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 experience, and current First Aid Card. **Class fee \$5. 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 or equivalent experience, and current First Aid Card. **Class fee \$5. F, W, Sp, Su**

#### **ED110 Psychology of Learning**

**3 class hrs/wk, 3 cr.**

Teaching techniques based on modern theories of behavior, motivation, and human development. **F**

#### **ED111 Teaching Lab for Instructional Assistants**

**3 class hrs/wk, 1 cr.**

An opportunity for students to apply the knowledge they are gaining from their program coursework in a closely

monitored environment. Includes one hour per week of planning and consultation with the supervising instructor and two hours per week implementing approved teaching plans through closely monitored, direct contact with local elementary age school children. **Prerequisite:** ED110 and concurrent enrollment in one or more of the following: ED131, ED123, ED124. **W, Sp**

#### **ED123 Classroom Techniques in Reading and Language**

**3 class hrs/wk, 3 cr.**

An introduction to the nature of the reading process. Students will be introduced to the skills and techniques used in providing supplemental reading instruction with elementary age students. Focuses on teaching reading for meaning through the use of the four cuing systems, comprehension strategies, sight and meaning vocabulary development, reading and writing connections, and appropriate uses of graphophonics. **W**

#### **ED124 Classroom Techniques in Mathematics and Science**

**3 class hrs/wk, 3 cr.**

Prepares educators to help children learn specific mathematical content (facts, skills, concepts), apply mathematical ideas to solve problems, and to foster a positive attitude toward mathematics. Covers concepts of patterns, estimation, graphing, addition, subtraction, multiplication, division, and fractions. **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.**

Introduces a variety of teaching techniques and provides practice for students in lesson planning and peer teaching. Students will plan lessons, teach these lessons to small groups of peers, and participate in self-evaluation and peer evaluation of others' teaching. **W**

#### **ED133 Instructional Media and Materials**

**3 class hrs/wk, 3 cr.**

Designed to train students in the preparation and use of instructional media and materials commonly found in public schools. Includes an introduction to computers and other new learning technologies. Helps students develop an understanding of the place and importance of these instructional tools in the learning process, and how to design lessons using these materials. **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**

#### **ED199E Teaching at the Community College**

**3 class hrs/wk, 3 cr.**

Provides the new/adjunct instructor with the skills and knowledge necessary to apply successful instructional strategies in a community college classroom. Discusses shifting paradigms in teaching/learning and how they relate to current trends in education reform. **Offered as needed.**

#### **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.**

#### **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**

#### **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. **Offered as needed.**

#### **ED217 Comprehensive Classroom Management**

**3 class hrs/wk, 3 cr.**

Presents current theory and methodology for managing small and large groups of students effectively. Covers understanding students' personal/psychological and learning needs, establishing positive teacher-student relationships, implementing instructional methods that facilitate optimal learning, and using organizational and group management methods that maximize on-task student behavior. **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 and current First Aid Card. Class fee \$5. F, W, Sp, Su

#### **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 and current First Aid Card. Class fee \$5. F, W, Sp, Su

#### **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 and current First Aid Card. F, W, Sp, Su

#### **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. Offered as needed.

#### **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

#### **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. Offered as needed

#### **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. Exam-

ines the philosophy, rationale, and legal implications of bilingual/bicultural programs and management and use of English and Spanish reading materials in a bilingual classroom. Offered as needed

#### **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. Offered as needed.

#### **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. Offered as needed.

### **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 or MTH070, or 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

#### **ELE056 Concepts of Electronics**

4 class and 4 lab hrs/wk, 6 cr. Includes DC and AC theories, troubleshooting concepts, use of test equipment, and safety. **Prerequisite:** MTH070 or equivalent as determined by the instructor. Offered as needed.

#### **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, 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. Offered as needed.

#### **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. Offered as needed.

#### **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, and consent of instructor. Class fee \$12 each course. Offered as needed.

#### **ELE080 Introduction to Microelectronics**

3 class hrs/wk, 3 cr. Surveys the field of microelectronics. Includes definitions of common microelectronic terms, an overview of technology and manufacturing processes, and the impact on the economy and society. Offered as needed.

#### **ELE090 Vacuum Technology**

3 class hrs/wk, 3 cr. Addresses high vacuum systems, including vacuum pumps, seals, gauges, valves, power supplies, lead detecting equipment, and related hardware. Discusses the set up, operation, troubleshooting and monitoring of vacuum systems. Offered as needed.

#### **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 the use of MS/DOS, 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 MTH111, or consent of instructor. **F, W**

**ELT062 Electronic Problems II**  
2 lab hrs/wk, 1 cr.

Covers the presentation of technical data and computations using electronic spreadsheets. 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. Also covers troubleshooting techniques of generic analog systems. **Prerequisite:** ELT065 and ELT071, 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**

**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 Pneumatics/Hydraulics**  
3 class hrs/wk, 3 cr.

Theory, operation, and design of basic hydraulic and pneumatic control systems and their components. **Prerequisite:** MTH081. 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 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. Offered as needed.

**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:** Second-year standing in Electronics or consent of instructor. Class fee \$24. **Sp**

**ELT280 Cooperative Work Experience**  
see AUM280.

**EMT**

**Emergency Medical Technology**

**EMT051 Emergency Medical Technician Basic, Part 1**

4 class and 3 lab hrs/wk, 5 cr.  
Part 1 of Oregon EMT Basic certification. Designed to develop skills in recognition of symptoms of illness and injuries and proper procedures of emergency care. Geared specifically for those currently active in services which demand response to emergency care situations; e.g. ambulance, fire, police, etc. 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

**EMT061, 062, 063 Health Care Skills**

2 lab hrs/wk, 1 cr. each  
Designed as a guided-studies class in which students identify their areas of strength and areas that need improvement. Each student is asked to establish between five and 10 objectives for the course and will enter into a contract with the instructor on the method of achieving those objectives. **Prerequisite:** Concurrent enrollment in any EMT course. Offered as needed.

**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 stu-

dents 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

**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, CS101, MTH095, SP111, WR121, 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:** Current immunizations and concurrent enrollment in EMT090. Class fee \$61. 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 speciality certification courses such as Pre-hospital Trauma Life Support, Advanced Cardiac Life Support, and Pediatric Advanced Life Support. Culminates with required oral board examinations. **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:** Concurrent enrollment in EMT094. Class fee \$15. Sp

**EMT280 Cooperative Work Experience**

see AUM280.

**ENG**

**English**

**ENG104 Introduction to Fiction**

3 class hrs/wk, 3 cr.

Features analysis of fiction through the reading of works in English and in translation. Introduces the short story, novel, and/or novella, basic literary concepts (which may include a thematic or chronological or stylistic approach, etc.), 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.

Features analysis of poetry through the reading of major and minor poets of various cultural backgrounds. Introduces poetic concepts, principles, and terminology, explores various structures, types, and elements of poetry. F, W, Sp, Su

**ENG107 Introduction to World Literature**

3 class hrs/wk, 3 cr.

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

**ENG204 Introduction to English Literature**

3 class hrs/wk, 3 cr.

Covers the development of English literature from its beginnings in the Anglo-Saxon period through the early Renaissance (to c.1600). Focuses on literary works as products of a historical period and on the analysis and interpretation of works. F

**ENG205 Introduction to English Literature**

3 class hrs/wk, 3 cr.

Covers the development of English literature from the time of Shakespeare (c.

1600) to the end of the 18th century. Focuses on literary works as products of a historical period and on the analysis and interpretation of works. W

**ENG206 Introduction to English Literature**

3 class hrs/wk, 3 cr.

