


## Table of Contents

Application form, iii
about Chemeketa, V
College District Map, vi
Introducing Chemeketa, 1
Academic Calendar, 2
Admission and Registration, 4
How to Enroll at Chemeketa, 5
Money Matters, 7
Academic Information, 13
Career and Employment Advising and Services, 19
Services to the Community, 20
Student Life, 22
Education for the Community, 23

## Degrees, Diplomas, Certificates, and Transfer Information, 25

Degrees, 26
Graduation, 27
Certificates, 27
High School Completion, ABE, and GED, 27
College Transfer, 31
General Education Requirements:
Eastem Oregon State College, 32
Oregon Institute of Technology, 33
Oregon State University, 34
Porlland State University, 35
Southem Oregon State College, 36
University of Oregon, 37
Westem Oregon State College, 38
Programs of Study, 39
Program Guide, 40-41

- Accounting, 42
- Agriculture, 43
- Anthropology, 43
- Art, 44
- Automotive Technology, 43
- Banking and Finance, 45
- Biology, Botany, Entomology, General Science, and Zoology, 46
- Building Inspection Technology, 47
- Business Administration, 48
- Chemistry, 49
- Chiropractic, 49
- Civil-Structural Engineering Technology, 50
- Computer Programming, 5 I
- Computer Science, 53
- Construction Skills Training, 53
- Criminal Justice, 54
- Dental Assisting, 54
- Dental Hygiene, 55
- Drafting Technology-CAD, 56
- Early Childhood Education, 58
- Economics, 59
- Education, 60
- Electronics Technologies, 61
- Emergency Medical Technology-Paramedic, 65
- Engineering, 66
- English, 67
- Farm Business Management, 67
- Fire Protection Technology, 68
- Foreign Languages, 69
- Forest Resources Technology, 70
- Forestry, 71
- General Studies, 71
- Geography, 72
- Geology, 72
- Health, Health Education, 73
- Health Services Management, 73
- History, 76
- Home Economics, 76
- Hospitality and Tourism Management, 77
- Hotel, Restaurant, and Resort Management, 78
- Human Services, 79
- Industrial Technology and Apprenticeship, 81
- Journalism, 81
- Management, 82
- Manufacturing Engineering Technologies, 83
- Manufacturing Engineering Technologies (college transfer), 84
- Mathematics, 84
- Medical Office Assisting, 85
- Nursing, 86
- Nursing (college transfer), 87
- Occupational Skills Training, 87
- Office Administration and Technology, 88
- Philosophy, 92
- Physical Education and Human Movement Studies, 92
- Physics, 93
- Political Science, 93
- Pre-Enginecring, 94
- Pre-Law, 94
- Pre-Professional Study (medicine, dentistry, and veterinary medicine), 94
- Professional-Technical Teacher Preparation, 94
- Psychology, 95
- Real Estate, 96
- Small Business Management, 97
- Sociology, 97
- Speech, 97
- Visual Communications, 98
- Welding, 99


## Course Descriptions, 101

Definition of Electives, 102

## Board of Education, 147

## Staff, 147

Student Rights and Responsibilities, 150
Index, 152
Salem Campus Map, 154

CHEMEK=TA
COMMUNITY COLLEGE
Chemeketa Community college is an equal opportunity, attimative action institution.
CONFIDENTIAL STUDENT IDENTIFICATION NUMBER: Providing your Social Security number is voluntany. If you provide it, the college will use your Social Security number for keeping records, doing research, and reporting. The college will not use your number to make any decision directly affecting you or any other person. Your Social Secunty number will not be given to the general public. If you choose not to provide your Social Security number, you will not be denied any rights as a student. Please read the statement on Page 13 which describes how your number will be used. Providing your Social Security number means that you consent to use of the number in the manner prescribed. Contact the Admissions Office for additional infomation.


Social Secunity Number

## STUDENT RECORD FORM

To apply for admission, fill out this form and return or mail it to the Admissions Office, Building 22, Room 110, Chemeketa Community College, P.O. Box 14007, Salem, OR 97309. Contact the Admissions Office at (503) 399-5006 for information on limited enroliment programs, admission requirements for specific programs, or for the status of your application. Students taking six or more credit hours must take a free placement test before they apply. Contact the Advising and Counseling Center in Building 2 on the Salem Campus or call (503) 399-5120 for information.
Mailing Address $\frac{}{\text { Number }}$

PLEASE PRINT
Name

State $\qquad$ County $\qquad$ Phone (Day) $\qquad$ (Eve) $\qquad$
How long have you lived in Oregon? $\qquad$ $\square$ Citizen or $\square$ Permanent resident of what country? (USA, Germany, Palau, etc.)

Date of birth $\overline{\text { Month Day }}$ Year Age__ Sex: $\square$ Female $\square$ Male
Are you a US veteran? $\square$ Yes $\square$ No
Alien Number $\qquad$

I have (not) completed high school as follows (check one):
$\square$ N-Did not complete high school
S.Still in high school

H-High school graduate
G-GËD
D-Alternative high school diploma
1-Certificate of Initial Mastery (CIM)
A-Certificate of Advanced Mastery (CAM)
E-External diploma program
T-Attendance completion
$\square$ P-Proficiency exam


I am applying for: (enter curriculum code from back)

I plan to start at CCC: (check one) $\square$ Fall (Sept.) $\square$ Winter (Jan.) $\square$ Spring (March) $\square$ Summer (June)

I plan to register for (check one): $\square$ non-credit only $\square 1-5$ credits $\square 6-11$ credits $\square 12$ or more credits
To assist the college in complying with federal requirements and to provide needed services, you are urged to supply the following information voluntarily. This information is confidential. (Check one):
■1. White, Non-Hispanic ■2. Black, Non-Hispanic [] 3. Hispanic $\square$ 4. American Indian or Alaska native $\square 5$. Asian or Pacific Islander

Chemeketa Community College releases only very limited information regarding students: enrollment status, dates of enrollment, degree or certificate awarded, athletic statistics, and honors awarded. If you do NOT want any person outside of the college, including prospective employers, to know any of this information, you must file a Request for Non-Disclosure of Student information Form with the Admissions Office.

I certify that all statements on this application are complete and true. I also understand that if I am admitted and do not enroll for the term to which I am admitted I will need to reapply for admission. Please note: No submitted materials will be returned and/or duplicated.
Signature $\qquad$ Date $\qquad$

## NON-CREDIT ONLY

Use only if all courses are non-credit ( 900 ). Do not use for auditing courses
High School Completion (O6B)
PROFESSIONAL-TECHNICALPROGRAMS
Accounting (025)
Automotive Technician (129)
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-Struclural 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 Juslice (044)

* Dental Assisting (08E)

Drafting Technology - CAD (142)
Early Childhood Education (060)
Education Assistant
Electronic Engineering (120)
Electronic Engineering-Advanced Technology Certificate-one year (120)

* Emergency Medical Technology-Paramedic (60U)

Fire Prevention (57P)

* Fire Suppression (05F)

Forest Resources Technology (057)

* Healih Services Management - Claims Analys/Medical Biller (70N)
* Healih Services Management - Health Information Technician (09X)
* Health Services Management - Health Services Management (09V)
* Healch Services Management - Medical Receptionist/Clerk (70T)
* Health Services Management - Medical Transcriptionist (09Z)

Hospitality and Tounism Management (624)

* Human Services - AlcoholDrugs (09A)
* Human Services - Gerontology (09G)
* Human Services - Social Services (09S)

Industrial Electronics (126)
Industrial Technology ( 160 )
Management (026)
Manufacturing Operations (148)
Manufacturing Technology (147)
Mechanical Design (143)

* Medical Office Assisting (08L)
* Nursing ( 08 N )
Pre-Nursing (291)

Occupational Skills Training (705)
Office Administration and Technology - Administrative Assistant Option (528)
Office Administration and Technology - Information Processing (532)
Office Administration and Technology - Mcdical 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)

Welding (137)
Welding Fabrication (136)

## LOWER DIVISION COURSES OF STUDY WHICH MAY BE TRANSEERRED TO OREGONS FOUR-YEAR COLLEGES AND UNIVERSITIES <br> LDC-Business (210)

Accounting
** Business Adninisitration
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 Healch
** Healch 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
** Foreiga Languages
** Journalism
Lilcrature
** Music
** Philosophy
** Speech
** Theates
LDC-Mathematics (310)
** Mathematics
LDC-Physical Education/Human Movement Studies (270)
** Physical Education
LDC-Science (300)
** Agriculture
** Biology
** Chemistry
** Chiropractic
** Dental Hygicnc
Entomology
** Geology Horticulture
** Occanography Physical Science
** Physics
** Pre-Professional Sudy (Medicine, Dentistry, and Veterinary Medicine)
** Zoology
LDC-Social Sciences (260)
** Anthropology
** Economics Ethnic Studies
** Geography
** Hislory
Law Enforcement-Corrections
** Political Science
Pre-Law
** Psychology
** Sociology

One star (*) indicates programs which may have special admission requirements or enroliment limits. Please contact the Admissions Office at 399-5006.


## Chemeketa Community College District



## LEGEND

CHEMEKETA Salem Campus
Directions to Chemeketa's main campus in Salem and a campus map can be found on Page 154.
Other communities where Chemeketa classes are held

## Introducing Chemeketa



## 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 the college's Dallas, McMinnville,

Santiam, or Woodburn campuses. 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 pro-fessional-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 pro-fessional-technical programs include general education courses. The aim of these courses is to help you become more competent in writing and mathematics and gain knowledge of humanities, communications, sciences, and social sciences.

- College transfer courses are for students who wish to continue their education at a four-year college or university. If you successfully complete Chemeketa's two-year college transfer program, you may also earn an Oregon Associate of Arts transfer degree. See Page 28 for requirements.
Some of our professional and technical programs also include courses which may be transferred for college credit. For more specific information, consult with a Chemeketa counselor or advisor, or with the four-year institution you wish to attend. Generally, transfer courses are numbered 100 or above.
- Lifelong learning is important at Chemeketa. We encourage you to continue to learn throughout your life. We offer many credit and non-credit classes, workshops, and short courses. Chemeketa classes can help you to improve your technical, vocational, avocational, and academic knowledge and skills; to retrain for new positions; and to continue your personal development.
- 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 245 full-time faculty members. In general, faculty who teach college transfer courses have at least a master's degree; some have doctorates.

## Academic Calendar

|  | Fall <br> 1996 | Winter <br> 1997 | Spring <br> 1997 | Summer <br> 1997 | Fall <br> (Tentative) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Registration begins | Please check each term's Schedule of Classes for registration information. |  |  |  |  |
| Day and Evening classes begin | September 23 | January 6 | March 31 | June 23 | September 22 |
| Last day to withdraw and receive a refund | October 4 | January 17 | April 11 | July 7 | October 3 |
| Last day to register or add classes | October 11 | January 24 | April 18 | July 11 | October 10 |
| One and two-year programs |  |  |  |  |  |

Faculty in professional-technical programs generally have a rich background which combines education with practical, on-thejob experience. In addition, we hire an average of 600 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 the college'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 Chemereta?

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, Sublimity, 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, at 365 Ferry Street S.E., in downtown Salem.

## What kind of facilities does Chemeketa have?

Chemeketa's Salem Campus has 10 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.
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 (503) 399-5008. Chemeketa's Dallas, McMinnville, Santiam, and Woodburn campuses 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 people come to Chemeketa to train or retrain for new careers or to update their professionaltechnical 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.
Almost 50,000 persons enroll in Chemeketa classes and workshops every year. Each term, about 5,000 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 150 and 151 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 teach-

## Affirmative action and non-harassment policy

It is the policy of
Chemeketa Communit)
College that discrimina-
tion on the grounds of
race, color, religion, sex,
national origin, marital
status, age, disabilit;, or
family relationships will
not exist in any area,
activit;, or operation of
the college as required by
Tille 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 pro. hibits harassment on the basis of ann: 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: I) 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 performantce; 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).

ing 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 commu-
nity 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.
3.2 Assure the protection of confidential student records and information.
3.3 Provide opportunities for association and preserve freedom of expression.

Who may enrollat
Chemeketa?
Admissions Office, (503) 399-5006; FAX, (503) 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 submit this form, contact the Advising and Counseling Center in Building 2 on the Salem Campus at (503) 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 Dallas, McMinnville, Santiam, and Woodburn campuses.

## Placement tests

(503) $399-5120$

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 Dallas, McMinnville, Santiam, and Woodburn campuses.

## REGISTRATION ORIENTATION (503) 399.5120

After you have applied for admission, you will be invited to a registration 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

(503) 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.

## How to Enroll at Chemeketa

| Student Classification | 1. Academic and career decision making | 2. Placement testing | 3. Applying for admission | 4. Registration for classes |
| :---: | :---: | :---: | :---: | :---: |
| Enrolling for MOST Salem Campus classes* | 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. | New Students- <br> Register following directions sent by Admissions Office. <br> Re-entering/Continuing <br> Students- <br> Register by touch-tone telephone following directions published in the quarterly Schedule of Classes. |
| Enrolling for classes held outside of Salem | Call the college's Dallas, McMinnville, Santiam, or Woodbum campuses or contact Advising and Counseling Center, Building 2, Salem Campus. | Contact nearest Chemeketa campus. | File Student Record Form at the nearest Chemeketa campus or with Admissions Office, Building 22, Salem Campus. | New Students- <br> Follow procedure above for encolling on Salem Campus. <br> Re-entering/Continuing Students- <br> Register by touch-tone telephone following directions published in the quarterly Schedule of Classes. |
| Enrolling for Salem evening, weekend, or non-credit classes | 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 or <br> - Register by touch-tone teiephone following directions published in the quarterly Schedule of Classes. |
| Interested in GED or English as a Second Language (non-credit) | Contact Developmental Education Office, Building 18, Salem Campus; the college's Dallas, McMinnville, Santiam, or Woodburn campuses; or the Downtown Leaming Center in Salem. During summer, contact the Developmental Education Office, Building 18. | GED: Contact Developmental Eduction Office, Building 18, Salem Campus. <br> ESL: Contact ESL Office, Building 16, Salem Campus. | Student Record Form not required. Students 16 to 18 must have a High School Rclease Form and be referred by the Downtown Learning Center if living in the SalemKeizer School District. | Consult quarterly Schedule of Classes. Open entry during term. |
| Interested in earning a high school diploma | Contact the High School Completion Office, Building 50, Salem Campus; or the college's Dallas, McMinnville, Santiam, or Woodburn campuses (optional). During summer, contact the Developmental Education Office, Building 18. | 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> - Sudents 16 to 18 must have a High School Release Form and be referted by the Downtown Leaming Center if living in the SalemKeizer School District. | Follow directions sent by Admissions Office 10 days before registration. |
| *These programs have prerequisites and require assessment before admission. After taking the placement test, contact the Advising and Counseling Center at (503) 399-5120 for assessment. |  |  |  |  |
| Accounting Automative Technology Banking and Finance Computer Programming | Construction Technology Dental Assisting Drafting Technology Electronics Technologies | Health Services Management Health Information Technician Medical Transcriptionist Hospitality and Tourism Management | Management <br> Manufacturing Engineering Technologies Medical Office Assisting | Office Administration and Technology Real Estate Welding Fabrication |
| **These programs have special admission requirements or enrollment limits. Please contact the Admissions Office, (503) 399.5006 , for details. |  |  |  |  |
| Building Inspection <br> Education Assistant <br> Emergency Medical Technology <br> Fire Supression | Human Services Nursing (RN, LPN, Nursing Assisting, re-entry courses) | Professional-Technical Teacher Preparation Visual Communications |  |  |

## Registration

(503) 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 unless you make satisfactory arrangements with the Business Office in Building 22.

## Class loads

(503) $399-5001$

If you enroll in 12 or more credit hours, you are considered full time for academic purposes.

## Class changes

(503) 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. We recommend the changes 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 profes-sional-technical programs which limit enrollment or have special admission requirements:

## Accounting

Automotive Technology
Banking and Finance
Building Inspection
Computer Programming
Construction Skills Training
Dental Assisting
Drafting Technology
Electronics Technologies
Emergency Medical Technology
Fire Suppression
Health Information Technician
Health Services Management
Hospitality Systems Management
Human Services
Management
Manufacturing Engineering Technologies
Medical Office Assisting
Medical Transcriptionist
Nursing (Registered Nurse, Licensed Practical Nurse, Nursing Assistant, and re-entry courses)
Office Administration and Technology Real Estate
Welding Fabrication
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 have established new entry requirements. If you wish to take six or more credit hours in health, business, or trades and technology programs, you will
need to be assessed and may need to take preparatory courses before being admitted. For details about these requirements, 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, ánd the military

(503) 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 collegelevel credits earned at a regionally accred-

## About Chemereta's Diversity

[^0]
## Credt Class Tuition

| No. of <br> Credit Hours | Oregon <br> Students | Out-ff-State <br> Students | International <br> Students |
| :---: | :---: | :---: | :---: |
| 1 | $\$ 34$ | $\$ 120$ | $\$ 140$ |
| 2 | $\$ 68$ | $\$ 240$ | $\$ 280$ |
| 3 | $\$ 102$ | $\$ 360$ | $\$ 420$ |
| 4 | $\$ 136$ | $\$ 480$ | $\$ 560$ |
| 5 | $\$ 170$ | $\$ 600$ | $\$ 700$ |
| 6 | $\$ 204$ | $\$ 720$ | $\$ 840$ |
| 7 | $\$ 238$ | $\$ 840$ | $\$ 980$ |
| 8 | $\$ 272$ | $\$ 960$ | $\$ 1120$ |
| 9 | $\$ 306$ | $\$ 1080$ | $\$ 1260$ |
| 10 | $\$ 340$ | $\$ 1200$ | $\$ 1400$ |
| 11 | $\$ 374$ | $\$ 1320$ | $\$ 1540$ |
| 12 | $\$ 408$ | $\$ 1440$ | $\$ 1680$ |
| 13 | $\$ 442$ | $\$ 1560$ | $\$ 1820$ |
| 14 | $\$ 476$ | $\$ 1680$ | $\$ 1960$ |
| 15 | $\$ 510$ | $\$ 1800$ | $\$ 2100$ |
| 16 | $\$ 544$ | $\$ 1920$ | $\$ 2240$ |
| 17 | $\$ 578$ | $\$ 2040$ | $\$ 2380$ |
| 18 | $\$ 612$ | $\$ 2160$ | $\$ 2520$ |

Over 18 hours: Multiply the number of credit hours by the cost given for one credit hour.
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 (AP) 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 15.
Chemeketa also accepts some credits from the military and the Community College of the Air Force. Submit an official copy
of your CCAF transcript to the Admissions Office from CCAF or submit a certified copy of your DD214 to Admissions and request an evaluation of your credits.
Your accepted transfer credits and scores will become part of your permanent record at Chemeketa. Only the course grades you earn at Chemeketa are used to compute your grade point average.

## International students

(503) 399-5141; FAX: (503) 399-2519 e-mail: international@chemek.cc.or.us
If you are a citizen of another country, you must meet certain federal immigration and college requirements before being admitted to Chemeketa. You are expected to maintain levels of academic achievement acceptable to the United States Immigration Service and to the college.
Chemeketa's Admissions Office has spe-
cial 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

(503) 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.

## $] \sqrt{\text { Oney }} \begin{aligned} & \text { Matters }\end{aligned}$

## Tution

(503) 399.5011

Tuition and fees are due when you register. If your credit is in good standing, you may pay tuition in installments, with onethird of the amount due plus a $\$ 20$ contract fee to be paid at 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 101.

## 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.
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.

## Older adut tuition

(503) 399-5140

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.

## 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

(503) 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 in Building 22 before the end of the fourth week of the term.

## TUTIION REEUND 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 15.
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 (503) $399-5011$

The cost of books and supplies for fulltime 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 profes-sional-technical programs on Pages 39 to 100.
Fees vary by the course. They are included in the course descriptions in this catalog.
You may rent a hall locker for $\$ 5$ a term. Our physical education locker and towel fee is $\$ 15$ if you are not enrolled in a PE class.
Contact the Cashier's Office in Building 22 on the Salem Campus for more information on fees and program costs.

## STUDENT HEALTH AND ACCDENT INSURANCE (503) 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 at (503) 399-5006 for further information.

## Veterans' services <br> (503) 399-5004

If you are a veteran, contact the veterans' specialist in the Registrar's Office in Building 22 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 submit a Student Record Form to the Admissions Office in Building 22.
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 $A=4, B=3, C=2, D=1$, $\mathrm{F}=0$.
- 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 ad

(503) 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 ELIGBLE?

To qualify for financial aid, you must:

- Be at least 18 years of age or have a high school diploma or a General Educational Development (GED) high school equivalency certificate, or have the ability to benefit from a college education.
- Be a United States citizen or able to provide I-94 or other documents showing you are an eligible non-citizen.
-Be registered with Selective Service if you are a male born after December 31, 1960. (If you are now on active duty in the United States Armed Forces-not the reserves-you do not have to be registered.)
- Show need for financial help.
-Enroll in a degree program or a certificate program at Chemeketa.
- Enroll in six or more credit hours at Chemeketa with these restrictions:

1) If you wish to receive aid as a full-time student, you must register for 12 or more credit hours. These may include only one three-credithour television, mail, or on-line course.
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.
-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 retake the placement test. Contact the Advising and Counseling Center.

## What kinds of financlalad are avallable?

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.

## 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 friend.
ships, and shared old
name Chemeketa is a meaning "place of peace." Long before settlers came to this area, Willamette Valley Native Americans would gather at a place they called Chemeketa There they conducted their counclls, renewed friend ships, 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 here) which appear on Building 3 on our Salem Campus. Designed by graphic anist

Anvid 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 allitudes. 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.


## Kinds of financial aid available at Chemeketa

Except as listed below, all financial aid programs have the following
requrements:
-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 progran.
- You must use the money you receive to 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 <br> of funding | Eligibility requirements | Available amounts | Special information |
| :--- | :--- | :--- | :--- |

## Loans

Federal Perkins
Student Loan Program (FPSL)

- You may borrow up to $\$ 3,000$ in an -You must complete a separate Perkins Loan academic year.
-The highest award at Chemeketa for 1996.97 will be $\$ 1,500$.
application form.
- You do not have to pay any interest or principal while in school.
-You must begin payment six to nine months after you drop your enrollment to less than six credit hours.
-The current interest rate is 5 percent.
- You must repay Chemeketa.
- You must view an orientation video before funds are disbursed.
-Interest is paid by the federal govermment while you are enrolled in an approved program. - You must attend an entrance and an exit interview.
*Contact the Financial Aid Office for information on repayment and deferments.


## Program and source of funding

## Eligibility requirements Available amounts

## Special information

## Loans (cont.)

Federal Subsidized Stafford Loan (funded by commercial lenders with state or other agency guarantee and interest subsidy from the federal government)
-School has the right to deny loan certification and/or limit amount borrowed.

- 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 that six credit hours.
- You may defer payment if you continue halftime or full-time study. Contact the Financial
Aid Office for other possible defements.
- 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. Tems and conditions for subsidized Stafford Loans apply to unsubsidized Stafford Loans.
-School has the right to deny loan certification and/or limit amount borrowed.

## 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.
-Lenders will perform credit checks and may deny loan certification based on adverse credit.
-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.

- 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 |  | -Amounts vary according to your financial need. <br> -Funds usually are not more than $\$ 600$ a term or $\$ 1,800$ a year. <br> - Jobs pay minimum wage or higher. | - Jobs are available both on and off campus. <br> - You must view a college work-study orientation video before job placement. <br> -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. <br> -Jobs pay minimum wage or higher. | - No FAFSA is required. <br> -Contact the Financial Aid Office. |
| Part-time jobs (funded by private businesses) | - You must be willing to work. <br> -You must meet the qualifications of the employer. | - Pay varies according to the job. <br> -The average wage for 1995-96 was $\$ 5.10$ an hour. | - No FAFSA is required. <br> - Apply at the Placement Resource Center in Building 17 on the Salem Campus. |

-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 the college's Dallas, McMinnville, Santiam, or Woodburn campuses.
-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 Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses for details.
-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 eligble

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 credithour 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

## 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 necessan' 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 senvices.
required to repay all financial aid received.
At least once a year, the Financial Aid Office checks to make sure you have completed the required number of total 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

During the first two weeks of each term, the college policy for tuition refunds applies to all students. (See Page 8 for details.) There is an additional federal tuition refund policy for financial aid students who totally withdraw, effective the third to the sixth week of the term. Examples of the application of thisirefund are available in the Financial Aid Office. Refunds are credited to the financial aid programs in the following sequence: 1) unsubsidized Stafford Loan, 2) subsidized Stafford Loan, 3) "PLUS" Loan, 4) Perkins Loan, 5) Pell Grant, 6) Supplemental Educational Opportunity Grant, and 7) other Title IV aid, and 8) student.

## Repayments

When a financial aid student who has received a cash disbursement totally withdraws or drops below the credit hour requirements for the term, the Financial Aid Office will determine whether the student was entitled to all of the cash received. If not, the Financial Aid Office will determine what portion of the cash disbursement the student owes, and will notify the student. Students owing a repayment are not eligible for further financial aid funds and cannot receive any services from the college until the repayment is made. All financial aid students will receive a copy of this repayment pol-
icy. Repayments are credited to the financial aid programs in the following sequence: 1) Perkins Loan, 2) Pell Grant, 3) Supplemental Educational Opportunity Grant, 4) other Title IV programs, and 5) state, private, and institutional programs.

## 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.

## \& $\begin{aligned} & \text { CADEMIC } \\ & \text { InFORMATION }\end{aligned}$

## STUDENT RECORDS AND TRANSCRIPTS

## (503) 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.
We recommend you 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, col-
leges, and vocational schools, to find
out how many community college students go on with their education and to find out how successful community college students are with their subsequent 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 leam 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

## (503) $399-5001$

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 welfare of the student and for the integrity of the college. 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 in Building 22 to inspect Chemeketa's student records policy and procedures, 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 |  |
| :---: | :---: | :---: |
| B | Above average |  |
| C | Average. |  |
| D | Below average |  |
| F | Failed . . . . . |  |
| I | - Incomplete |  |
| P | Pass. . |  |

N No grade assigned. . ............. 0
R Course repeated ............... 0
T Transfer ......................... 0
X Audit............................ 0
Z Course in progress $\ldots \ldots \ldots \ldots .$.
Your grade point average is computed by dividing the total credit hours (except I, N, P, R, T, X, and Z) into the total points eamed.
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.

## Continuing Education Classes

A continuing education unit (CEU) course is one that provides general or technical information which is applicable to the professional or technical field and will be of value wherever the individual is employed. CEUs are not equivalent to credit hours and therefore cannot be used toward Chemeketa certificates or degrees. Some programs offering CEU classes offer CEU certificates. One CEU is awarded for each 10 hours or their equivalent. Chemeketa transcript records are available for CEU hours.
Tuition for CEU courses is charged regardless of the number of credit hours for which the student enrolls. CEU classes do not meet the federal requirements for financial aid or veterans' benefits.

## Academic Progress/ Review Program <br> (503) 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

(503) 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 in Building 22 to change your grade to an $R$ (Repeated). Please note that even if you repeat a course more than once, only your original grade can be changed to an R. If you repeat a course and receive a lower grade, both grades will remain on the transcript. An original grade of $N$ or I may not be changed by repeating a course. The Registrar does not include an R in computing your gradepoint 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

(503) 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 (503) 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 Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. Submit the completed form to the Registrar's Office, Cashier's Office, or one of our outreach 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 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-stating 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

(503) $399-5210$

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)

## (503) 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 deter-

## Questions? Call For information

Campus Information Center, (503) 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 jour questions about room locations, activities, work-
shops, meetings, academic advisor assignments, and instructional stafj office locations. The Information Center also distributes class schedules and cata-
logs.
Chemeketa Campuses
If you live ouside the Salem area, call one of
our local centers for infor. mation:
Chemeketa Dallas Campus
(503) 623-5567 or (503) 399-5206

Chemeketa McMinnville Campus
(503 472.9482 or
(503) 399-5219

## Chemeketa Santian

(Stayton) Campus
(503) 769.7738 or
(503) 399-5215

Chemeketa Woodburn Campus
(503) 981.8820 or
(503) 399.5207
mine which examinations and scores Chemeketa accepts.

## Credit by examination

(503) 399.5120

Another way to earn credit for some courses is to demonstrate your collegelevel 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 successfullycompleted 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

 (503) 399.5120In certain professional-technical programs, Chemeketa may award you up to 24 credit hours for documented knowledge and skills that apply to the program in which you enroll. 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 (503) 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

(503) $399-5191$

You may earn college credit hours by enrolling in courses offered by television, mail, and on-line. 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's Dallas, McMinnville, Santiam, or Woodburn campuses. 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.
On-line courses 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.