Covers the development of English literature from late 18th century (Romanticism) to the late 20th century. Focuses on literary works as products of a historical period and on the analysis and interpretation of works. Sp

**ENG253 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Features Exploration, Colonial, New Republic, and Romantic literature from 1492-1850. Includes the works of Anne Bradstreet, Jonathan Edwards, Thomas Paine, Washington Irving, Nathaniel Hawthorne, Edgar Allan Poe, and Herman Melville. Literary devices and style are also addressed via class discussion and writing assignments. F

**ENG254 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Covers Transcendental, Realistic, and Naturalistic literature from 1850-1914. Includes the works of Ralph Waldo Emerson, Henry Thoreau, Walt Whitman, Emily Dickinson, Henry James, Hamlin Garland, and Kate Chopin. W

**ENG255 Introduction to American Literature**

3 class hrs/wk, 3 cr.

Relevancy of literature to the human condition is continued in this study of literature from 1914 to the present. Includes the works of Willa Cather, F. Scott Fitzgerald, Ernest Hemingway, Robert Frost, T.S. Eliot, Katherine Porter, Flannery O'Connor, Ralph Ellison, Joyce Carol Oates, and Alice Walker. 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

**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 MTH252. 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.  
An introduction to the art of film and the ways in which you can come to understand a movie. Emphasis is on the feature length movie. Class fee \$20. 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 \$20. 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 \$20. Sp

**FE****Field Experiences**

**FE205 Job Search Techniques**  
1 class hrs/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 interview; 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 Management

**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 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

**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 competen-

cies 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.

**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.

**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, and 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.

History and philosophy of fire protection, through review of life and property loss statistics, case studies of fire protection agencies, current and future fire protection problems, and fire prevention laws and regulations. Students develop an awareness of and positive attitude toward fire prevention as a method of accomplishing the fire department mission.

**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.

**FRP065 Interface Fire Prevention and Mitigation**

2 class hrs/wk, 2 cr.

Provides instruction in analyzing conflagration potential and employing strategies to improve the survival of structures located in grassland, brush, and light timber. **Prerequisite:** FRP060 or consent of instructor. Offered as needed.

**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.

**FRP068 Law Enforcement Procedures for Fire Prevention**

2 class and 2 lab hrs/wk, 3 cr.

Deals with the enforcement of fire laws. Covers the preparation of cases for prosecution. **Prerequisite:** FRP072, FRP073, FRP074, or 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.

Includes systematic development of action plans for a variety of emergency situations. Students will practice and demonstrate the ability to recognize emergency scene needs; prioritize these needs; develop plans including strategies, tactics, and contingencies, and describe how resources should be deployed to implement those plans.

**FRP071 Fire Protection Systems and Extinguishers**

3 class hrs/wk, 3 cr.

Covers types and uses of portable fire extinguishers, as well as care, inspection, and recharging procedures. Includes various types of sprinklers and special extinguishing systems, stand-pipe systems, and systems designed to detect and report fires.

**FRP072 Fire Codes and Ordinances**  
3 class hrs/wk, 3 cr.

A study of the Uniform Building Code, Uniform Fire Code, State Fire Marshal Fire Safety Regulations and related Oregon Revised Statutes, National Fire Protection Association (N.F.P.A.) and other codes relating to fire prevention and life safety.

**RP073 Firefighters' Law**

3 class hrs/wk, 3 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 the 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**  
3 class hrs/wk, 3 cr.

Studies causes and prevention of natural cover fires, ground cover fire behavior, standard firefighting orders, urban interface problems, fire suppression methods, and fireground 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 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.

**FRP083 Incident Report Writing**

2 class hrs/wk, 2 cr.

Methods of contemporary fire prevention inspection practices, including preparation, pre-approach information, written inspection notices, relations with owners and occupants, and compliances. Prerequisite: FRP073, FRP074, WR121, or consent of instructor. Offered as needed.

**FRP084 Public Information for the Fire Service**

1 class and 3 lab hrs/wk, 2 cr.

Presents skills to help participants identify public and proprietary information, as well as instruction and practice in forming medical releases and developing and maintaining positive relations with media representatives. Prerequisite: FRP073, FRP074, or consent of instructor. 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 programs, or consent of instructor. Offered as needed.

**FRP086 Advanced Detection and Protection Systems**

3 class hrs/wk, 3 cr.

Provides training in the design of fire protection systems and the evaluation of existing systems with regard to fire codes, fire code standards, and National Fire Protection Standards. 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. Prerequisite: FRP060 or consent of instructor. Offered as needed.

**FRP088 Fire Prevention Education Programs**

1 class and 4 lab hrs/wk, 3 cr.

Participants will demonstrate their ability to unitize fire data, analyze the prevention needs in a community, and design one public fire education program directed toward preventing or mitigating certain fires in that community. Prerequisite: FRP060 or consent of instructor. Offered as needed.

**FRP089 Fire Codes and Ordinances 2**  
3 class hrs/wk, 3 cr.

Study of the Uniform Fire Code, State Fire Marshal Fire Safety Regulations and related Oregon Revised Statutes,

N.F.P.A., and other codes relating to fire prevention and life safety. 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 humans 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 hrs/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 hand-held calculators, MS/DOS computers, and electronic data recorders. Class fee \$5. 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 \$10. F

**FRT061 Western Oregon Tree and Shrub Identification 1**

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 \$10. W

**FRT062 Western Oregon Tree and Shrub Identification 2**

2 class and 3 lab hrs/wk, 3 cr.

Identification of 17 species of hardwood trees, 23 species of deciduous shrubs, and 10 species of forbs and grasses. Covers both common and scientific names of species. Class fee \$10. 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 resource 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 MTH070, and 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 deter-

mined by the instructor, FRT061, FRT065, and FRT071A. Sp

**FRT081 Natural Resource Management I**

3 class hrs/wk, 3 cr.  
A study of tree habits, forest ecology, and silvicultural practices in the management of forest lands in the Pacific Northwest. **Prerequisite:** FRT061, FRT062, FRT065, and FRT071A. F

**FRT082 Natural Resource Management II**

3 class hrs/wk, 3 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. Sp

**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. W

**FRT087 Forest Field Study**

2 class and 6 lab hrs/wk, 4 cr.  
Brings together the knowledge and skills that the student has learned in previous Forest Resource Technology courses with a hands-on field laboratory class. **Prerequisite:** Second-year standing in Forest Resource Technology program or consent of instructor. Class fee \$10. 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

**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

**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 hand-held 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 program-

ming 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. Sp

### **GE115 Engineering Graphics**

2 class and 3 lab hrs/wk, 3 cr.  
Graphic communication, multiview and pictorial representation, graphical analysis and solutions, and computer-aided drafting. 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.  
Examination of the geographic personality of the world's regions through the study of physical and cultural characteristics of these regions. 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

### **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

### **GS107 Introduction to Astronomy**

3 class and 1 lab hrs/wk, 4 cr.  
Surveys the physical properties of planets, stars, and galaxies. Emphasizes the size of the universe and the objects within. Examines the process astronomers use to gather data and form models. Class fee \$23. F, Offered as needed.