# (Tudent Development $N_{\text {Services }}$ 

## 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

(503) 399-5190

Free individualized and small group tutoring in a variety of subject areas is available to all students. Visit the Tutoring Center in Building 2 on the Salem Campus for more information. A current student ID card is required to use these services.

## VOLUNTEER TUTORING SERVICES

## (503) 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

## (503) 399-5162

Learning assistance services and skillbuilding 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

(503) 399-6298

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, (503) 399-5120, for admission and career-planning assistance.

English as a Second Language program-Building 16, (503) 399-6298.
Volunteer tutoring services--Building 16, (503) 399-2557.
Counseling, tutoring, and English as a Second Language classes are also available at Chemeketa's Dallas, McMinnville, Santiam, and Woodburn campuses.

## addlt 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 27.

## Services for students wITH DISABLLTIES

(503) 399-5192 voice/TDD and

## SERVICES FOR STUDENTS <br> WHO ARE DEAF AND <br> HARD OF HEARING

(503) 399.5122 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. Diagnostic testing and assessment are available by appointment in the Advising and Counseling Center. Chemeketa's major buildings on the Salem Campus and at the Dallas, McMinnville, Santiam, 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 (503) 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 special accommodations for classes or college events, contact the disabilities specialist at least five working days in advance. If you need an alternative format for this publication, call the disabilities specialist at (503) 399-5192 (voice/TDD).

## Writing Center

(503) 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.

## Bookstore

## (503) 399.5131

## http://bookstore.web.chemek.cc.or.us

You may purchase books and supplies at the college Bookstore in Building 1 on the Salem Campus and at the McMinnville Campus. Textbooks also are available at the beginning of each term at our Dallas, Santiam, and Woodburn campuses. The cost of books is included in the description of each professional-technical program. Costs range from $\$ 450$ to $\$ 600 \mathrm{a}$ 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 prices. Some restrictions may apply. Contact the Salem Campus Bookstore for details.

## Student identification Cards <br> (503) 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

(503) 399-5023

For first aid services on the Salem Campus, call (503) 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 <br> (503) 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. Visilors 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 Information and Public Safety Booth.

## Smoking on The Salem Campus

## (503) 399-5023

Smoking is allowed outside campus buildings, except under overhangs and within 20 feet of a building entrance. Smoking is also permitted in seven designated areas.

These areas are located outside buildings $3,4,6,28,49,50$ and 53 .
These covered areas have been provided so that smokers may sit down during their smoking breaks.
Smoking areas are clearly marked with signs, and ashtrays have been provided. Smokers are asked to be considerate of non-smokers and smoke only in the designated areas using the ashtrays provided.

## Where to eat

The Breezeway, Building 2, (503) 399-5180-sandwiches, soups, salads, pastries, pizza, grilled items, and fast foods.
Lite Side Deli, Building 7, (503) 399-8895-fat-free and low-fat sandwiches, soups, and salads.
Avenue 34, Building 34, (503) 399-2543-breakfast, deli lunch, fast foods and food-to-go, hot meals, fresh desserts, and bakery items.
Blue Moon Cafe, MaPS Building, (503) 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 (503) 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.

## Child care

Chemeketa offers two child care programs on the Salem Campus.
Child Development Center, Building 39, (503) 399-5107-As a training center for students enrolled in the Early Childhood Education program, the center offers fullor 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, (503) 399-5174 This facility accepts about 90 children ages six weeks to six years old for full-day care and ages $2-1 / 2$ to six years old for 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 (503) 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.

## Student's Check List

1. If you are a new stu-
dent, have you:
I taken mathematics,
reading, and writing
placement tests? Contact
the Advising and Counsel-
ing Center, Salem Cam.
pus, Building 2, (503) 399 .
SI20.
O applied for admission to
the college? Contact the
2. If you are a new student, have you:
0 taken mathematics, reading, and writing placement tests? Contact he Advising and Counsel ing Center, Salem Cam.
pus, Building 2, (503) 399. 5/20.
applied for admission to the college? Contact the

Admissions Office, Salem Campus, Building 22, (503) 399-5006. An application/student record form is on Page iii.
$\square$ checked to find out if there are special require. ments for the program you wan to enter? Contact the Admissions Office, Salem Campus, Building 22,
(503) 399-5006.
2. Do you know the costs of:
$\square$ tuition and fees? $\square$ special tools, equip. ment, uniforms, etc. required by your program? These costs are listed in this catalog in the descrip. tion of your professionallechnical program.
3. Have you arranged for:
Q transporation?
Ochild care?
4. Have you asked about
financial aid? Contact the
Financial Aid Office,
Salem Campus, Building
22, (503) 399-5018, or
Chemeketa's Dallas,
McMinnville, Santiam, or
Woodburn campuses.

Have you arranged for:
5. Have you checked on your eligibility for Veterans Administration educational benefits? Contact the Registrar's Office, Salem Canpus, Building 22, (503) 399.5004.
6. Have you read the term Schedule of Classes for registration information and class listings? A copy
of the schedule should be delivered to you by mail before each term begins if you live in the college district. 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.

## Bus passes

(503) 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

(503) 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 (503) $399-5116$

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. Contact the Student Life Office in Building 3, Room 101 for more information. and Services
Advising and Counseling Center
(503) 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 Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. Counseling services are available to both current and prospective students.
The Advising and Counseling Center offers the following services:

## Individual asisitance

Counselors offer individual help for program and course planning, career decision making, and personal issues. For assis-
tance, drop in during open hours. Call the Advising and Counseling Center for current hours of operation.

## 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 trends.
-develop a personal plan of action.
Contact the Advising and Counseling Center for a current schedule of career planning workshops.

## 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 conceming 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 spe-
cific 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 skills you prefer to use 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 to all students. If you are enrolling in a profes-sional-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 or if you plan to transfer to a four-year school, your assigned advisor will be one of your instructors. Some assignments are made through the automated computer system and notification mailed to the student. If a change is desired, the Advising and Counseling Center will assist in advisor assignments.
If you attend only evening classes or are a part-time student, we encourage you to visit the Advising and Counseling Center periodically for academic advising. You may also consult with a counselor at our Dallas, McMinnville, Santiam, or Woodburn campuses.

## Placement Resource Center

 (503) 399-7789Chemeketa'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 RECRUTITNG

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's Dallas, McMinnville, Santiam, and Woodburn campuses, and the Salem Public Library.

## Job Search Technioues classes

These one-credit-hour courses include information on how to prepare yourself to look for a job and how to find and apply for a job. The classes cover preparing and writing resumes, identifying the requirements of a job, determining what an employer looks for in a new employee, and practicing interview techniques. These classes are listed under Job Search in each term's Schedule of Classes.

## Cooperative Work Experience <br> (503) 399-5026

As a full-time or part-ime 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 workrelated experiences.
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 leaming 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 when you complete 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.

# s <br> ERVICES TO THE Community 

## Training and Economic Development Center

(503) 399-5181

Chemeketa's Training and Economic Development Center is a resource for business firms and organizations or for anyone who is starting a business. The center is located in Liberty Square at 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.
Small Business Development-..Workshops and free counseling are offered for those who wish to start a business and for those currently operating a business.

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

## American Management Association

 Extension Institute-Courses are offered to meet the needs of working professionals who want to update their business and management skills.Partnerships for Quality (P4Q)-This program is designed to increase the productivity and effectiveness of Oregon's businesses and organizations by delivering continuous quality improvement training and education services.
Oregon Marketplace-This program benefits local and international businesses by finding Oregon suppliers of goods and services.
Computer Training-Workshops cover a variety of topics, including computer fundamentals and MS/DOS and MS/Windows operating systems, as well as an assorment 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, and a new, high-performance lab is now open for technical skills training.

## Oregon Advanced Technology Consortium (OATC)

## (503) 399-5210

Sixteen 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 managers who implement those technologies.

## Short-TERM TRAINING <br> (503) 399-5179

Chemeketa has a variety of short-term training options which may lead to employment opportunities for you.
Currently Chemeketa's short-term training consists of more than 40 offerings including office administration and technology, automotive brake system specialist, 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 (503) $399-5120$ for the most current list of short-term training options.

## Campus Gallery <br> (503) 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

 (503) 399.5119The 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 libraties.
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.

## 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 imegrated cultural or professional education leading to a certificate or degree.

Elective - A required, nonspecific 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.

## Planetarium

(503) 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 usially 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 (503) 3995161 to arrange group showings for schools, clubs, and organizations.

## Technology Access for Life Needs (TALN) Project (503) 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 17.

TUDENT LIFE

## Special programs <br> AND ACTIVITIES <br> (503) 399-5116

At Chemeketa Community College, 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.
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 or Chemeketa Communty College <br> (503) 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

(503) 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, multi-cultural, and educational activities.
As members of the Programming Board, students can learn leadership and eventplanning 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 <br> (STUDENT NEWSPAPER)

(503) 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 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.

## Culural 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) (503) 399.3995

This program gives you the opportunity to work as an 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

(503) $399-5116$

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 combines 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

## (503) 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 eaming Cooperative Work Experience credit.

## Student clubs and organzations

 (503) 399-5117The Associated Students of Chemeketa Community College (ASCCC) recognize 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
Gay and Lesbian Alliance
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) For more information about clubs and organizations on the Salem Campus, contact ASCCC or the Student Life Office in Building 3.

## College committees

(503) 399.5117

Student representatives serve on campuswide 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

## Communtry Colleges of Oregon

Student Association and Commissions (CCOSAC)
(503) 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.

## Intercolleglate athletics

## (503) 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, women's volleyball, and men's and women's cross country.
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.

## Tducation 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, Santiam, and Woodburn campuses; and at other convenient sites in the district.
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; profes-sional-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 a business skills program which includes training on computers and word processors.

## OUTREACH CAMPUS SERVICES

In addition to classes, Chemeketa's Dallas, McMinnville, Santiam, and Woodburn campuses provide these services:
academic advising, program planning, and course selection guidance.

- career counseling.
-information on financial aid and on veterans' benefits.
-placement and vocational interest testing.


## College for Older Adults

 (503) 399-5140Chemeketa offers a variety of classes, workshops, and other activities which may especially interest older adults. We hold these classes and activities at a number of Salem locations and in various communities throughout the college district. These offerings cover a wide range of topics, including computers, health and fitness,

history, writing, art, guided trips and tours, and special programs of interest to recreational vehicle enthusiasts.

## Agriculture classes

(503) 399-5139

Chemeketa offers non-credit classes to meet continuing educational and selfimprovement needs of persons involved in agriculture.
A variety of classes are offered in each of the following areas:
Landscape and nursery
Pesticide application license examination preparation and recertification
Sheep production
Horse care and horsemanship Classes are also offered on Christmas tree, woodland, and pasture management; small
gas engine repair; and record keeping for part-time farmers.
The program strives to be relevant and responsive to the agricultural community by adjusting course offerings regularly. Suggestions are welcome.

## Farm Business Management

(503) 399-5089 or (503) 399-5066

Chemeketa's three-year Farm Business Management program trains farmers in basic recordkeeping and financial management. For more information, see Page 67.

## Family Resource Center/ Program <br> (503) 399-3915

The Family Resource Center is located in Building 50 on the Salem Campus. The Center operates the Chemeketa Commu-
nity 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 Dallas, McMinnville, Santiam and Woodburn campuses. Topics range from human relations and personal growth to parenting and family studies.

## New Workforce Program (503) 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 twoweek seminar on confidence building, career planning, and job search techniques to help you develop your plan for acquiring occupational skills and finding employment. Follow-up sessions continue for eight weeks. Some financial assistance is available for child care, transportation, tuition, and supplies.

## New Workforce/Life Skills Resource Center

## (503) 399-5236

The New Workforce/Life Skills Resource Center is located in Building 20 on the Salem Campus. It provides support and encouragement for the concerns of individuals and directs them to campus and community services. People are welcome to drop in, talk, and browse through books and materials.

Chemeketa's Mission and Vision

Our Mission
Chemeketa Community
College's mission is to empower through intellec. tual growth, meaningful carcer preparation and advancement, and enhanced personal effec. tiveness.

Chemeketa is a dynamic community of learners and innovators. Undaunted by: limitations, we seek to improve the quality of life for individuals, our community, and the world.


## 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.

## $D^{+m}$

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 nation-ally-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 40 and 41 for a complete list of our transfer pro-
grams. Information and curriculum outlines of these programs begin on Page 42. 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 28.

## Associate of Applied Science degree

Chemeketa, with its emphasis on profes-sional-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. In some programs of study, there
are prerequisites to enter the program. See the Program Guide on Pages 40 and 41 for a complete list of A.A.S. degree programs. Information and curriculum outlines of these programs begin on Page 42 along with college transfer curricula.
To qualify for an Associate of Applied Science degree, you must meet the requirements listed on Page 29.

## 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 30.

## SECOND DEGREE

Effective fall term 1996, to earn a second associate degree, you must complete at least 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 fouth 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 in 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 Dallas, McMinnville, Santiam, and Woodburn campuses.

## 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 40 and 41 for a complete list of Certificate of Completion programs. Information and curriculum outines of these programs begin on Page 42 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.

## - $\begin{aligned} & \text { IGH School } \\ & \text { Completion, }\end{aligned}$ 1 GED,\&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 DPPLOMA PROGRAM

## (503) 399.5115

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

## Oregon Associate of Arts Transfer Degree Requirements

| Requirements | Credit hours | Courses which satisfy requirements |
| :---: | :---: | :---: |
| Complete a minimum of 93 credit hours. These must include the following: |  |  |
| General Education Requirements Writing (with grade "C" or better) | 9 | WR121, WR122, and WR123, or WR227 |
| Math (with grade "C" or better) | 4 | MTH105 or above |
| Oral Communication/Rhetoric (with grade "C" or better) | 3 | SP111, SP112, SP113, SP114, SP115, SP118, SP130, or SP230 |
| Physical Education or Health | 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. |
| Computer Studies | 3 | CIS120, CS101, CS131, CS161, or other computer information science or computer science course. |
|  |  |  |
| Social Sciences <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, 237, 239, 246; SOC204, 205, 206, 210, 221, 227, 291, 292; SSC150, 151, 206; WS101, 102, 103 |
| Sciences, Math, Computer Science <br> A 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. Note: 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 |  |
| Electives |  |  |
| 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; SKD050A,B,C; SKD051L,M,N; WR090, 095. A maximum of 12 credit hours of cooperative work experiences may be applied toward an Associate 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 Appled Science Degree Requirements

| Requirements | Courses which satisfy requirements |
| :---: | :---: |
| Satisfactorily complete the required courses and credit hours listed for each program in the Programs of Study section of this catalog. |  |
| General Education Requirements <br> You will meet the general education requirements if you follow the curriculum outtine 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 requirements. |  |
| Writing | One class of WR115, WR121, BA214, COM051, or OA084 or any higher numbered witing class |
| Math | One class of MTH052 or any higher numbered math course |
| Computer Literacy | 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: Social Science | Anthropology, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies |
| HumanitiesFine Arts | American Sign Language, Ant, English, Film Art, Foreign Language, Humanities, Multidisciplinary Studies, Music, Music Performance, Philosophy, Religion, Theater Arts |
| SciencelApplied Science | 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 |
| Communications | Communication Skills, English as a Non-Native Language, Journalism, Speech, Writing, Reading, plus these specific classes: RD115, RD116, and HD112 |
| Three additional credits from any of these areas: <br> Communications <br> Health Education <br> Humanities/Fine Arts <br> Math <br> Physical Education <br> Science |  |
| Complete a minimum of 30 credit hours at Chemeketa. |  |
| Earn a cumulative grade point average (GPA) of 2.0 or above for all course cred its which apply toward the degrec. Only courses numbered 050 or higher, unless otherwise indicated, apply toward the degree. |  |

## Notes:

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

## Associate of General Studies Degree Requirevents

| Requirements | Credit hours | Courses which satisfy requirements |
| :---: | :---: | :---: |
| Complete a minimum of 90 credit hours. These must include the following: |  | 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. |
| Writing (with a grade "C" or better) | 6 | WR12I and one additional course from WR122, 123, 227, 241, 242, 243, or BA214 |
| Math (with a grade "C" or better) | 4 | MTH095 or above |
| Speech | 3 | SP111 or above |
| Computer Studies | 3 | CIS120, CS101, or other computer science courses or DRF072; ELT091; GE102; OA200, 201; VC051A, 051B, 061A, 061B |
| *Physical Education or Heallh | 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) |
| Arts and Letters/Humanities | 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 |
| Social Science <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 |
| Science <br> (Courses must include a laboratory.) | 8 | Choose courses from Biology, Botany, Chemistry, Geology, General Science, Physics, Zoology |
| Electives: <br> Additional courses to bring the total number of credits to 90 . |  |  |
| 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.

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 Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. 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 Dallas, McMinnville, Santiam, or Woodburn campuses.
-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. 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)

(503) 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 Dallas, McMinnville, Santiam, and Woodburn campuses; 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 fee is $\$ 45$.

## Adult Basic Education (503) 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 at our Dallas, McMinnville, Santiam, and Woodburn campuses.

## OLLEGE Transfer Procedures

## General information

Chemeketa offers courses for students who wish to continue a four-year degree at a public or private college or university. You can usually 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.) 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.
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.
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.


## COLLABORATIVE BACHELOR'S DEGREES

Chemeketa has entered into collaborative agreements with Linfield College and Portland State University. Junior and senior level classes leading to a bachelor's degree at these institutions are offered on Chemeketa's Salem Campus. Most classes are held during the evening and on weekends. Listed below are the majors offered in 1996-97:

## Linfield College (503) 399-5121

Management, Accounting, Business Information Systems, Arts and Humanities, and Social and Behavior Sciences
Portland State University (503) 399-5262 Child and Family Studies, General Studies
For more information on these two programs, contact the advsiors at the numbers listed above.

## CURRICULUM REQUIREMENTS

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, Santiam, and Woodburn campuses.
General education requirements for Oregon's four-year colleges and universities are listed on pages 32 to 38 . The Advising and Counseling Center also has advising sheets specific to these institutions, which include Eastern Oregon State College, Oregon Institute of Technology, Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. Additionally, the center has advising sheets for many of the programs offered at Bassist College, Concordia College, George Fox College, Linfield College, Oregon Health Sciences University, Pacific University, University of Portland, Warner Pacific College, Western Baptist College, Western States Chiropractic College, and Willamette University.

| Requirements | Credit Hours | Chemeketa courses which satisfy requirements |
| :---: | :---: | :---: |
| Humanities (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, 261, 262, 263; FA255, 256, 257; MS251, 252, 253; MUS201, 202, 203; PHLL201, 202, 203; R199; SP115; TA110 |
| Natural Science (Choose courses from at least two different prefixes other than your major:) | Minimum 15 hours | ANTH101; B1101, 102, 103, 131, 132, 133, 200; BOT201, 202, 203; CH110, 104, 105, 106, I11, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; G201, 202, 203; GEOG105; GS104, 105, 106, 107, 120, 141, 142, 143; OC133; PH111, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY211, 219; ZO0201, 202, 203 |
| Social Science <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 |
| Arts, Languages, and Logic (Choose courses outside of your major.) | Minimum 15 hours |  |
| Artistic Creation (Sub-Area 1) | $3 \text { to } 12$ hours | ARTI15, 116, 117, 131, 132, 133, 154, 155, 156, 221, 222, 223, 244, 254, 270, 271, 281, 284, 291, 292, 293; MUP100, 101, 174; MUS197, 199; TA121, 122, 123; WR199A, 241, 242, 243 |
| Languages and Logic (Sub-Area 2) | $\begin{aligned} & 3 \text { to } 12 \\ & \text { hours } \end{aligned}$ | 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; SP11, 112, 113, 114, 115, 118, 130; SPAN101, 102, 103, 150, 151, 201, 202, 203 |
| Notes: |  |  |
| 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 Eastem. 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 Acts, 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 eamed will transfer to Eastern. |  |  |
| 8. This guide is subject to change without notice and should not be regarded as a contract between Eastern and students attending Chemeketa Community College. |  |  |

## Oregon Institute of Technology

| Requirements | Credit <br> hours | Chemeketa courses which satisfy requirements |
| :--- | :--- | :--- |, | Communication |
| :--- |
| Speech <br> English Composition |
| Nine additional credits from speech/writing <br> courses having WR122 or SPEI11 as a prereq- <br> uisite; specified by the major deparment from <br> the following: WR123, 214, 227; 230, 231, <br> $322,323,327 ; ~ S P E 321 . ~$ |

Notes:

1. A maximum of 108 credit hours eamed 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 presequisite 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.

## Oregon State University

General Education Requirements
(Baccalaureate Core Curriculum)

| Requirements | Credit hours | Chemeketa courses which satisfy requirements |
| :---: | :---: | :---: |
| Writing I | 3 | WR121 (must be completed before transferting) |
| 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 \$P111, 112 |
| Mathematics | 4 or 5 | MTH105, 111, or higher math (must be completed before transferring) |
| Fitness | 3 | HPE295 |
| Writing Intensive Course |  | (Must be taken at OSU as part of major.) |
| Physical Science Including lab | 4 to 5 | CH104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; G201, 202, 203; GS104, 105, 106; PH201, 202, 203, 207, 208, 209, 211, 212, 213 |
| Biological Science Including lab | 4 | B1101, 102, 103, 200, 234; BOT201, 202, 203; Z00201, 202, 203 |
| One additional Physical Science or Biological Science course | 4 to 5 | Any courses listed for Physical or Biological Science above. |
| Western Culture | 3 | ART101, 204, 205, 206; 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; 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: Western Culture, Cultural Diversity, Literature and the Arts, and Social Processes and Institutions | 6 | Any courses listed above for Western Culture, Cultural Diversity, Literature and the Arts, and Social Processes and Institutions. |
| 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. <br> 2. No more than two courses from the same department may be used to fulfill the Baccalaureate Core Curriculum requirements. <br> 3. In general, only courses with letter prefixes and numbers above 100 are accepted at OSU. |  |  |
| 5. Departments, schools, or colleges at OSU m <br> 6. OSU will accept "D" grades. Some departm <br> 7. Courses from the major department may not <br> 8. Students with an Oregon Associate of Arts ( lower division Baccalaureate Core Curricul | restrict the <br> , schools, <br> used to fu <br> .) transfe requireme | ourses used by their major students to satisfy each general educational component. colleges may not accept "D's" in required courses. 1 the Baccalaureate Core Curriculum reguirements. gree from Chemeketa Community College will be considered as having met OSU's |
| 9. This guide is subject to change without notic College. | should | be regarded as a contract between OSU and students attending Chemeketa Community |


| Requirements | Credit <br> hours | Chemeketa courses which satisfy requirements |
| :--- | :---: | :---: |
| Freshman Inquiry <br> (Three five-credit courses) <br> This sequence is required of all transfer students <br> who have eamed less than 30 quatter hours at the <br> time of transfer. <br> Electives | 15 | Complete 45 credit hours from courses listed for Oregon Associate of Arts transfer degree. <br> Courses should include writing, speech, and computer science. It is also important to learn <br> approptiate information technology resources of the library. |
| Sophomore Level <br> (Three four-credit courses selected from different <br> interdisciplinary programs or general education <br> clusters) | 12 | Complete 45 credit hours from courses listed for the Oregon Associate of Arts transfer degree <br> and courses required for major. Students planning to attend Chemeketa for two years should <br> complete the Oregon Associate of Arts transfer degree. |
| Students who have earned 30 to 89 quarter hours at <br> the time of transfer must complete sophomore <br> inquiry at PSU. <br> 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. Students must have achieved a 2.00 cumulative GPA with 30 transferable credit hours to be considered as a resident transfer student.
4. PSU does not accept courses in which "D" grades have been earned.
5. 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.
6. Students who have eamed 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.
7. 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 <br> hours | Chemeketa courses which satisfy requirements |
| :--- | :---: | :--- |
| 1. To be able to express ideas written in clear, log. <br> ical, and grammatically correct English. To be <br> fluent and confident in writing ability, including <br> formal and technical writing styles, and in the <br> 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 effec- <br> tively 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. |  |  |$\quad 3$ to 4 | MTH105, 112, 212, 213, 241, 243, 251, 252, 253, 254, 255 |
| :--- |

## University of Oregon

| Requirements | Units | Chemeketa courses which satisfy requirements |
| :---: | :---: | :---: |
| Written English | 6 credit hours | WR121 (must be completed before transferning) 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: ART204, 205, 206; ENG 104, 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; 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, 237, 239, 246; R201, 202, 203; SOC204, 205, 206, 210, 221, 227; SSC150, 206; 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 transfering.) | 16 credit hours | ANTH101; BI101, 102, 103, 131, 132, 133, 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; PH201, 202, 203, 207, 208, 209, 211, 212, 213; PSY201; ZOO201, 202, 203 |
| Multicultural Studies <br> You must complete two courses chosen from two of the following three areas: <br> Area 1-American Culture <br> Area 2-Identity, Pluralism, and Tolerance <br> Area 3-International Cultures <br> (Some courses may be chosen to meet this requirement and one of the requirements listed above.) | 2 courses | HST257, 258, 259; $\operatorname{SSCl} 50$ <br> ENG260; SP115; SSC206; 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 eanned 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 carned 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 | SPI11, 112, 113, 114, 126 or 130. SP111 preferred. |
| Physical Education | 4 | All activity courses selected from PE180, 185, 190, 194, 294, and HPE295. (HPE295 and one hour of activity class preferred. Classes should include different activities.) |
| Creative Arts (Art, Dance, Music, Theater Arts) | 9 | Any coursed 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 couses is allowed. |
| Humanities (Literature, Philosophy, and Religion) | 12 | A sequence of at least nine hours in literature is required: ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 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 $\mathrm{BI}, \mathrm{BOT}, \mathrm{CH}, \mathrm{G}, \mathrm{GS}, \mathrm{PH}, \mathrm{ZOO}$ (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. The remaining three hours may be in any social science area including psychology and criminal justice. (U.S. history and geography are recommended for elementary education majors.) |
| Special LACC graduation requirement 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 eamed at a community college may be applied toward a baccalaurcate 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 fulifll major requirements may be used to meet LACC requirements if the student eams an Oregon Associate of Arts (A.A.) transfer degree. In the absence of an A.A. degree, students much 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 (503) 399-5120.
$\mathrm{C}=$ Certificate of Completion
A = Associate of Applied Science Degree
T = Transfer Program and/or Associate of Arts Degree
$0=$ Other (classes for personal or professional skill development)

| Program Name | C | A | T | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Accounting |  | $\checkmark$ |  |  |
| Adult Basic Education |  |  |  | $\checkmark$ |
| Adult High Schooi Diploma |  |  |  | $\checkmark$ |
| Agriculture |  |  | $\checkmark$ |  |
| Anthropology |  |  | $\checkmark$ |  |
| Art |  |  | $\checkmark$ |  |
| Automotive Technology. |  | $\checkmark$ |  |  |
| Banking and Finance | $\checkmark$ | $\checkmark$ |  |  |
| Biology |  |  | $\checkmark$ |  |
| Botany |  |  | $\checkmark$ |  |
| Building Inspection Technology | $\checkmark$ | $\checkmark$ |  |  |
| Business Administration |  |  | $\checkmark$ |  |
| Chemistry |  |  | $\checkmark$ |  |
| Chiropractic |  |  | $\checkmark$ |  |
| Civil-Stuctural Engineering Technology | $\checkmark$ | $\checkmark$ |  |  |
| Computer Programming |  |  |  |  |
| Computer Programming |  | $\checkmark$ |  |  |
| Microcomputer Support Specialist |  | $\checkmark$ |  |  |
| Computer Science |  |  | $\checkmark$ |  |
| Construction Skills Training (Shor-Term) | $\checkmark$ |  |  |  |
| Criminal Justice |  | $\checkmark$ |  |  |
| Dental Assisting | $\checkmark$ |  |  |  |
| Dental Hygiene |  |  | $V$ |  |
| Drafting Technology-CAD |  |  |  |  |
| CAD |  | $\checkmark$ |  |  |
| CAD-CAM |  | $\checkmark$ |  |  |
| Mechanical Design |  | $V$ |  |  |
| Early Childhood Education |  |  |  |  |
| Child Development Cerificate | $\checkmark$ |  |  |  |
| One-Year Program | $\checkmark$ |  |  |  |
| Two-Year Program |  | $\checkmark$ |  |  |
| Economics |  |  | $\checkmark$ |  |
| Education |  |  |  |  |
| Education Cerificate | $\checkmark$ |  |  |  |
| Elementary |  |  | $V$ |  |
| Secondary |  |  | $\checkmark$ |  |
| Electronics Technologies |  |  |  |  |
| Advanced Technology Endorsement | $\checkmark$ |  |  |  |
| Computer Electronics |  | $\checkmark$ |  |  |
| Electronic Engineering Technician |  | $\checkmark$ |  |  |
| Microelectronics/Industrial Electronics |  | $\checkmark$ |  |  |
| Emergency Medical Technology-Paramedic |  | $\checkmark$ |  |  |
| English as a Second Language |  |  |  | $\checkmark$ |
| Engineering |  |  | $\checkmark$ |  |
| English |  |  | $V$ |  |
| Entomology |  |  | $\checkmark$ |  |
| Farm Business Management |  |  |  | $\checkmark$ |
| Fire Protection Technology |  |  |  |  |
| Fire Suppression |  | $\checkmark$ |  |  |
| Fire Prevention |  | $\checkmark$ |  |  |