### **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. Class fee \$8. 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. Class fee \$8. **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. Class fee \$8. **Sp**

## **H**

### **Health Services Management**

See also **Allied Health and Medical Assisting**

#### **H210 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**

#### **H250 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. **W**

#### **H251 Health Services Management II**

**3 class hrs/wk, 3 cr.**

Continuation of H250. 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:** H250. **Sp**

## **HD**

### **Human Development**

#### **HD090 Peer Assistance Training**

**3 class hrs/wk, 3 cr.**

Provides training for peer assistants in the development of effective communication skills and referral techniques. Students will act as a resource in their respective departments to assist peers with personal, social, or academic problems. **Offered as needed.**

#### **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 concentration, 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**

## **HDF and 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 hrs/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. Course may be repeated for a maximum of six credits. **F, W, S**

#### **HDF051 Parent/Toddler**

**1 class hrs/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. Course may be repeated for a maximum of six credits. **F, W, Sp**

#### **HDF052 Parent/Preschooler**

**1 class hrs/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. Course may be repeated for a maximum of six credits. **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.**

Study of the basic principles of development, prenatal through two years of age. Emphasizes physical, intellectual, emotional, and social growth and development of young children. **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 hrs/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, pri-

marily 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. Appropriate environmental planning, activities, and observation skills will be discussed, demonstrated, and practiced. **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 Services Management

#### **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**

#### **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. **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 hrs/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**

#### **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 29.

## **Home Economics**

see 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. Prerequisite: HS101. W

**HS140 Handling the Violent Client**

1 class hrs/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: Admission to Human Services program and concurrent enrollment in HS154, HS170. 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 hrs/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: Admission to Human Services program and concurrent enrollment in HS150 and HS170. 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. Prerequisite: HS101. 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. Prerequisite: HS101. 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. Prerequisite: HS101. 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. F and 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 HS292-296A,G,S. Prerequisite: Admission to Human Services program and concurrent enrollment in HS150, HS154, and HS170. F, W

**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. F, W

**HS199J Dual Diagnosis Clients in Treatment**

1 class hrs/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. W

**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-depen-

dent 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 hrs/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 hrs/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 students to the field of social gerontology; explores relationships between aging individuals and society; examines stereotypes and ageism; emphasizes diversity of the older population in our culture and the variety of possible responses to personal, environmental, and social change. **Class fee \$15. 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 emphasizing 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 hrs/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. **Sp**

### **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 HS292-296 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, HS265, HS292-296 or concurrent enrollment. **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**

### **HS292-296A,G,S Practicum-Human Services**

**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 and HS170. **Class fee varies, \$3 each. 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 and Hotel, Restaurant, and Tourism Management

#### **HSM070 Travel Agency Basics**

**3 class hrs/wk, 3 cr.**

Covers the travel industry—specifically the travel agency—and its creation, problems, techniques, and promotion. Emphasizes materials and resources for students who are interested in employment in the travel industry and as a professional development opportunity for those currently employed in the field. Presents an overview of the organization of the travel agency, including systems, terminology, procedures, regulations and employment requirements. Current issues and future trends will be discussed. **F, W**

#### **HSM071 Travel Agency Sales and Marketing**

**3 class hrs/wk, 3 cr.**

An overview of the travel marketing process as well as tips on how to market and sell travel effectively. Covers developing and marketing a travel product, identifying target audiences, using effective advertising techniques, and converting marketing strategies into sales techniques. Emphasis placed on customer service training. **F, W, Sp**

#### **HSM072 Travel Agency Management**

**3 class hrs/wk, 3 cr.**

An in-depth study of the methods and techniques necessary to successfully operate a travel agency. Includes discussion of management theory, systems, decision making and leadership relevant to the travel agency business, while emphasizing the development of effective communication skills. Covers the business systems of human resource management, finance, ethics, and marketing. Students will develop and operate a simulated travel agency as a class project. **Sp**

#### **HSM073 Travel Destination Geography**

**3 class hrs/wk, 3 cr.**

Provides in-depth geographical, political, and cultural data on the countries of the world and encourages thoughtful planning of travel itineraries incorporating this information. Uses a com-

bination of workbook exercises, maps, and reference materials highlighting location, climate, currency, ports of entry, and forms of government in countries around the world. F, W, Sp

### **HSM074 Computer Reservation Systems**

3 class hrs/wk, 3 cr.

This course uses simulatins of various computer reservation systems (CRS) including the APOLLO (United), SABRE (American), and WORLDSPAN (PARS & DATAS II) systems in a microcomputer laboratory, to train students with the skills necessary for successful employment in a travel agency. Identifies the distinguishing features of each CRS. Students will learn to display available flights, auto rentals, lodging and accommodations, and other related travel information necessary for client satisfaction. Emphasis will be placed on solving practical problems that travel agents encounter in the workplace. Class fee \$12. F, W, Sp

### **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 sales, 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 20th 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.

## **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

#### **J217 Feature Writing**

3 class hrs/wk, 3 cr.

Emphasizes feature, in-depth, and investigative reporting skills. Students are required to present material weekly for publication. Prerequisite: J216 or consent of instructor. Knowledge of typing required. W

#### **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 Office Assisting

Includes Health Information Technology and Medical Transcriptionist courses See also Allied Health and Health Services Management

#### 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

#### MED050A Introduction to Medical Terminology A

1 class hrs/wk, 1 cr.

An introduction to medical word elements and the rules for combining them to form meaningful medical terms. Emphasizes medical terms for the human body and focuses on pronunciation and spelling. W

#### MED050B Introduction to Medical Terminology B

1 class hrs/wk, 1 cr.

Continuation of MED050A. Emphasizes general application of medical terms. Abbreviations and symbols are included. **Prerequisite:** Grade C or higher in MED050A. Sp

#### 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:** OA121 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:** Admission to the Medical Office 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 Office 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 typing 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.

Procedures and principles used in the daily administrative office activities involved in the operation of a medical office, ambulatory care setting, and other non-traditional health care settings. Includes activities and duties required of the receptionist, including telephone procedures, appointment making, patient records, filing, office maintenance and management, office communications, fees, credit and collections, and processing drugs and prescriptions. **Prerequisite:** OA121 and enrollment in the Health Care Support Services program and/or Office Administration/Medical Option. 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 includ-

ing 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 \$25. **W**

### **MED073 Medical Transcription Seminar**

**1 class hrs/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 hrs/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 \$20. **Sp**

### **MED078 Medical Practice Seminar**

**1 class hrs/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, 5 cr.**  
Practice of medical assisting methods, procedures, and techniques in clinical situations. **Prerequisite:** Third-term standing in the Medical Office 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 \$27. **Sp**

### **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 \$27. **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 area, law and ethics, terminology, anatomy and physiology, pathology, and human relations. **Prerequisite:** Completion of accredited Medical Office Assisting program, or two years' part-time experience or one year full-time experience as a medical office assistant. **Su**

### **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, persons with disabilities, 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, qual-

ity 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 data-



bases, as they relate to industry. Class fee \$5. F

### **MFG093 CNC Machine Tool Operations**

3 class and 6 lab hrs/wk, 5 cr.  
Introduces 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.  
Practical application of CIM, automated manufacturing in a fully computerized manufacturing environment. **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**

### **Military Science**

#### **MS111 Military Science I: Leadership Development**

1 class hrs/wk, 1 cr.  
Introduction to ROTC and its relationship to the U.S. Army. Covers the role of the army officer, including leadership and management fundamentals. Offered as needed.

#### **MS112 Military Science I: Military Skills**

1 class hrs/wk, 1 cr.  
Covers basic rifle marksmanship, military first aid, customs and traditions of the U.S. Army, unit organization, and missions. Offered as needed.

#### **MS113 Military Science I: Land Navigation**

1 class hrs/wk, 1 cr.  
How to read a topographic map and use a magnetic compass. Includes a practical exercise. Offered as needed.

#### **MS211 Military Science II: Effective Team Building**

2 class hrs/wk, 2 cr.  
An examination of effective leadership, including the development of interpersonal skills using practical exercises and case studies. Offered as needed.

#### **MS212 Military Science II: American Military History**

2 class hrs/wk, 2 cr.  
History of the American soldier from 1775 to 1919, including weaponry and tactics of U.S. Army. Covers use of battle analysis and wargaming. Offered as needed.

#### **MS213 Military Science II: Fundamentals of Military Operations**

2 class hrs/wk, 2 cr.  
Presents basic U.S. Army tactics at the individual, team, and squad levels. Includes integration of military skills in offensive and defensive operations. Offered as needed.

#### **MS214 Camp Challenge**

6 class hrs/wk, 6 cr.  
Six weeks of leadership training at Fort Knox, Kentucky. Can be substituted for the first two years of the ROTC program. Offered as needed.