| Program Name | C | A | T | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Foreign Languages |  |  | $\checkmark$ |  |
| Forest Resources Technology |  | $\checkmark$ |  |  |
| Forestry |  |  | $\checkmark$ |  |
| General Educational Development (GED) |  |  |  | $\checkmark$ |
| General Science |  |  | $\checkmark$ |  |
| General Studies |  |  | $V$ |  |
| Geography |  |  | $V$ |  |
| Geology |  |  | $\checkmark$ |  |
| Health, Health Education |  |  | $\checkmark$ |  |
| Health Services Maragement |  |  |  |  |
| Claims Analys/Medical Biller (Shor-Term) | $\checkmark$ |  |  |  |
| Heaith Information Techntician | $\checkmark$ |  |  |  |
| Health Services Management |  | $V$ |  |  |
| Medical Receptionist/Clerk (Shor-Term) | $\checkmark$ |  |  |  |
| Medical Transcriptionist |  | $V$ |  |  |
| History |  |  | $\checkmark$ |  |
| Home Economics |  |  | $\checkmark$ |  |
| Hospitality and Tourism Management | $\checkmark$ | $V$ |  |  |
| Hotel, Restaurant, and Resort Management |  |  | $\checkmark$ |  |
| Human Services |  |  |  |  |
| Alcohol and Drugs |  | $\checkmark$ |  |  |
| Geromology |  | $V$ |  |  |
| Social Services |  | $\checkmark$ |  |  |
| Industrial Technology and Apprenticeship |  | $\checkmark$ |  |  |
| Joumalism |  |  | $\checkmark$ |  |
| Management |  | $\checkmark$ |  |  |
| Manufacturing Enginecring Technologies |  |  |  |  |
| Manufacturing Operations | $\checkmark$ |  |  |  |
| Manufacturing Technologies |  | $V$ |  |  |
| Manufacturing Engineering Technologies |  |  | $V$ |  |
| Mathematics |  |  | $V$ |  |
| Medical Office Assisting | $\checkmark$ |  |  |  |
| Nursing |  |  |  |  |
| Nursing Assisting | $\checkmark$ |  |  |  |
| Licensed Practical Nursing | $\checkmark$ |  |  |  |
| Registered Nursing |  | $\checkmark$ |  |  |
| Nursing |  |  | $\checkmark$ |  |
| Occupational Skills Training (Short-Term) | $\checkmark$ |  |  |  |
| Office Administration and Technology |  |  |  |  |
| Administrative Ássistant |  | $\checkmark$ |  |  |
| Clerical Basics | $\checkmark$ |  |  |  |
| Information Processing |  | $\checkmark$ |  |  |
| Medical |  | $V$ |  |  |
| Office Accounting |  | $\checkmark$ |  |  |
| One-Year | $\checkmark$ |  |  |  |
| Philosophy |  |  | $V$ |  |
| Physical Education/Human Movement Studies |  |  | $\checkmark$ |  |
| Physics |  |  | $\checkmark$ |  |
| Political Science |  |  | $\checkmark$ |  |
| Pre-Law |  |  | $\checkmark$ |  |
| Pre-Professional Study (medicine, dentistry, veterinary medicine) |  |  | $\checkmark$ |  |
| Professional-Technical Teacher Preparation | $V$ | $\checkmark$ |  |  |
| Psychology |  |  | $\checkmark$ |  |
| Real Estate |  | $\checkmark$ |  |  |
| Small Business Management |  |  |  |  |
| Sociology |  |  | $\checkmark$ |  |
| Sprech |  |  | $\checkmark$ |  |
| Visual Communications |  | $V$ |  |  |
| Welding |  |  |  |  |
| Welding Technology | $\checkmark$ |  |  |  |
| Welding Fabrication |  | $\checkmark$ |  |  |
| Zoology |  |  | $\checkmark$ |  |

## Professional-Technical and College Transfer Curricula



## see also Business Administration

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 eam 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, \$1,181; class fees, \$48; equipment and supplies, $\$ 104$. 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

Term 1
BA202 Personal Effectiveness ................................ 3
BA211 Financial Accounting ${ }^{*}$........................................ 4
BA214 Business Communications .............................. 3
WR123 English Composition-Research Witing ................... 3
CS125SS Lotus I-Worksheets ...................................... 4
MTH062 Business Applications Using Mathematics (or higher) ....... 4
Term 2
BA101 Business Environment ................................. 4
BA203 Interpersonal Relations in Business ......................... 3
BA212 Financial Accounting II .................................. 4
MTH070 Elementary Algebra (or higher) . . . . . . . . . . . . . . . . . . . . . 4
Computer science elective**............................ 3
Term 3
BA213 Managerial Accounting . . . . . . . . . . . . . . . . . . . . . . . . . 4
BA228 Computer Accounting Applications ...................... 3
BA256
EC200
WR227
Income Tax Accounting I ............ .
Introduction to Economics (or higher) ....................... 3
Technical Witing . ..................................... 3
Term 4
BA054
Govermmental/Nonprofit Accounting [*** . 3

BA059 Auditing ............................................ 3
BA257 Income Tax Accounting II . . . . . . . . . . . . . . . . . . . . . . . . 4
BA056 Intemediate Financial Accounting 1 ......................... 4
BA215 Cost Accounting ........................................ 3
BA226 Business Law I ......................................... 3
FE205C Interviewing for Success ....................................... 1
Psychology elective .................................... 3
$\stackrel{\text { or }}{\text { Sociology elective . ................................... } 3}$
Term 5
BA057 Intermediate Financial Accounting II ...................... 4
BA206 Business Management Principles ............................. 3
BA222 Financial Management ................................. 3
BA280 Cooperative Work Experience ............................. 3
${ }^{0}{ }^{0}$ usiness elective*****................................ 3
0A061A Electronic Calculators A......................................... 1
Term 6
BA058 Intermediate Financial Accounting III . . . . . . . . . . . . . . . . . 4
OA092 Payroil Procedures ..................................... 3
SP111 Fundamentals of Speech (or higher) ........................ 3
Business elective**** ................................ 3
or

*You must have completed the requirements for, or be concurently enrolled in MTH062 or MTH070.
*Choose from CSI25DB, CS135SS; OA201P; or a progamning class.
**xsf you are interesed in working for a government agency, you are strongly encouraged to consider BA054.
****Business elective: Choose courses with prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE except OA084, BA051, B052, and BA053.

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:


If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.

## ${ }^{\text {mame }}$

## (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 25 .

| First Year |  | Term |  |
| :--- | :---: | :---: | :---: | :---: |
| WR121 English Composition and Writing or Speech <br> courses* (WR227 Tectnical Writing required for <br> some options) | 1 | 2 | 3 |
| Mathematics (per placement test through MTHII1 <br> College Algebra for most majors; check OSU <br> catalog for additional math required in some <br> majors) | 3 | 3 | 3 |

Bl101, 102, 103 General Biology or ZOO201, 202,
203 Zoology or CH121, 122,123 General Chem$\begin{array}{llll}\text { istry (depending upon major and option) } & 4-5 & 4-5 & 4.5\end{array}$ HE231 Human Performance
CS101 Introduction to Microcomputer Applications
Arts and Letters or Social Science* (EC201, 202 Introduction to Microeconomics and Macroeconomics required in some options)

## Electives

Second Year
BA.211, 212 Financial Accounting (not required for all majors)

| 4.5 | 4.5 | 4.5 |
| :---: | :---: | :---: |
| 3 | 3 |  |

BIIO1, 102, 103 or $\mathrm{CH} 121,122,123$ (both sequences recommended but may not be required; some options require ZOO201, 202, 203 Zoology and BOT201, 202, 203 Botany)
Arts and Letters or Social Science elective* (EC201, 202, 203 Principles of Economics required for some majors)
Electives (BA226 Business Law required in some majors; check OSU for additional courses required in specific options)
*To meet OSU general education requirements.


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## (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 and Southern Oregon State College offer 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 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 25 .

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121, 122 and/or 123 English Composition* | 3 | 3 | (3) |
| HPE295 Health and Fitness for Life* or elective |  |  | 3 |
| ANTH101, 102, 103 Human Evolution, Archeology and Introduction to Cultural Anthropology |  |  |  |
| (ANTH101 and 102 not required at all schools. U0 requires any 2 of the 3 courses) |  |  |  |
| Atts and Letters/Humanittes courses**) | 3 | 3 | 0-3 |

## First Year

$\begin{array}{lll}1 & 2 & 3\end{array}$
HPE295 Health and Fitness for Life* or elective 3
ANTH101, 102, 103 Human Evolution, Archeology
antroduction to Cuitural Anhropology
ANTHIO1 and 102 not required at all schools.
Ats and Lettes any 2 or he 3 courses.)
3
$0-3$
college-level foreign language required at PSU and recommended at UO and may be required for graduate work.
Math or Science electives* (UO recommends one year of biology.)

## Second Year

Social Science electives* (SOC204, 205, 206 General Sociology for EOSC and SOC204, 205 for SOSC)
Ats and Letters/Humanities electives*
Second-year Foreign Language (for PSU and for graduate studies) or electives*
Math or Science electives**
Electives* (Art courses for OSU)
*To meet four-ycar college general cducation requirements.
**MTH243 Probability and Statisicics and CS101 Introduction to Microcomputer Applications recommended for students planning to do graduale studies.


## (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, Southem 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 25.

|  | 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 U0) | 3 | 3 | 3 |
| ART131, 132 Introduction to Drawing, ART234 Figure Drawing (EOSC, SOSC, and WOSC require ART131, 234; OSU requires ART131, 132, and |  |  |  |
| 234; PSU requires ART131, 132 and 133.) Science or Mathematics courses* | $\frac{3}{4}$ | 3 | (3) |
| 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)*

## Second Year

ART204, 205, 206 Att History
Social Science courses*
Arts and Letters/Humanities electives* (Literature or a second Foreign Language for UO Art History majors)
Science or Mathematics* (MTH111 College Algebra or 211 Foundations of Elementary Math for EOSC)
HPE295 Health and Fitness for Life* or elective
Studio Art courses (EOSC choose from ART154 Pottery I, ART221 Graphic Design, ART234 Fig. ure Drawing, ART261 General Photography, Photography, ART271 Introduction to Printmaking, ART281 Painting, ART291Sculpture; OSU ART291 Sculpture and 6 hours from ART221 Graphic Design, ART261, ART281 Painting; OSU Art Studio majors need 9 hours of 200 level classes from ART221, 225, 260, 281 Painting, 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
Electives (CS course required at EOSC, PSU and SOSC.)
*To meet four-year colliege gencral education requirements.

## $\& \begin{aligned} & \text { uTOMOTIVE } \\ & \text { Technology }\end{aligned}$

Do you want to become an automotive maintenance and repair technician? The Automotive Technology program emphasizes technical training and development of skills through the study of the various systems of the automobile. You may select individual courses to meet your needs, or you may work toward a degree as an automotive technician.
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 degree program has been designed to be completed in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.
You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in 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 98 required credit hours:

## Course Title Credit Hours

Term 1
AUM051 Basic Automotive Engines ............................ 5
AUM056 Automotive Shop Safety . . . . . . . . . . . . . . . . . . . . . . . . . . 1
AUM057 Automotive Brakes Systems ............................ 5
COM051 Conmunication Skills I .................................. 3
or
WR121 English Composition-Exposition ......................... 3
Communications, Mathematics or Science elective . . . . . . . . . 3
Term 2
AUM052 Automotive Machine Shop .............................. 4
AuM058 Automotive Steering and Suspersion ..................... 5
COM052 Communication Skills II ................................ 3
or
WR122 English Composition-Logic and Style ..................... 3
Computer science elective (CS101 or higher) ............... 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 Automatic Transmissions and Transaxles .................. 5
AUM066 Basic Fuel Systems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
AUM076 Automotive Electrical Systems II ........................ 4
Term 5
AUM067 Advanced Caburetion and Fuel Injection ................. 5
AUM077 Automotive Electrical Systems III ......................... 5
AUM082 Electronic Vehicle Controls ............................... 5
AUM086 Automotive Heating and Air Conditioning ................. 5
Term 6
AUM073 Automotive Repair ..................................... 3

AUM081 Iunt-up and Driveabinity .................................... 3
WLD097 Welding .............................................. 2

- Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

| CS101 | Introduction to Microcomputer Applications . . . . . . . . . . . . . 3 |
| :---: | :---: |
| GS199 | Applied Physical Science . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| MTH051 | Basic Mathematics . ................................ . . 3 |
| SKD050A | Technical Learning Skills |
| WR040 | Writing Skills ...................................... . 3 |

If you have questions about the requirements call (503) 399-6519. Failure to be assessed may delay your entry into program classes.

## OANKING 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 twoyear 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 46 credit hours:
Course Title Credit Hours

## Term 1

BAN067
BA202
BA214
BA269
OAl22

Teller Traming . . . . . . ...................................... 1
Personal Effectiveness ....................................... 3
Business Communication ..................................... 3
Principles of Banking . ...................................... 3
Keyboard Skillbuilding . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

| SPI14 | Interpersonal Communication . . . . . . . . . . . . . . . . . . . . . 3 |
| :---: | :---: |
| Term 2 |  |
| BAN064A | Understanding and Selling Bank Serving |
| BAN078 | Bank Customer Service ............. |
| BA051 | Accounting Procedures I . . . . . . . . . . . . . . . . . . . . . . . 4 |
|  |  |
| BA211 | Financial Accounting I |
| OA061 | Electronic Calculators |
| 0A128AB | Introduction to Records Management Banking elective ** |
| Term 3 |  |
| BAN280 | Cooperative Work Experience $\quad$................... .6 |
|  | or <br> Business elective* $6$ |
| BA238 | Sales and Persuasion |
| OA086 | Personal and Professional Development |
| OA091 | Computerized Bookkeeping .......................... 3 |
| - Alert! |  |

Program requirements have changed, see "Alert" section on this page for details.
*Business elective: Choose courses with prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}, \mathrm{RE}$ except $\mathrm{BA} 05 I$, BA052, and BA053.
**Banking elective: Choose courses with BAN prefixes and BA270, BA273, BA278, BA281, BA282, and BA284.