#### **MS215 Fundamentals of Military Science II**

3 class hrs/wk, 3 cr.  
Examines leadership and management fundamentals, and the role of the Army ROTC and the Army officer. Presents individual military skills and their incorporation into tactical operations at the squad level and land navigation using map and compass. Offered as needed.

#### **MS216A-F Basic Military Science**

1-6 class hrs/wk, variable 1-6 cr.  
Covers an introduction to leadership and management skills, organization of the Army and ROTC, the Army as a profession, map reading and land navigation, military tactics, and the role of the Army officer. Offered as needed.

## **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 interrelation-

ships 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, measurements and conversions, angles, perimeters, and areas of common geometric figures. **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. Includes Pythagorean theorem similar triangles, volumes of common geometric figures, 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. W, Sp

#### **MTH065 Introductory Algebra**

4 class hrs/wk, 4 cr.

Meets entry-level requirements of MTH081 and requirements for students who need a 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 hrs/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 hrs/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 hrs/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 hrs/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 hrs/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.

The study of functions and related inequalities using a graphing calculator. Includes polynomial, rational, exponential, logarithmic, and related piecewise defined functions. Presents a study of the complex number system, the algebra of functions, the applications of functions in sequences and series, and the powers of binomials. Higher order linear systems will be solved using a calculator. Group activities, writing assignments, and laboratory activities may be required. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by instructor. F, W, Sp, Su

#### **MTH112 Trigonometry**

5 class hrs/wk, 5 cr.

A pre-calculus course covering quadratic relations, circular functions, and trigonometric functions. Applications and the use of a graphing calculator are emphasized throughout the course. Group activities, writing assignments, and laboratory activities may be required. 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 solving 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**

3 class hrs/wk, 3 cr.  
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

### **MTH231 Discrete Mathematics**

4 class hrs/wk, 4 cr.  
Introductory course for computer science and mathematics majors. Introduces topics including logic, proof, recursion, sets, relations and functions, graphs and trees, and Boolean Algebra. **Prerequisite:** Grade C or higher in MTH111 or equivalent. W

### **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 of a four-term sequence. Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers rates of change and derivatives with applications; the definite integral used to model sums of products such as distance, area, and average; and an intuitive development of the Fundamental Theorem of Calculus. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH112 or equivalent. F, Sp, Su

### **MTH252 Integral Calculus**

5 class hrs/wk, 5 cr.  
Continuation of MTH251. Covers applications of definite integral, constructing functions from their rates of change, techniques of integration, and an introduction to differential equations. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH251 or equivalent. F, W

### **MTH253 Series Calculus and Linear Algebra**

4 class hrs/wk, 4 cr.  
Combines topics from linear algebra and infinite series. Includes Taylor and Fourier Series with applications and systems applications using matrices

and 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. Explores functions of many variables such as curves and surfaces in three-dimensional space, vectors, rates of change of functions of several variables, and optimization in multivariable models. **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 a multivariable calculus. Explores integration of functions of many variables; descriptions in parametric, polar, cylindrical, spherical, and vector forms; motion in space; introduction to vector fields; and line and surface integral. **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. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH254 or equivalent as determined by the instructor. F

## **MUP and MUS**

### **Music**

#### **MUP100 Piano**

1 class hrs/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**

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. Course may be repeated for a maximum of 6 credits. 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 hrs/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

## **NUR**

### **Nursing**

#### **NUR050 Obstetrical Nursing**

2 class and 1 lab hrs/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. **W, Sp, F as needed.**

**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:** Admission to the Nursing program. Registration must be completed, and immunizations and TB test results documented before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$40. **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, and immunizations and TB test results documented 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, and immunizations and TB test results documented 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, and immunizations and TB test results documented before a student is permitted in the clinical area. Current CPR certification (Level C) is required. Class fee \$30. **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. **Prerequisite:** NUR206. Registration must be completed, and immunizations and TB test results documented 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, and immunizations and TB test results documented 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 hrs/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. **Offered as needed.**

**NUR280 Cooperative Work Experience**

see AUM280.

**OAT**

**Office Administration and Technology**

**OA051 Civil Service Exam Prep**

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**

**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**

**A061A 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, payroll, 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

#### **AO64 Time Management for Office Workers**

**1 class hrs/wk, 1 cr.**  
Analysis of time-management needs and the implementation of time-management skills and tools for a productive office worker. Course includes 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. **Offered as needed.**

#### **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.**

#### **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. **Offered as needed.**

#### **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 personal skills. Emphasizes 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 hrs/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 hrs/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**

**3 class hrs/wk, 3 cr.**  
An introduction to computerized accounting procedures for charts of accounts, journals, posting to ledgers, trial balances, income statements, and balance sheets. Additional materials introduced on receivables, payables, comparative analysis, depreciation, payroll, and inventory. **Prerequisite:** OA090, BA051, or BA211. Class fee \$12. W, Sp

#### **OA092 Payroll Procedures**

**3 class hrs/wk, 3 cr.**  
An introduction to payroll recordkeeping in Oregon. Covers the use of both manual and computerized systems to computer and record gross wages, withholding amounts, and net wages, create and maintain employee earnings records and payroll registers; compute employers' taxes and other payroll-rated costs, make payroll tax deposits, complete payroll reports and W-2s, and make general journal entries for all payroll transactions; and compute deductions for both credit and child support wage garnishments. Also studies payroll systems and control procedures, reports to management, and methods of controlling costs. **Prerequisite:** OA090 and BA051 or BA211. Class fee \$12. Sp

#### **OA092A,B,C Payroll Procedures 1,2,3**

**1 class hrs/wk, 1 cr. each**  
An introduction to payroll recordkeeping in Oregon. OA092A: Covers the use of both manual and computerized systems to computer and record gross wages, withholding amounts, and net

wages, create and maintain employee earnings records and payroll registers. OA092B: Compute employers' taxes and other payroll-rated costs, make payroll tax deposits, complete payroll reports and W-2s, and make general journal entries for all payroll transactions. OA092C: Compute deductions for both credit and child support wage garnishments. Also studies payroll systems and control procedures, reports to management, and methods of controlling costs. **Prerequisite:** OA090 and BA051 or BA211. Class fee \$4 each. Sp

#### **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.**

#### **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 hrs/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 hrs/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 hrs/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 hrs/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

#### **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**

#### **OA118A,B,C Current Office Software**

**1 class hrs/wk, 1 cr. each**

A hands-on introduction to office software currently being used in business and industry. The brands of software in this class may change as industry standards evolve. Currently the course software will be: A) Operating Systems/Utilities-Microsoft Windows 3.1, including the use of Program Manager, File Manager, Windows Accessories, and other features of the software; B) Spreadsheet Software-Microsoft Excel 5.0 for Windows, including worksheet basics and an introduction to charting; and C) Database Software-Paradox for Windows, including database basics for forms design, data entry, queries, and reports. Any section may be taken independently. **Prerequisite:** Computer literacy (prior experience with computer and mouse device). Keyboarding (typing) skill of 25 words per minute. Class fee \$4. each. **W**

#### **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**

#### **OA123A Formatting A**

**2 lab hrs/wk, 1 cr.**

Includes proper formatting of business and personal letters, memos, and reports. **Prerequisite:** OA122 (or OA122 A,B); OA201P1, and touch-typing ability of 35 words per minute, or consent of instructor. Class fee \$4. **F, W, Sp, Su**

#### **OA123B Formatting B**

**2 lab hrs/wk, 1 cr.**

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.**

Presents additional formatting styles for tables, letters, memos, and reports including minutes and itineraries. **Prerequisite:** OA123B. Class fee \$4. **F, W, Sp, Su**

#### **OA130 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**

#### **OA131 Legal Office Procedures 1**

**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:** OA130, OA085, and OA201P. Class fee \$12. **Sp**

#### **OA132 Legal Office Procedures 2**

**2 class and 2 lab hrs/wk, 3 cr.** Continuation of OA131 with special emphasis on court documents, integration of computer skills with legal office procedures, legal terminology, and employability skills. **Prerequisite:** OA085, OA131, OA201P, OA203, and touch typing ability of 50 words per minute. Class fee \$12. **F**

#### **OA133 Legal Machine Transcription**

**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:** OA132 and OA225 (OA202P recommended). Class fee \$12. **W**

#### **OA199D Introduction to PageMaker**

**1 class hrs/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 of 35 words per minute. Class fee \$12. Offered as needed.