## 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 93 credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| BA101 | Business Environment |  |
| BA202 | Personal Effectiveness | 3 |
| BA211 | Financial Accounting I | . 4 |
| BA269 | Principles of Barking | 3 |
| OAl22A | Keyboard Skillbuilding |  |
| Term 2 |  |  |
| BA203 | Interpersonal Relations in Business |  |
| BA206 | Business Management Principles |  |
| BA212 | Financial Accounting II. . |  |
| EC200 | Introduction to Economics |  |
|  | or |  |
| EC201 | Introduction to Microeconomic |  |
|  | Psychology elective |  |
| Term 3 |  |  |
| BA204 | Teamwork Dynamics |  |
| BA213 | Managerial Accounting |  |
| BA214 | Business Communications |  |
| BAN051 | Introduction to Lending |  |
|  | or |  |
|  | Banking elective** |  |
| BAN067 | Teller Training |  |
|  |  |  |
|  | Banking elective** |  |
| MTH095 | Intermediate Algebra |  |
|  | or ${ }^{\text {Pr }}$ |  |
| MTH243 | Probability and Statistics |  |
| Term 4 |  |  |
| BA238 | Sales and Persuasion |  |
| BA270 | Money and Banking |  |
| BA281 | Consumer Lending . |  |
| 0A061A | Electronic Calculators A |  |

Term 1
BA101
BA22
BA22
OA122A
Term 2
BA203
BA206
BA212
EC200
EC201

Term 3
BA204
BA21
BAN051

BAN067
eller Training
Banking elective**
 . 4

Term 4
B 23
BA281
0A061A
Business Environment4Financial Accounting4Thisad Skilluild1
3Business Management PrinciplesIntroduction to Economics3
3Psychology elective3
Bugs Candis. ..... 4 11 1 4

## Term 5

BA222
BA223
BA273
BA278

Fundamentals of Speech ..... 3
Banking elective** .....  3
Financial Management .....  3
Principles of Marketing ..... 3
$\stackrel{\text { Marketing for Bankers }}{ }$ .....  3
Law and Banking-Principles ..... 3
Business elective* ..... 3
or
Banking elective** .....  3
or
Cooperative Work Experience .....  3
Introduction to Macroeconomics ..... 3
or Interpersonal Communications ..... 3
Term 6
BA284 Law and Banking-Applications ..... 3
OA086 Personal and Professional Development .....  3
BAN280 Cooperative Work Experience ..... 3
Business elective* .....  3
Banking elective** .....  3
Computer science elective . ..... 3
Humanities/fine arts elective .....  3
*Business electives: Choose courses with prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE exceBA051, BA052, and BA053. College transfer students should take BA213 and EC203.

## **Banking electives! Choose courses with BAN prefixes or BA282.

## -Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

| BA066 | Succeeding in Business |
| :---: | :---: |
| MTH060 | Introductory Algebra |
| OA085 | Business English II |
| OA200 | Introduction to Information Processing |
| CS101 | or Introduction to Microcomputer Applications |

If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.

## D iology, 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, and the Botany, Zoology, Physiology and Microbiology options for Biology at PSU. 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 25.

| First Year | Term |  |  |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| WR121, 122 and/or 123 English Composition* | 3 | 3 | (3) |
| HPE 295 Health and Fitness for Life* or elective |  |  | 3 |
| CH221, 222, 223 General Chemistry (CH121, 122, <br> 123 College Chemistry is also accepted for OSU |  |  |  |
| [Botany, Entomology, and General Science majors] and UO) | 5 | 5 | 5 |
| Mathematics sequence (consult an advisor or fouryear college catalog to determine appropriate math; most require some calculus. MTH111 College 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 CS161) | 4-5 | 4-5 | 4 |
| Arts and Letters/Humanities courses* <br> (SP111 Fundamentals of Speech for SOSC) | 3 | 3 | 3 |
| Second Year | 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 OSU Zoology majors; and OSU Botany majors take BOT201, 202, 203 Botany)** (SOSC also accepts G201, 201, 203 |  |  |  |
| Geology) | 4 | 4 | 4 |
| $\mathrm{CH} 241,242,243$ 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);UO General |  |  |  |
| Science majors may take G201, 202, 203 Geology | 5 | 5 | 5 |
| Social Science courses* ${ }^{*}$ | 3 | 3 | 3 |
| Arts and Letters/Humanities electives* | 3 | 3 | 3 |

## First Year

WR121, 122 and/or 123 English Composition*
HPE 295 Health and Fitness for Life* or elective 123 College Chemistry is [Botany, Entomology, and General Science majors] and UO)
Mathematics sequence (consult an advisor or fouryear college catalog to determine appropriate man, most require some calculus. MIHIII Col-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 Elementar Calculus and 243 for Botany, Entomology,解ral Science at OSU WOSC requires Ats and Letters/Humanities courses*
(SP111 Fundamentals of Speech for SOSC)
Second Year
201, 202, 203 General Physics or PH211, 212, 213 General Physics for Scientists and Engineers not required at WOSC or for Entomology and cen a science majors at OSU, only PR201, OSU Botany majors take BOT201, 202, 203 Botany)** (SOSC also accepts G201, 201, 203 Geology)
4, 242, 243 Organic Chemistry* (may not replace 300 -level Organic Chemistry at all colleges, not required at WOSC or for General Sc PSU. Take BOT201, 202, 203 for EOSC; Zool ogy majors take ZOO201, 202, 203);UO General
Science majors may take G201, 202, 203 Geology
Arts and Letters/Humanities electives*
Social Science electives or other electives* (EOSC requires CS101 Introduction to Microcomputers and CS125SS Lotus I-Worksheets or computer studies courses at or above the 200 level; 00 recommends a computer class; OSU General Science requires CIS120, 121 Computer Information Science I and II; SOSC requires CS10I;
**Botany majors should take ZOO201, 202 General Zoology and BOT201, 202 General Botany. Zoology majors should take Z00201, 202 and BOT201 or 202. PSU General Science degree aillows other science choices.
U0 General Science needs itree sequence from BI 101, 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.

## $T$ UILDING Inspection TECHNOLOGY

The Building Inspection Technology program has two options. There is a four-term plan for students with experience in the building trades and a two-year (six-term) option for those new to the field. As a graduate of either program, you may qualify for State of Oregon certification as a building inspector at the $C$ level or higher, depending upon your experience.
There is a need for certified building inspectors working for public agencies. If you have some experience in the field, after you graduate you may qualify as a construction manager or clerk-of-the-works or perform similar functions in other jobs.
The curriculum covers technical and general education courses. Classes on various codes, plans inspection techniques, and construction materials are complemented by courses in mathematics, communication skills, and public relations. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.
You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in BLD280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.
The certificate program has been designed to be completed in one year and the degree program in two years, if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.
This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at (503) 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 | BLD062 | Structural Inspection-Masonry |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | BLD093C | Building Inspection - Lab |  |
| Term 1 |  | DRF060 | Advanced Print Reading . |  |
| BLD051 | Building Codes | COM053 | Technical Report Writing |  |
| BLD063 | Structural Inspection-Concrete . . . . . . . . . . . . . . . . . . . . . . . 3 |  |  |  |
| BLD071 | Plumbing Codes I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 | WR227 | Technical Writing |  |
| BLD081 | Mechanical Codes I .................................. . . 3 | FE205A | Job Search Preparation |  |
| BLD093A | Building Inspection-Lab |  | Cooperative Work Experience |  |
| COM051 | Communication Skills I .............................. 3 | Term 4 |  |  |
|  | ${ }_{\text {On }}^{\text {English Composition-Exposition . . . . . . . . . . . . . . . . . . . } 3} 3$ | BLD063 | Structural Inspection-Concrete | 3 |
| MTH052 | Introduction to Algebra and Geomety (or higher) .......... 3 | BLD071 | Plumbing Codes I . . . . . . . | 3 |
| Term 2 |  | BLD093D | Building Inspection - Lab |  |
|  |  | BLD069 | Engineering for the Building Inspector | 3 |
| BLD052 | Building Codes II ................................... 3 | BLD068 | Foundations, Excavation and Grading . |  |
| BLD061 | Structural Inspection-Wood . . . . . . . . . . . . . . . . . . . . . . . 3 | Term 5 |  |  |
| BLD072 | Plumbing Codes II . . . . . . . . . . . . . . . . . . . . . . . . . 3 |  |  |  |
| BLD082 | Mechanical Codes II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 | ART261 | General Photography |  |
| BLD093B | Building Inspection-Lab . . . . . . . . . . . . . . . . . . . . . . . . . 1 |  | or |  |
| COM052 | Communication Skills II . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |  | Social Science elective |  |
|  |  |  | or |  |
| WR122 | English Composition-Logic and Style . . . . . . . . . . . . . . . . 3 |  | Humanities/ine arts elective |  |
| MTH053 | Introduction to Trigonometry with Geometry (or higher) .... 3 | BLD064 | Structural Inspection Steel |  |
| Term 3 |  | BLD066 | Structural Plan Review |  |
| BLD053 |  | BLD072 | Plumbing Codes II . .... | 3 |
| BLD054 | Building Dwelling Constuction under the UBC | BLD093E | Building Inspection - Lab |  |
| BLD055 | Building Department Administration ................... 3 | Term 6 |  |  |
| BLD062 | Structural Inspection-Masonry ........................ 3 | BLD091 | One and Two Family Electrical Code . . . . . . . . . . . . . . . . . . . 3 |  |
| BLD093C | Building Inspection-Lab .............................. 1 |  |  |  |
| C0M053 | Technical Repor Writing . ........................... 3 | FR | Fire Codes and Ordinances . . . . . . . . . . . . . . . . . . . . . . |  |
|  |  | BLD060 | Fire Protection for Buildings |  |
| WR227 | Tec | BLD067 | Nonstructural Plan Review |  |
| Term 4 |  | BLD093F | Building Inspection - Lab |  |
| BLD280 Cooperative Work Experience* ........................ <br> *Cooperative Work Experience may not be used as a deviation in the one-year program. |  | PSYIO1 | Psychology of Human Relations .... |  |
|  |  | BLD092 | One and Two Family Dwelling Code (optional) |  |
| Associate of Applied Science Degree |  | UCINECC |  |  |
| 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. |  | (college transfer) <br> (Includes Accounting, Finance, Marketing, and Management) |  |  |
| Course | Title Credit Hours | Oregon | te colleges and universities offeri |  |
| Term 1 |  | 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. |  |  |
| BLD050 | Introduction to Building Inspection . ................... 3 |  |  |  |  |  |
| BLD051 | Building Codes I . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |  |  |  |  |  |
| BLD081 | Mechanical Codes I ................................ 3 |  |  |  |  |  |
| C0M051 | Building Inspection - Lab . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 Communication Skills I . . . . . . . . . . . . . . . . . . |  |  |  |  |  |
|  |  | 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. |  |  |
| $\begin{aligned} & \text { WR121 } \\ & \text { CS101 } \end{aligned}$ | English Composition-Exposition .............................. 3 Introduction to Microcomputer Applications . . . . . . . . 3 |  |  |  |  |  |
| MTH052 | Introduction to Algebra and Geometry . . . . . . . . . . . . . . . . . 3 |  |  |  |  |  |
| Term 2 |  | The length of time you take to complete the program will depend |  |  |
| BLD052 | Building Codes II .................................... 3 | on your | kills in these areas. To assess the tio |  |
| BLD059 | Material of Construction . . . . . . . . . . . . . . . . . . . . . . . . 2 |  | the program, you may consult wit |  |
| BLD082 | Mechanical Codes II .............................. 3 | ing and | ounseling Center or a Chemeketa |  |
| BLD093B | Structural Inspection-Wood . . . . . . . . . . . . . . . . . . . . . . . 3 Building Inspection - Lab . . . . . . . . . . . . . . |  |  |  |
| DRF059 | Print Reading . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |  |  |
| COM052 | Communication Skills II . . . . . . . . . . . . . . . . . . . . . . . . 3 | Many colleges have specific requirements for admission to their Business Administration programs. These include specified GPA, |  |  |
|  |  |  |  |  |  |  |
| $\begin{aligned} & \text { WR122 } \\ & \text { MTH053 } \end{aligned}$ | English Composition-Logic and Style . . . . . . . . . . . . . . . . 3 Introduction to Trigonometry with Geometry (or higher) . . 3 | completion of specific courses, and deadlines for admission. As a |  |  |
|  | Term 3 | student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our |  |  |
| BLD053 | Building Codes III . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |  |  |  |  |  |
| BLD054 | Dwelling Construction Under the UBC . . . . . . . . . . . . . . 3 | Adv | nd Counseling Center or a Che |  |
| BLD055 | Building Department Administration ................... 3 | should | so make early contact with an advi | on 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 25.

## First Year

WR121 English Composition
WR122 and 123 Eng fish Composition for SOSC; WR122 or 123 English Composition for UO; WR122 for WOSC; approved witing elective for OSU*
(3)

BA214 Business Communications for PSU
Mathematics per placement test (MTH111 College Algebra, MTH243 Probability and Statistics, MTH241 Elementary Calculus for OSU, UO, and WOSC. MTH241 for EOSC; MTHIII and 243 for PSU and SOSC
CSI25SS Lotus I-Workshects recommended for EOSC
CS101 Introduction to Microcomputer Applications (CS101 and CS125P Micro Database-Paradox for OSU)
Arts and Letters/Humanitics courses** (PHL203 Ethics required for PSU accounting majors)
Social Science courses* (PSU Accounting majors need one course from ANTH, PSY or SOC)
HPE295 Health and Fitness for Life* or elective
Electives* (recommend CS199D for PSU; CS101 for UO)
Second Xear
BA211, 212 Financial Accounting
Term
12
3333
(3)
$4 \quad 5 \quad 6$
$4 \quad 4 \quad 4$

3
33
EC201, 202, 203 Economics (EC203 not required at OSU, or UO but is recommended)
SP111 Fundamentals of Specch for WOSC; SP112 Fundamentals of Persuasion for OSU and PSU; choose one from SP111, 112, 113 Fundamentals of Small Group Communication or SP114 Interpersonal Communication for SOSC; SP114 for EOSC
BA226 Business Law for EOSC, OSU, and WOSC; BA101 Business Environment for UO
Elective courses to meet gencral education requirements:
Ats and Letters/Humanities electives*
Science courses*
Social Science courses** accounting majors at PSU need PS201, 202 American Govemment)
*To mece four-year college general cducaion requirements.


## HEMISTRY

## (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 BusinessChemistry co-major.
The one or two year program outlined below is designed to meet some of the requirements at these institutions. However, the pro-
gram 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 leam 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 25.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121, 122, and/or 123 English Composition or 227 Technical Witing* | 3 | 3 | 3 |
| CH221, 222, 223 General Chemistry | 5 | 5 | 5 |
| Mathematics per placement test through MTH254 |  |  |  |
| Vector Calculus IOSU and UO also requires |  |  |  |
| MTH256 Applied Differential Equations; EOSC |  |  |  |
| reauires strough MTH253 Series Calculus; |  |  |  |
| and MTH252 Integral Calculus, and MTH254) | 4.5 | 4-5 | 4.5 |
| Arts and Letters/Humanities electives* (PSU and |  |  |  |
| UO recommend 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:
$\mathrm{PH} 211,212,213$ General Physics for Engineers and Scientists (SOSC and UO students may substi$\begin{array}{lcccc}\text { tute PH201, 202, 203; not required at WOSC) } & 4.5 & 4.5 & 4.5 \\ \text { teial Science courses* }\end{array}$
Social Science courses*
MTH252, 255, 254 Calculus (EOSC requires CS161 Computer Science I-C Language; OSU and UO don't require MTH255. UO also recommends CS133FFORTRAN; OSU requires Bl101 General Biology, WOSC does not require MTH254 and 255 but requires 3 hours of approved electives in Natural Science or Math)
HPE295 Health and Fitness for Life* or elective Arts and Letters/Humanities clectives or Social Science electives*
*To meet four-year college gencral education requiremenis.

(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 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 25.

## First Year

CH221, 222, 223 General Chemistry
Mathematics per placement test through MTHIII College Algebra
WR121 English Composition-Exposition, and six hours from J216 Newswriting; SP111 Fundamentals of Speech, SP112 Fundamentals of Persuasion, SP1 30 Business and Professional Speaking; WR122 English Composition-Logic and Style, WR123 English composition-Research Writing, WR227 Technical Writing, WR241, 242, 243 Imaginative Writing
PSY201 and 202 or 203 General Psychology (counts towards 15 credits of required Social Science)
Approved Humanities or Social Science electives*
Second Year
ZOO201, 202, 203 Zoology or BI231, 232 Biology and one course in Zoology
PH201, 202, 203 General Physics
CH241, 242, 243 Organic Chemistry
Approved Humanities or Social Science electives*

## Term

123 $5 \quad 5 \quad 5$ 5

| 3 | 3 | 3 |
| :---: | :---: | :---: |
|  | 3 | 3 |
| 3 | 6 | 4 |
| 4 | 5 | 6 |
| 4 | 4 | 4 |
| 4 | 4 | 4 |
| 5 | 5 | 5 |
| $3-4$ | $3-4$ | 3 |

*lt is recommended that students who do not aiready 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 anlhropology, 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 bours may be in foreign language; an additional 3 hours may be in theater or music performance).

## (ivil-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 HoursTerm 1
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
College Algebra (or higher) ..... 5MTH111
Term 2
CVL061A Plane Surveying II - Lecture ..... 3
CVL061B Plane Surveying II - Lab .....  2
CVL074 Construction Estimating, Contracts and Specifications ..... 4
CVL076 Soils Testing Laboratory .....
DRF073 Advanced AutoCAD ..... 3
MTH082 Technical Mathematics II ..... 4
or
MTH112 College Algebra (or higher) ..... 5
Term 3
COM051 Communication Skills I ..... 3
WR121 ..... 3or
CVL064A Constuction and Route Surveying.Lecture .....  3
CVL064B Construction and Route Surveying-Lab
DRF081 Mapping and Platting2
DRF093 Technical Software Applications .....  3
CSI25Q Workshects-Quattro .....  4
MTH083 Technical Mathematics III .....  4
MTH251
or

Calculus

## 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 95 credit hours. As a graduate of the program, you may transfer to Oregon Institute of Technology to complete course work for a Bachelor of Science degree in engineering technology.
Chemeketa also offers a pre-engineering transfer program for students who want to transfer to an accredited four-year college or university to earn a Bachelor of Science degree. For details, look under Engineering (college transfer).
Course Title Credit Hours

Term 1

CVLO60A
CVL060B
CVL078
DRF065
DRF072
MTH081
MTH111
Term 2
CVL06IA
CVL061B
CVL074
CVL076
DRF073
MTH082
MTH112
Term 3
COM051
WR121
CVL064A
CVL064B
DRF081
DRF093
CS125SS
MTH083
MTH251
Term 4
BI131

CVL080

## Term 5

CVL082
CVL084DRF085
Environmental Science4 3
DRF084 GIS Applica .....  1
DRF089
DRF089
GEOG105 Structural Drafting ...
Introductory Geography ..... 3 ..... 3
Structural Drafting ....
Introductory Geography .....  3
Humanities/fine arts elective ..... 3
Social Science elective .....  3
Strength of Materials4
Soil Mechanics and Foundations ..... 3
CVL087 ..... 4
DRF082
Introduction to MicroStation PC ..... 3

Civil Dratting-Softdesk 3
Plane Surveying I - Lecture .....  3
Plane Surveying l-Lab ..... 2
Concrete and Concrete Testing .....  3
Introduction to HP48 Calculators .....  2
Introduction to AutoCAD ..... 3
Technical Mathematics I .....  4
$\stackrel{\text { or }}{\text { College }}$ Algebra (or higher) ..... 5
Plane Surveying II - Lecture .....  3
Plane Surveying II - Lab .....  . 2
Construction Estimating, Contracts and Specifications .....  4
Soil Testing Laboratory .....  1
Advanced AutoCAD .....  3
Technical Mathematics II .....  4
Trigonometry (or higher) ..... 5
Communication Skills I ..... 3
English Composition-Exposition ..... 3
Construction and Route Surveying-Lecture ..... 3
Construction and Route Surveying - Lab .....  2
Mapping and Platting .....  3
Technical Software Applications ..... 3
Lotus I-Worksheets ..... 4
Technical Mathematics III .....  4Differential Calculus (or higher) 5or
Laboratory Science Elective
Applied Mechanics

Term 6
COM053 Technical Report Writing ..................................... 3
WR227 Technical Writing .....  3
CVL069 Survey Equipment Operations Review .....  1
CVL088 Environmental and Sanitary Engineering .....  3
CVL092 Reinforced Concrete Design and Construction .....  3
DRF083 Project Development .....  3

see Electronics Technologies

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 98 credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| CISI20 | Computer Information Science I |  |
| CIS121 | Computer Information Science II |  |
| MTH105 | Introduction to |  |
|  | Contemporary Mathematics (or higher) |  |
| WR121 | English Composition-Exposition (or higher) |  |
| Term 2 |  |  |
| BA101 | Business Environment |  |
| CS133C | COBOLI | , |
| CSI40A | OS Concepts and Facilities | 3 |
| CS140B | Microcomputer Operating Systems | 3 |
| FE205A | Job Search Preparation |  |
| FE205B | or <br> Resumes and Job Search Core |  |
|  | or |  |
| FE205C | Interviewing for Success |  |
| Term 3 |  |  |
| CIS122 | Computer Information Science III |  |
| CS233C | COBOL II | 4 |
| CS244 | Systems Analysis I | 3 |
| SP11 | Fundamentals of Speech (or higher) | 3 |
| WR227 | Technical Report Writing |  |
| Term 4 |  |  |
| BA211 | Financial Accounting I |  |
| CS133VB | Visual Basi--Event-Driven Programming |  |
| CS234L | On-Line Programming Techniques ..... |  |
| CS246 | Systems Analysis II. | 3 |
| CS280C | Cooperative Work Experience |  |
|  | or Computer science elective* |  |
| Term 5 |  |  |
| CS171 | Principles of Computer Organization |  |
| CS275 | Database Management ....... |  |
| CS278 | Data Communications . | 3 |
| CS280C | Cooperative Work Experience. |  |
|  | $\stackrel{\text { or }}{\text { Computer science elective* }}$ |  |
|  | Humanities/fine arts elective |  |
|  | or |  |
|  | Science/applied science elective |  |
| Term 6 |  |  |
| CS234C | COBOL Programming Techniques | . 4 |
| CS280C | Cooperative Work Experience . . | . 3 |
|  | Computer science electives*. | . 6 |
|  | Social Science elective ... |  |
| **Computer science elective: Choose courses with CS or CIS prefixes above CSIO1 (addiional spreadsheet or database classes will not apply as CS elective). |  |  | or database classes whit not apply as CS elective).

## Alert!

Program requirements have changed, see "Alert" section on this page for details.

## Microcomputer Support Specialist Option

This option emphasizes the horizontal integration of application packages and provides an introduction to microcomputer programming. It includes training in installing and integrating many of the software packages used by businesses.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 1,092$; 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 98 credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| CIS120 | Computer Information Science I |  |
| CIS121 | Computer Information Science II | 4 |
| MTH105 | Introduction to . |  |
|  | Contemporary Mathematics (or higher) |  |
| WR121 | English Composition-Exposition (or higher) | 3 |
| Term 2 |  |  |
| BA101 | Business Envitonment |  |
| CS125DB | Micro Database Software-DBASE |  |
|  | or |  |
| CS125FX | Micro Database Software-FoxPro |  |
| CS133C | Cobol 1 |  |
| CS140B | Microcomputer Operating Systems |  |
| FE205A | Job Search Preparation ......... |  |
| FE205B | Resumes and Job Search Correspondence |  |
|  | or |  |
| FE205C | Interviewing for Success |  |
| Term 3 |  |  |
| CS122 | Computer Information Science III |  |
| CS125SS | Lotus I-Worksheets |  |
|  |  |  |
| CS125E | Worksheets-Excel |  |
|  | or |  |
| CS1250 | Worksheets-Quattro |  |
| CS135DB | Advanced Micro Database-DBASE |  |
|  |  |  |
| CS135FX | Advanced Micro Database-FoxPro |  |
| CS244 | Systems Analysis I | 3 |
| WR227 | Technical Report Writing |  |
| Term 4 |  |  |
| BA211 | Financial Accounting I |  |
| CS133VB | Visual Basic-Event-Driven Programming |  |
| CS240 | Advanced MSIDOS and Utilities |  |
| CS246 | Systems Analysis II. | 3 |
|  | Humanities/fine arts elective |  |
|  | or Sciencelapplied science elective |  |
| Term 5 |  |  |
| CS145 | Microcomputer Hardware and Software Eva | ion ........ 4 |
| CS171 | Principles of Computer Organization |  |
| CS275 | Database Management . ........... | . 4 |
| CS278 | Data Communications . |  |
| CS280C | Cooperative Work Experience |  |
|  | $\stackrel{\text { Or }}{\text { Computer Science elective* }}$ |  |
| Term 6 |  |  |
| CS050 | Data Communications Lab | 2 |
| CS060 | Techniques of User Training | 2 |
| CS279 | Network Management . | . 3 |
| CS280C | Cooperative Work Experience |  |
|  | or ${ }^{\text {O }}$ ( ${ }^{\text {a }}$ |  |
|  | Computer Science elective* ..... |  |
| SP111 | Fundamentals of Speech (or higher) | 3 |
|  | Social Science elective |  |

*Computer science elective: Choose course wilh CS or CIS prefixes (additional spreadshect or database classes will not apply as CS elective)

## -Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The-first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized pro-
gram of study. The program of study may include one or more of the following courses:

| BA066 | Succeeding in Business | 6 |
| :---: | :---: | :---: |
| MTH060 | Introductory Algebra | 4 |
| WR115 | Introduction to Composition | 3 |
| CS101 | Introduction to Microcomputer Applications | 3 |
|  | or |  |
| OA200 | Introduction to Information Processing | 3 |

If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.

## (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. Southem Oregon also has a computer information science option which requires less math. (See SOSC catalog for requirements.)
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 25.

## First Year

CSI60 Introduction to Computer Science (required corequisite for Chemeketa's CS161) CS161, 162, 260 Computer Science I, II and III (required by all except UO; recommended for UO; PSU also accepts CIS120, 121)
Mathematics per placement test* (MTHIII needed for CSI61; MTH231, 232 Discrete Mathematics required for CS162 and 260)
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 Physics for PSU; PH211, 212, 213; PH201, 202, 203 General Physics; BI101, 102, 103 General Biology; or CH121, 122, 123 General Chemistry for UO)
WR121, 122 and/or 123 English Composition and/or

## Term

WR227 Technical Writing* (WR121, 122, 227
for OSU and SOSC; WR121 and WR227 for
PSU; WR121 and WR122 or 123 for UO;
WR121 and two courses from WR122, 123, 227 for WOSC)
$3 \quad 3$ (3)
It is recommended that students planning to attend PSU and U0 transfer after completing one year.

## Second Year

Computer Science course to meet major requirements (Chemeketa recommends CS171 Principles of Computer Organization for all schools;
CS171, CSI33F FORTRAN IV required for PSU;
Mathematics to meet major requirements through MTH253 in addition to MTH231, 232 Discrete Mathematics for OSU and UO; through MTH254 Vector Calculus I for PSU; MTH231 and 254 for WOSC; through MTH252 for SOSC and MTH23I
Social Science courses*
Atts and Letters/Humanities sequence*
HPE295 Health and Fitness for Life* or elective Electives* (CH221, 222, 223 General Chemistry for PSU
*To meet four-year college general education requirements.

## Monstruction 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
Term 1
CTX050 Fundamentals of Construction ............................ 18
Term 2
CTX060 Applied Construction Principles ........................... 15
-Alert!
To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
DRF072 Introduction to Auto/CAD

MTH051 Basic Mathematics ........................................... . 3
SKD050A Technical Learning Skills ...................................... . . 1
WR040 Writing Skills ................................................... . . 3
If you have questions about the requirements call (503) 399-6519. Failure to be assessed may delay your entry into program classes.