#### **OA201P Word Processing**

**Procedures I-WordPerfect**

**3 class hrs/wk, 3 cr.**

Training in the operation of WordPerfect software on IBM-compatible computers. **Prerequisite:** Touch-typing ability of 35 words per minute. Class fee \$12. **F, W, Sp, Su**

#### **OA202P Word Processing**

**Procedures 2-WordPerfect**

**3 class hrs/wk, 3 cr.**

Intermediate word processing training for persons with basic skills and knowledge of WordPerfect on IBM-compatible equipment. **Prerequisite:** OA201P or equivalent and touch typing ability of 35 words per minute. Class fee \$12. **F, W, Sp**

#### **OA203 Advanced Formatting**

**1 class hrs/wk, 1 cr.**

Students will demonstrate knowledge of correct formats for formatting business documents including letters, envelopes, tables, memorandums,

reports, and forms. **Prerequisite:** OA202P and touch typing speed of 35 words per minute. Class fee \$4. 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. Offered as needed.

#### **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. Offered as needed.

#### **OA210 Office Microcomputer Applications**

3 class 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

#### **OA230 Executive Office Simulation**

2 class and 2 lab hrs/wk, 3 cr.

Presents participants with opportunities to use decision-making, prioritizing, and time management skills. **Prerequisite:** OA116, BA214, and OA210. Class fee \$12. W, Sp

#### **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. W

##### **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.

##### **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.

##### **PE185AA,AB,AC Sports Conditioning-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Students will develop and execute conditioning programs for specific athletic activities. F, W, Sp

##### **PE185AD,AE,AF Back Care and Conditioning-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

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.

##### **PE185BE,BF,BG Baseball-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed to introduce the student to the fundamentals of baseball.

##### **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.

##### **PE185BS,BT,BU Body Building-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Students will develop a strength and body building program to fit particular needs.

##### **PE185BV,BW,BX Bowling-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Presents the fundamentals of bowling.

##### **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.

##### **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. (May include country-western line dancing.)

**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.

**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.

**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.

**PE185DR,DS,DT Ballroom Dance-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Prepares students to perform basic dance steps and common variations of the Swing, Foxtrot, Waltz, and Cha Cha. Beginning class covers basics. Intermediate and advanced classes cover progressively more difficult variations. F, W, Sp

**PE185DV Square Dance Basic**

**IPE185DW Square Dance Main-stream IPE185DX Square Dance Plus**

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.

**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.

**PE185FD,FE,FF Soccer-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Covers the fundamentals of soccer and basic conditioning.

**PE185GJ,GK,GL Golf-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Designed for the beginning to advanced golfer. Emphasizes the development of basic swing fundamentals. In the latter stages of the class, students who have mastered the fundamentals will be allowed optional playing days. Proper golf etiquette, rules, and playing procedures emphasized throughout.

**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.

**PE185JJ,JK,JK Jogging-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Jogging to gain and maintain cardiovascular fitness.

**PE185KA,KB,KC Karate-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. each

Development of the basic language and movements of martial arts.

**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.

**PE185PA,PB,PC Personal Defense-Beginning, Intermediate, Advanced**

3 lab hrs/wk, 1 cr. 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.

**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 covered. Prerequisite: Beginning swimming. 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-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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**PE185WN Water Exercise**

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. Offered as needed.

**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. Stretch-



ing postures, proper breathing techniques, and stress reduction will be emphasized.

**PE190BI Baseball-Varsity**  
3 lab hrs/wk, 1 cr.  
Varsity baseball for men.

**PE190BN Basketball-Men's Varsity**  
3 lab hrs/wk, 1 cr.

**E190TQ Track and Field-Men's Varsity**  
3 lab hrs/wk, 1 cr.  
Intercollegiate varsity track and field competition for men.

**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

## 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 \$5.

**PE194TF Tennis-Professional**  
1 class and 2 lab hrs/wk, 2 cr.  
For physical education majors. Class fee \$5. 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 \$5. F

**PE294TR Track and Field-Professional**  
1 class and 2 lab hrs/wk, 2 cr.  
For physical education majors. Class fee \$5.

**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 \$5. 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 \$5. 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. Covers matter, measurements, mechanics, machines, heat, light, and electricity. Laboratory time provides demonstrations and experiments and applications of the various physical concepts. The practical aspects of physics as they relate to students' vocational area will be stressed. **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

**PH111 Physical Science for Fire Science and Emergency Services**  
4 class and 2 lab hrs/wk, 5 cr.  
Presents fundamental principles of physical science relating to the duties of fire and emergency service professionals. Concepts relating to motion, forces, interactions of matter and energy, properties of matter, electricity, heat and thermodynamics, and radiation will be studied in an applied format. **Prerequisite:** MTH095. Class fee \$5. W

**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, electromagnet-

ic 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:** Grade C or higher in 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:** Grade C or higher in 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:** Grade C or higher in 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**

### **PS151 Introduction to State of Oregon Legislative Process**

1 class hrs/wk, 1 cr.

An overview of the Oregon legislative process. Examines organization, legislative participation, legislative enactment, lobbying, and the electoral process. In addition, constituent, institutional, and organizational influences in legislative decision making will be discussed, and the influence of political parties and lobbyists will be analyzed. Offered as needed.

### **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.

Introduction to psychology. Includes perspectives in psychology; scientific methods of inquiry; biological foundations; sensation and perception; consciousness, learning, emotion, and motivation; personality theory; abnormal behavior; and therapeutic interventions. 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, memo-

ry, 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**

### **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 hrs/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 each. 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 non-fiction materials, especially 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 hrs/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. Offered as needed.

#### **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:** BA263 and 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 registration. 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 con-

sent of instructor. Class fee \$2 each. RUS101: F; RUS102: W; RUS103: Sp

## Secretarial

see Office Administration and Technology

## SKD

### Skills Development

see also Human Development, Mathematics, Reading

#### SKD003 College Orientation For Deaf Students

1 class hrs/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 hrs/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 hrs/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 hrs/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 hrs/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 hrs/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 students 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 hrs/wk, 1 cr. each

Assists students in analyzing and improving thinking skills and problem-solving techniques. 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.

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.

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.

Designed to develop interpersonal communication skills with friends and business associates. 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, non-verbal communication, values, cultural systems and models, sex roles, belief systems, and culture shock. Offered as needed.

#### **SP118 Interpersonal Communication in the Health Professions**

3 class hrs/wk, 3 cr.

Presents communication skills essential to the health care provider. Emphasizes provider/client relationship, concepts of sender/receiver perceptual differences, the need for message clarity, increased feedback, and active listening to create effective communication. Prerequisite: Interest in or involvement in health professions. F

#### **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. Independent study is also available (uses customized Macintosh computer programs, cassettes, and conversation partners/tutors). 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. Independent study targeted to health care professionals is also available. **Prerequisite:** SPAN111. Class fee \$2. W

**SPAN113 Spanish Conversation-Beginning, Term III**

3 class hrs/wk, 3 cr.

A continuation of SPAN112. Independent study targeted to health care professionals is also available. **Prerequisite:** SPAN112. Class fee \$2. Sp

**PAN150 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.

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

**PAN202 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, audiovisual 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.

**SSC206 Dealing with Diversity**

3 class hrs/wk, 3 cr.

Provides lessons in social interaction; the concepts of race, social class, age, gender, and sexual orientation; the sociology of minorities; global and national demographic trends; and U.S.

immigration policy. Offered as needed.

**ST**

**Occupational Skills Training**

**ST050A-L Occupational Skills Training**

40-480 lab hrs/term, variable 1-15 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 for JOBS participants. Students must be referred by a sponsoring agency. Variable class fee. 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, playwrighting, 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

**VC****Visual Communications****VC051A Layout and Design 1**  
2 class and 3 lab hrs/wk, 3 cr.

Introduces the basic skills required in the layout and design process of the graphic arts, including electronic page layout with type, photographs and other graphic elements. **Prerequisite:** Enrollment in the Visual Communications program; completion of VC081 and VC082, and good verbal and written communication skills. Class fee \$5. **W, Offered as needed.**

**VC051B Layout and Design 2**  
2 class and 3 lab hrs/wk, 3 cr.

Continuation of VC051A. **Prerequisite:** Enrollment in the Visual Communications program; successful completion of VC081, VC082, and VC051A; and good verbal and written communication skills. Class fee \$5. **Sp, Offered as needed.**

**VC052A Prepress Production 1**  
2 class and 3 lab hrs/wk, 3 cr.

Introduces prepress production methods including process photography, image assembly, proofing, and platemaking. **Prerequisite:** Enrollment in the Visual Communications program and successful completion of VC081 and VC082. Class fee \$5. **W, Offered as needed.**

**VC052B Electronic Imaging 1**  
2 class and 3 lab hrs/wk, 3 cr.

Introduces digital photography, black and white scanning and photo manipulation on the Macintosh. Work includes electronic imagesetting and operating a film processor. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC081 and VC082. The student should have completed a course in basic black and white photography or be concurrently enrolled in such a course. Class fee \$5. **Sp, Offered as needed.**

**VC053A Small Press Operations**  
2 class and 3 lab hrs/wk, 3 cr.

Introduces the basic skills required in small offset press and duplicator and bindery operations while working on real production jobs. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC081 and VC082. Class fee \$5. **W, Offered as needed.**

**VC053B Large Press Operations**  
2 class and 3 lab hrs/wk, 3 cr.

Continues the basics of press and bindery operations with multiple-color work on large presses. Multiple-page brochures and publications are included in real production jobs. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC081, VC082, and VC053A. Class fee \$5. **Sp, Offered as needed.**

**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. Electronic design, typography, proofing/

planning procedures, and career opportunities will be studied. Students will produce work for real clients. **Prerequisite:** Second-year standing in the Visual Communications program or consent of instructor. Class fee \$10. **F, W, Offered as needed.**

**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 digital photo manipulation, process photography, densitometry, multiple color stripping, 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. Class fee \$10. **F, W, Offered as needed.**

**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. Class fee \$10. **F, W, Offered as needed.**

**VC067A Basic Photography**  
2 class and 3 lab hrs/wk, 3 cr.

Introduction to 35mm black and white photography. Includes camera equipment, correct exposures, film processing, darkroom techniques, and enlargement presentation. Class fee \$7. **F, Offered as needed.**

**VC067B Technical Photography**  
2 class and 3 lab hrs/wk, 3 cr.

Introduction to studio and technical photography. Includes 35mm, large format cameras, lighting, art direction, and copystand work. **Prerequisite:** VC067A. Class fee \$7. **Sp, Offered as needed.**

**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:** VC067A, VC067B or consent of instructor. Class fee \$15. **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:** VC051A, VC051B, VC052A, VC052B, VC053A, VC053B or consent of instructor. **F, W, Sp**

**VC081 Introduction to Graphic Arts**  
2 class hrs/wk, 2 cr.

An overview of the graphic arts. Includes the history of printing and publishing; the evolution of desktop publishing, digital graphics, and related fields of applied arts; future trends; and career opportunities. **F, Offered as needed.**

**VC082 Basic Macintosh for Visual Arts**  
1 class and 2 lab hrs/wk, 2 cr.

An introduction to Macintosh computers with an emphasis on graphics applications. Includes file formats, linked and exported files, scanned images, memory, hardware and software, and high resolution imagesetting. Basic computer knowledge and keyboarding skills are beneficial. Class fee \$10. **F, Offered as needed.**

**VC083 Cost Accounting for Printers**  
3 class and 1 lab hrs/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**

**VC090 Visual Communications Operations**  
1 class hrs/wk, 1 cr.

A weekly meeting for all staff and students in the Visual Communications program. Discussion will include production schedules for current jobs, technology updates, software upgrades, equipment maintenance, and part-time job possibilities. Course may be repeated for a maximum of six credits. **Prerequisite:** Enrollment in the Visual Communications program. **F, W, Sp**

**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:** Enrollment as a full-time student in the Welding or Welding and Fabrication Programs, or consent of program chair. 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/3 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

**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. Sp

**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 comparisons. Examines the status of women in subsistence economies and developing countries, and under social-

ism 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.S

## Staff as of June, 1995

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—Program Chair, Construction Skills Training  
Adams, Laurie—Coordinator, 2+2/Technical Preparation Programs  
Aebischer, Joanne—Coordinator, Automated Library Systems  
Agee, Steve—Instructor, Automotive Technology  
Alfaqueh, Nuri—Instructor, Mathematics  
Alvarez, Maria (Cleo)—Counselor  
Anderson, D. Craig—Coordinator, Agriculture Program  
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  
Bates, Michael—Program Chair, Computer Science  
Bay, Brian—Director, Health, PE, and 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—President  
Berman, Arthur—Program Chair, Accounting and Management  
Bibler, Rob—Instructor, Art and Film Studies  
Blodget, James—Specialist, Media Production  
Blucher, Robert—Instructor, Computer Science  
Bode, Elizabeth—Instructor, Medical Office Assisting  
Bodtker, Diana—Instructor, Life Science  
Bodtker, Egon—Director, Social Science and Human Resources  
Bohlender, Susan—Instructor, Office Administration and Technology  
Bolen, Gene—Counselor/Instructor, Corrections Education  
Bone, Andrew—Instructor, Accounting  
Booth, Karleen—Instructor, Office Administration and Technology  
Bothwell, Bruce—Instructor, Electronics  
Bowman, Roberta—Instructor, Deaf and Hearing Impaired  
Boyington, Gary—Program Chair, Electronics  
Brooks, W. David—Instructor, Accounting  
Brownlow, Carol—Director, Title III  
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

Cammack, Janice—Instructor, Physical Science  
Campbell, Lorraine—Coordinator, Family Resource Center

Cannon, Michael—Instructor, Emergency Medical Technology

Carnegie, Kay—Instructor, Nursing

Caster, John—Instructor, Farm Business Management

Chancey, Fred—Instructor, English, Writing, and Literature

Chapman, Richard—Data Base Administrator

Chesley, Bob—Instructor, Mathematics

Christensen, Janet—Instructor, Corrections Education

Clark, Lori—Instructor, Health and Physical Education

Cochrane, Edward—Instructor, History

Cochrane, Linda—Director, Learning Resource Center

Cockrell, James—Program Chair, Real Estate

Colton, Lois—Instructor, Developmental Education

Concepcion, Paul—Instructor, Psychology

Connor, Marilyn—Instructor, Communication Skills

Cornutt, Delvin—Instructor, Sociology

Crandall, Sondra—Instructor, Public Speaking and Composition

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

Culveyhouse, James—Instructor, Training and Economic Development

### D

Darnall, Nathan—Instructor, Computer Science

Davenport, Susan—Coordinator, Older Adult Programs

Davidson, Mollie—Instructor, Human Services

Davis, Anne—Counselor

DePue, Thomas—Director, Information Technology

Desel, Theodore—Instructor, Speech

Dinsdale, Sara—Program Chair, Adult Basic Education and GED

Dixon, Robert—Coordinator, Oregon Advanced Technology Consortium

Dobay, Deborah—Instructor, Psychology

Doeneka, Molly—Program Chair, Political Science and Instructor, Anthropology

Dow, Lisa—Instructor, Medical Office Assisting

Dunn, Tim—Program Chair, Civil-Structural Engineering and Forest Resources Technology

Dutch, Donald—Instructor, Corrections Education

### E

Edge, Barbara—Coordinator, Grants Development

Ehlers, Deborah—Instructor and Counselor, Life Skills

Eichstadt, 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

Eustrom, James—Coordinator, Student Life and Tutoring

### F

Faircloth, Kathleen—Instructor, Psychology

Felton, Maureen—Assistant to the Vice President

Fenske, Helen—Instructor, Human Services

Ferguson, Elaine—Instructor, Center for Independent Learning

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—Program Chair, Health and Physical Education

Florence, William—Instructor, Journalism; adviser, student newspaper



## 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—JoAnne Belke*

*Zone four—Wayne E. Feller*

*Zone five—Philip Frey*

*Zone six—Gerald Watson*

*Zone seven—Gwen VanDenBosch*



Ford, Lowell—Dean, Student Development and Learning Resources  
Forest, Jacques—Instructor, Economics  
Forslund, Larry—Instructor, Life Science  
Freeman, Tony—Instructor, Human Services  
Furr, William—Program Chair, Alternative High School

## G

Galligan, Patricia—Director, Financial Aid  
Garaventa, James—Specialist, Executive/Employee Development  
Gaul, Debra—Coordinator, Volunteer Tutor Program  
Gerard, Kay—Program Chair, English as a Second Language  
Gilbert, Jeremy—Instructor, Psychology  
Gill, Tom—Instructor, Writing and Speech  
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—Dean, Regional Education Services

## H

Haines, Beverley—Coordinator, Cooperative Work Experience  
Hanby, Stephen—Instructor, Welding Technology  
Hare, Nancy—Instructor, Clerical Technology and Office Occupations  
Harmon, Millie—Instructor, Sociology  
Harris, Lois—Team Coordinator, Nursing  
Harris, Ralph—Instructor, Mathematics  
Hartline, Ron—Instructor, Manufacturing Engineering  
Harvey, Jean—Instructor, Alternative High School  
Hassoun, Judith—Counselor  
Hawkins, John—Executive Director, Chemeketa Foundation  
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  
Holtcamp, Richard—Instructor, German  
Hoobler, Tony—Instructor, Physical Science  
Horn, Terry—Director, Business and Management and Health Services Management  
Howard, Jeffrey—Instructor, Deaf and Hearing Impaired  
Hulett, Ronald—Director, Training & Economic Development Center  
Hunter, Jeri—Registrar  
Hunter, Robert—Manager, Computer Services

## I

Irving, Jan—Instructor, Nursing  
Ivey, Marion—Instructor, Custodial/Building Maintenance

## J

Jacobsen, Brent—Director, Advising and Counseling and the New Workforce  
Jacobson, Lee—Program Chair, Art  
Jantzi, Ron—Director, Trades and Technologies  
Johanson, Terri—Director, Woodburn Campus  
Johnson, Donald—Instructor, Drafting Technology  
Johnson, Robert—Instructor, Computer Science  
Jones, Ben—Counselor  
Jones, Lee—Instructor, Mathematics  
Jordan, Carol—Instructor, Office Administration and Technology  
Judd, Connie—Program Chair, Learning Assistance/Skills Development

## K

Kaczmarczyk, Lisa—Instructor, Computer Science  
Kalb, David—Instructor, Automotive Technology  
Kimmel, Fred—Instructor, Drafting Technology  
King, James—Program Chair, Human Services  
King, Janet—Director, Stayton Campus  
Kirk, Barbara—Instructor, Physical Science  
Kizziah, John—Instructor, Welding Technology  
Knab, Bernard—Director, Humanities and Communications  
Knight, Franklin—Instructor, Electronics  
Koch, Alan—Director, Student and College Advancement  
Krahn, Greta—Coordinator, Older Adult Programs  
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—Program Chair, Mathematics  
LeRoy, Robert—Instructor, Composition and Literature  
Levine, Ellen—Director, Regional Professional Technical Education  
Levine, Richard—Vice President  
Libbon, George—Athletic Director; Instructor, Health and Physical Education  
Linder, Christine—Instructor, Visual Communications  
Longshore, Glen—Specialist, Media Production

## M

MacDonald, Herman—Instructor, Alternative High School  
MacDonald, Lucy—Instructor, Learning Assistance/Skills Development  
MacInnes, Patricia—Instructor, Inmate Education  
Malone, Patricia—Instructor, Office Administration and Technology  
Marckx, Elaine—Team Coordinator, Nursing  
Martin, Joel—Counselor  
McCready, Marveen—Instructor, Mathematics  
McCullough, Linda—Instructor, Accounting  
McDermott, Laura—Reference Librarian  
McDonough, Thomas—Instructor, Physical Science  
McGill, Meg—Coordinator, Salem Area Programs  
McLain, Roger—Program Chair, Criminal Justice  
McLaughlin, Suzanne—Instructor, Spanish  
McLaughlin, Terrence—Instructor, Physical Education  
McNicholas, Michael—Program Chair, Physical Science  
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  
Mock, John—Instructor, Composition and Literature  
Mohn, Elaine—Instructor, Nursing  
Moothart, Janine—Coordinator, Cooperative Work Experience  
Morgan, Micheal—Dean, Campus-Based Instruction  
Morin, Christiane—Program Chair, Foreign Language, .. Humanities, and Speech  
Moxley, Doug—Executive Assistant  
Murphy, Lori—Director, Corrections Education

## N

Nagle, Priscilla—Instructor, Adult Basic Education and GED  
Nava, Andy—Manager, Public Safety  
Nelson, Sandra—Coordinator, New Workforce  
Neuendorf, Mary—Coordinator, Public Relations  
Newton, Kristi—Program Chair, Banking and Finance  
Nichols, Van—Program Chair, College Transfer Engineering and Drafting Technology  
Nieuburt, Kathleen—Team Coordinator, Nursing  
Nubile, Barbara—Team Coordinator, Nursing Skills Lab

**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  
 Parmeter, Stanton—Program Chair, Life Science  
 Patterson, Darrell—Instructor, Emergency Medical Technology  
 Paul, Sheri—Instructor, Custodial/Building Maintenance  
 Perkins, Ruth—Instructor, Inmate Education  
 Phipps, Raymond—Director, Cooperative Work Experience and Placement Services  
 Pillette-Stephens, Debra—Instructor, Criminal Justice  
 Pintler, Michael—Program Chair, Welding Technology  
 Pitt, Donald—Instructor, Civil-Structural Engineering Technology  
 Poston, Susan—Instructor, Mathematics  
 Pratt, Betty—Instructor, Office Administration and Technology  
 Prothero, Marilyn—Instructor, English as a Second Language

**R**

Rasmussen, Douglas—Instructor, Mathematics  
 Reed Mark—Instructor, Life Science  
 Reid, Donna—Instructor, Art and Writing  
 Rhodes, Sandra—Instructor, Adult Basic Education and GED, Downtown Learning Center  
 Rice, Leonard—Instructor, Drafting Technology  
 Richardson, Steve—Program Chair, Modern Curriculum  
 Roach, Larry—Project Specialist, Technical Preparation Program  
 Roelofs, Gary—Instructor, English as a Second Language  
 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  
 Sawser, Judith—Program Chair, JOBS; Coordinator, Placement Resource Center  
 Saxowsky, Gail—Instructor, Emergency Medical Technology  
 Scheer, Sara—Instructor, Nursing  
 Scherf, Joan—Director, Dallas Campus  
 Schmidt, Steve—Manager, Computer Services  
 Schneider, Arthur—Instructor, Office Administration and Technology  
 Scoggin, Paul—Coordinator, Hospitality Systems Management  
 Seals, Georgina—Program Chair, Office Administration and Technology  
 Sessions, Patricia—Instructor, Office Administration and Technology  
 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  
 Stevens, Malia—Program Chair, Instructional Assistant  
 Stewart, Joanne—Instructor, Adult Basic Education  
 Stubbs, Dina—Team Coordinator, Nursing  
 Suter, Marcia—Program Chair, English, Writing, and Literature  
 Suter, Paul—Instructor, Communication Skills  
 Swearingen, Dell—Director, Science, Mathematics, and Electronics

**T**

Tabor, Patrick—Instructor, History  
 Tardaewether, Virginia—Instructor, Adult Basic Education and Even Start  
 Terhes, John—Instructor, Communication Skills  
 Terpin, Mark—Director, Developmental Education  
 Thorp, Anne—Instructor, Adult Basic Education and GED (Downtown Learning Center)  
 Trumbo, Mark—Director, McMinnville Center

**V**

Vaughn, Joyce—Program Chair, Dental Assisting  
 Vessello, Jerry—Director, Facilities and Operations  
 Vollmar, Lorene—Instructor, Dental Assisting

**W**

Wachal, Ken—Instructor, Business Management  
 Wahner, Royal—Program Chair, Manufacturing Engineering Technology  
 Wall, James—Coordinator, Cooperative Work Experience  
 Ward, H. Jill—Coordinator, ABE/GED and Disability Services  
 Warren, John—Instructor and Counselor, Life Skills  
 Warren, Lynda—Manager, Business Services  
 Wasson, Barbara—Instructor, Learning Assistance/Skills Development  
 West, Susan—Instructor, Health and Physical Education  
 Wetle, Victoria—Program Chair, Health Service Management  
 White, Roger—Instructor, Electronics  
 Whitton, Louanne—Instructor, Adult Basic Education and GED  
 Whyte, Catherine—Instructor, Instructional Assistant  
 Wigginton, Barbara—Instructor, Composition and Literature  
 Williams, Doris—Director, Nursing  
 Willis, Vicki—Assistant to the President, Organizational Development  
 Wilson, Peggy—Instructor, Dental Assisting  
 Wiltgen, Christine—Instructor, Mathematics  
 Wintermeyer, Larry—Instructor, Computer Science  
 Woods, Rae—Counselor  
 Wright, Larry—Instructor, Accounting and Business Management

**Y**

Yenne, Michele—Team Coordinator, Nursing

**Z**

Zacharias, Patricia—Instructor, Health Services Management  
 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. Students' access to education shall not be inhibited by prejudiced or capricious academic evaluation.
  - 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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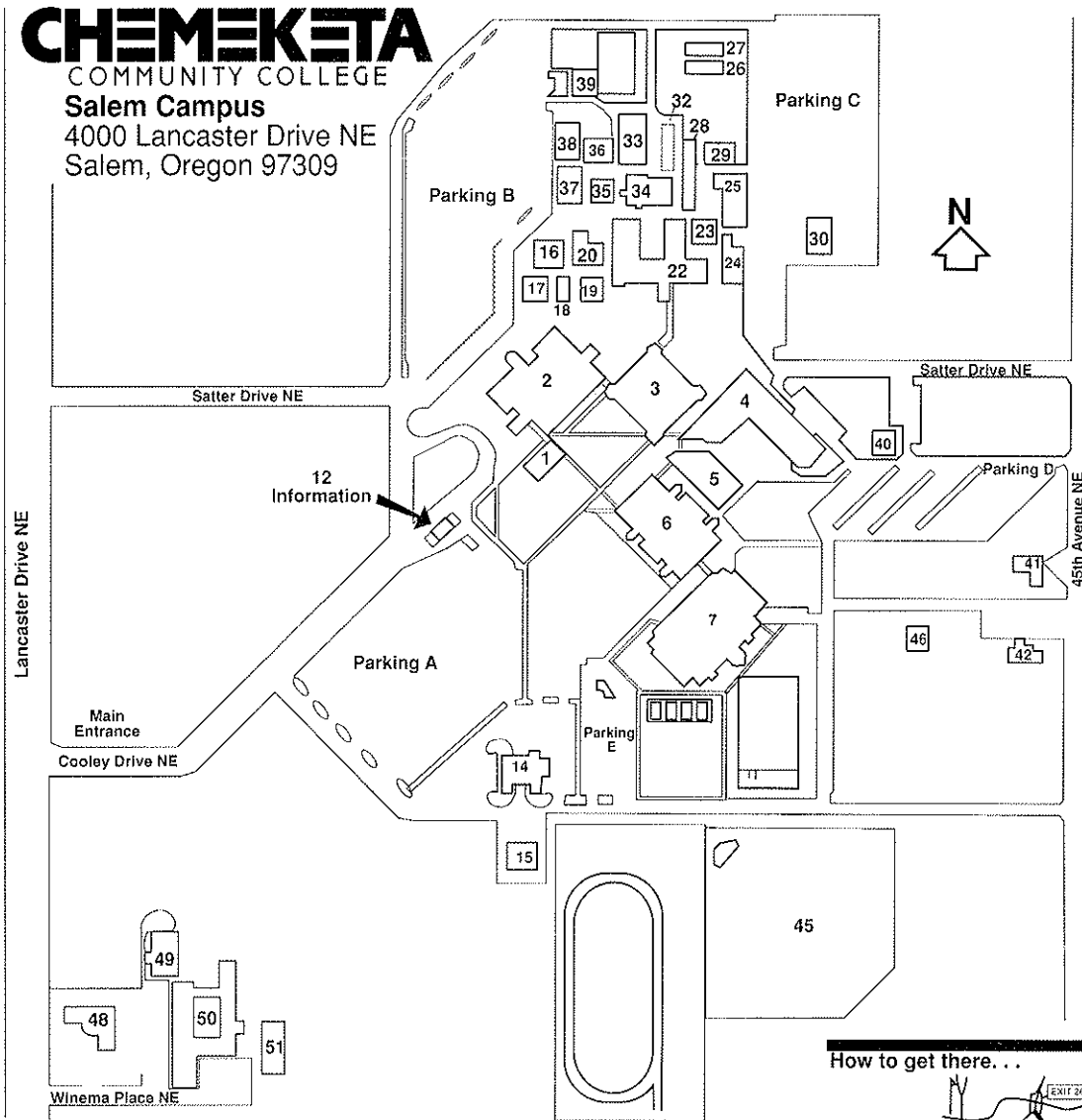


# CHEMEKETA

COMMUNITY COLLEGE

## Salem Campus

4000 Lancaster Drive NE  
Salem, Oregon 97309

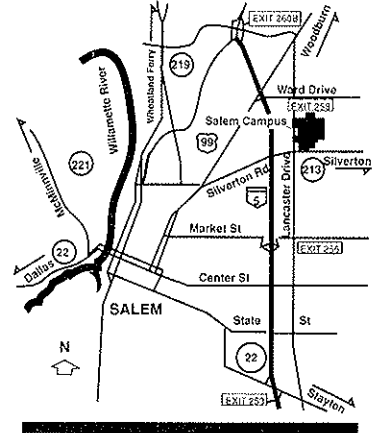


### Map Legend

1. Bookstore and staff offices
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. English as a Second Language, Volunteer Tutor Program
17. Cooperative Work Experience, Placement Resource Center, JOBS Program
18. Staff offices and classrooms
19. Life Skills Center

20. New Workforce Resource Center
22. Admissions, Business Office, Computer Services, Financial Aid, Personnel, Registrar's Office
23. Life Skills classroom
24. Machine Shop
25. Welding Shop
26. Classrooms A-B
27. Classrooms A-B
28. Classrooms A-F
29. Staff offices, classroom
30. Maintenance/Facilities Services
32. Classrooms A-D
33. Mailing, Purchasing, 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, Chemeketa Community Child Care Center
51. Construction Skills



CHEMEKETA COMMUNITY COLLEGE

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