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 correational 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, $\$ 950$. 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 The
CS101 Introduction to Microcomputer Applications (or higher) ..... 3WR121 .3 English Composition-Exposition.
WR122
WR122
WR227 Technical Witing .....  .3
or
English Composition-Research Writing ..... 3
WR123
Speech clective ..... 3
MTH052
Physical education elective (three different activities) .....  3 ..... 3
Social Science sequence
Humanities sequence ..... 9
General education electives .....  18
Criminal Justice core requirements ( 18 credit hours)
CJ100 Survey of the Criminal Justice System .....  3
Cl101 Criminology .....  3
CJ132 Introduction to Parole and Probation ..... 3
CJ206 Crime and Delinquency .....  3
C1215 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
C1220 ..... 3
CJ230 Introduction to Juvenile CorrectionsCJ231 Introduction to Corrections Process3
introduction to Corrections Process ..... 3
CJ232 Introduction to Corrections Casework .....  3
CJ280 Cooperative Work Experience .....  3
${ }^{\text {man }}$
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. To enroll, you must have a high school diploma or GED certificate. For additional information, contact the Admissions Office at (503) 399-5006.
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.
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, \$430; class fees, $\$ 125$; equipment and supplies, \$644; test fees, \$140; physical examination, \$80;
measles vaccination, $\$ 10$; Hepatitis $B$ series, $\$ 150$. Contact the Financial Aid Office to find out if you qualify for help with these costs.
You may earn a Certificate of Completion by successfully completing these 52 required credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| BI060 | Basic Science Principles |  |
| DEN050 | Dental Sciences I ..... |  |
| DEN051 | Introductory Concepts in Dental Assisting |  |
| DEN052 | Dental Anatomy and Physiology . . . . . . | . 3 |
| DEN053 | Dental Materials 1 | . 4 |
| DEN054 | Preventive Dentistry | . 1 |
| Term 2 |  |  |
| DEN060 | Dental Sciences II |  |
| DEN061 | Dental Assisting Practicum I | 3 |
| DEN062 | Expanded Functions I | . 3 |
| DEN063 | Dental Materials II | . 4 |
| DEN064 | Dental Radiology I |  |
| Term 3 |  |  |
| DEN070 | Dental Office Management |  |
| DEN071 | Dental Assisting Practicum II | . 9 |
| DEN072 | Expanded Functions II | 3 |
| DEN074 | Dental Radiology II | . 2 |
| DEN080 | Dental Assistant Seminar | . 2 |

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
Term 1

| AH051 | Heath Occupations Overview A |
| :---: | :---: |
| MED050A | Introduction to Medical Terminology A |
| MTH060 | Introductory Algebra |
| RD090 | College Textbook Reading |
| WR090 | Fundamentals of Writing |
| Term 2 |  |
| AH052 | Health Occupations Overview B |
| CSIO1 | Introduction to Microcomputer Applications |
| MED050B | Introduction to Medical Terminology B |
| SP118 | Interpersonal Communication in the Health Professions |
| WR095 | Fundamentals of Composition |

If you have questions about the requirements call (503) 399-5058. Failure to be assessed may delay your entry into program classes.
(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 Aprill.
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 25 .

First Year
BI231, 232, 233 Anatomy and Physiology (not required but highly recommended for OHSU )
CH121, 122, 123 College Chemistry (CH104, 105, 106 Chemistry for Allied Health may be substituted for OHSU**)
PSY201 General Psychology
SOC204 General Sociology
ANTH 103 Cultural Anthropology for OHSU; Psychology elective for OIT
WR121, 122 English Composition and 227 Technical Writing for OIT; OHSU choose WRI22, 123, or 227
SP111 Fundamentals of Speech (SP111 or higher specch classes for OHSU)
CSi01 Introduction to Microcomputer Applications or CS131 Introduction to Data Processing for OIT (strongly recommend for OHSU)
MTH095 Intermediate Algebra for OIT (prerequisite for CH121)
PE 185 Any Physical Education elective for OIT
Elective (3 hours for OIT)
Second Year
FN225 Nutrition
Humanities electives* (9 hours for OIT; 6 hours from Art, Literature, Philosophy, Religion, Speech, Theater Arts, or second year foreign language for OHSU )
BI234 Microbiology (not required but strongly recommended for OHSU)
PE185 Physical activity ( 1 credit for OIT)
MTHIII College Algebra

| Term |  |  |
| :---: | :---: | :---: |
| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| 4 | 4 | 4 |
|  |  |  |
| 4.5 | 4.5 | 4.5 |
| 3 |  |  |
| 3 |  |  |

33

Social Science electives*: 3 hours from Anthropology, History, Economics, Geography, Psychology, Social Science, Political Science for OIT
Electives (additional electives to bring total transferable credits to 91 for OHSU )
*To meet four-year college gcneral education requirements.
**OHSU requires science courses be completed wibinin the past 10 years.

## - RAFTING TechnologyCAD

Drafting Technology offers three paths of entry into careers in drafting and design: Computer-Assisted Drafting (CAD), 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 makeknowledgeable decisions about their careers. Choose individual courses to meet your needs, or work toward an Associate of Applied Science degree. You should choose CAD, 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.

## Computer-Assisted Drafting (CAD) Option

Upon graduating from the CAD option, you may become a technician in civil, mechanical, pipe, or architectural drafting. Additional career opportunities include Geographic Information Systems (GIS) mapping and technical illustration. Training includes computer-aided drafting projects in all of the fields listed and broader skills in communication, teamwork, and human relations which are necessary for career success.
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

Term 1
COM051 Communication Skills I ...................................... 3
WR121 English Composition-Exposition .............................. 3
DRF050 Sketching . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
DRF065 Introduction to HP48 Calculators . . . . . . . . . . . . . . . . . . . . . . . . 2
DRF073 Advanced Aut0CAD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MFG053 Manufacturing Processes .......................................... . . . 3
MTH081 Technical Mathematics I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

MTH111 $\quad \stackrel{\text { or }}{\text { College Algebra (or higher) }}$. ............................. 5
Term 2
DRF056
DRF075
GEOG105
Architectural Drafting ................................... 3
AutoCAD 3-D .............................................. 3
Introductory Geography ........................................ 3
Humanitiesfine arts elective ............................... 3
or
Social Science elective ..................................... 3
MTH082 Technical Mathematics II ..................................... . . 4
MTH112 Trigonometry (or higher) ................................. 5
PH081 Applied Physics (or higher) ................................. . . 4
Term 3
CVL066A
CVL066B
DRF074 Descriptive Geometry .............................................. . . . 3
Surveying for Drafters-Lecture

DRF081 Mapping and Platting . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
DRF092 CAD System Administration.................................. 3
DRF093 Technical Software Applications ............................. 3
CS125Q Worksheets-Quattro ....................................... . . 4
Term 4
BLD069 Engineering for the Building Inspector ...................... 3
CVL080 Applied Mechanics ......................................... 3
C0M053 Technical Report Writing .................................. 3
WR227 Technical Writing ............................................. . 3
DRF068 Geometric Tolerancing ........................................ 3
DRF078 AutoLISP Programming . ...................................... 3
DRF084 GIS Applications Lab ............................................. . . . 1
DRF089 Stuctural Drafting . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 5
DRF077 Introduction to MicroStation PC . . . . . . . . . . . . . . . . . . . . . 3
DRF082 Civil Drafting-Softdesk . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
DRF085 Geographic Information Systems (GIS) ........................... 3
DRF094 3-D Studio ................................................. . . 3
Technical elective* ......................................... 3
or
DRF280C Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 6
DRF055 Architectural Design ....................................... . . . 3
DRF061 Technical Illustration . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
DRF070 CAD Pipe Systems ................................................. . . 3
DRF083 Project Development $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 3$
or
Technical elective* .......................................... . . 3
${ }_{\mathrm{C}}^{\mathrm{Co}} \mathrm{O}$ perative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . 3
Technical elective* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
*Technical elective: May be any professional-technical or math/science course.
Alert!
Program requirements have changed, see "Alert" section on Page 58 for details.

## Mechanical Design Option

Mechanical Design is a comprehensive drafting program with practical approaches to engineering and design concepts using Computer-Aided Design (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' tech-
nical 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 97 credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| COM051 | Communication Skills I | 3 |
|  |  |  |
| DRF050 | English Composition-Exposition. | 3 |
|  | Sketching | 1 |
| DRF065 | Introduction to HP48 Calculators | . 2 |
| DRF073 | Advanced AutoCAD |  |
| MFG053 | Manufacturing Processes | . 3 |
| MTH081 | Technical Mathematics I |  |
| MTH111 | or College Algehra (or higher) | 5 |
| Term 2 |  |  |
| COM053 | Technical Report Writing | 3 |
|  | or |  |
| WR227 | Technical Writing | 3 |
| DRF075 | AutoCAD 3-D | . 3 |
| MTH082 | Technical Mathematics II |  |
|  | $\stackrel{0}{\text { Or }}$, |  |
| MTH112 | Trigonometry (or higher) | . 5 |
| PH081 | Applied Physics |  |
| PH20] | $\stackrel{\text { Or }}{\text { General }}$ Physics (or higher) | 5 |
|  | Humanitiesffine arts elective | 3 |

Term 3
DRF074
DRF092
DRF093
Descriptive Geometry . 3
CAD System Administration* . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Tectnical Software Applications* . 3

CS1250
or
MTH083
Worksheets-Quattro
.4

MTH251

DRF280C
or
Differential Calculus (or higher)
Technical elective*3
Cooperative Work Experience .....  3

Term 4
CVL080
Applied Mechanics
DRF068 Geometric Tolerancing .................................................. 3
DRF078
DRF089
MFG054
MT100
Term 5
CVL082
DRFO66
AutoLISP Programming* $\ldots .3$
Structural Drafting*. ............................................. 3
Geometric Tolerancing Lab 1
Electronics Fundamentals for Non-Majors .....  4Strength of Materials 4Tool Design Lab I 3

DRF077

DRF086

DRF086
Power Transmission Design
Power Transmission Design .....  .3 .....  .3DRF094
Term 6
DRF06IDRF070DRF07I
3-D Studio ..... 3
Technical Illustration I* .....  3
CAD Pipe Systems* .....  3
Machine Design .....  3
DRF087 Flexible Manufacturing Systems ..... 3
Technical elective* ..... 3
or
DRF280C Cooperative Work Experience ..... 3
*Technical elective: May be any professional-technical or math/science course
-Alert!

Program requirements have changed, see "Alert" section on page 58 for details.

## 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 97 credit hours:
Course Title Credit Hours
Term 1
COM51 Communication Skills 1 .....  3
WR12I $\stackrel{\text { Or }}{\text { English Composition-Exposition }}$ ..... 3DRF050DRF065
DRF073
MFG064
MTH081
Sketching ..... 1
Introduction to HP48 Calculators .....  . 2
Advanced AutoCAD ..... 3
Manufacturing Fundamentals ..... 4
Technical Mathematics I ..... 4
or College Algebra (or higher) ..... 5
Term 2
DRF075 AutoCAD 3-D .....  3MFG065Tool and Work Holding5
MFG093
MFG093
MTH082 Technical Mathematics II .....  4
MTH112 Trigonometry (or higher) .....  5
Term 3
C0M053 Technical Report Writing .....  3
WR227 Technical Writing .....  3
DRF093 Technical Software Applications .....  3
CS125Q Worksheets-Quattro .....  4
MFG066 Material Cutting/Removal Mcthods .....  5
PSY246 Introduction to Industrial Psychology ..... 3
Humanities/fine ants clective ..... 3


#### Abstract

Social Science elective ...................................... . . 3


## or

Term 4
CVL080 Applied Mechanics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
DRF068 Geometric Tolerancing ........................................ 3
MFG054 Geometric Tolerancing Lab . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
MFG094 Manufacturing Programming . .............................. 5
PH081 Applied Physics ................................................... 4
${ }_{\text {General Physics (or higher) . . . . . . . . . . . . . . . . . . . . . . . . . . . } 4} 4$
PH201 General Physics (or higher) . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Term 5
CVL082 Strength of Materials ......................................... . 4
DRF066 Tool Design Lab I . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
DRF086 Power Transmission Design ...................................... 3
MFG095 CAM Applications . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
MT100 Electronics Fundamentals for Non-Majors ................... . . 4
Term 6
DRF071 Machine Design ............................................. . 3
DRF087 Flexible Manufacturing Systems . . . . . . . . . . . . . . . . . . . . . . . 3
MFG096 CAD/CAM Integrations ......................................... 5
Technical elective* .......................................... 3
or
DRF280C Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . 3
*Technical elective: May be any professionai-technical or math/science course.

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

| CSI01 | Introduction to Microcomputer Applications |
| :---: | :---: |
| DRF051 | Machine Drafting I |
| DRF072 | Introduction to AutoCAD |
| MTH060 | Introductory Algebra |
| SKD050A | Technical Learning Skills |
| WR040 | Writing Skills |

If you have questions about the requirements call (503) 399-6519. Failure to be assessed may delay your entry into program classes.

## Aarly Childhood Education

Early Childhood Education is a comprehensive program of both theory and practical experiences designed to prepare you to work with young children. Many of the courses may be helpful to parents of preschool-age children and to persons working with families, children, and individuals. Graduates may qualify to be child care aides, assistants, and teachers in pre-schools, day care centers, kindergatens, 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 firstaid 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 geared to 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 initial minimal training information only and may not be suitable for everyone. (Please contact program chair for further information.) Students completing the Child Development Certificate may use their credits toward completion of the one-year Early Childhood Education certificate and the two-year associate degree. Students completing this program may also enter employment as classroom aides in pre-schools, 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. A competencybased evaluation and checklist will be used in fieldwork instruction.
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

## Term 1

ECE068A Observing the Preschool Experience . . . . . . . . . . . . . . . . . . . 1
ECE151 Observing and Guiding Behavior ............................ 3
ECE2801 Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . . 9
HDFS247 Preschool Child Development ................................. 3
HDFS249 Working and Living with Infants and Toddlers ............. 3
Term 2
ECE068B Observing the Preschool Experience . . . . . . . . . . . . . . . . . . . . 1
ECE068C Observing the Preschool Experience . . . . . . . . . . . . . . . . . . . . 1
ECE2801 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 |
| :---: | :---: | :---: |
| Term 1 |  |  |
| ECE068A | Obse |  |
| ECE150 |  |  |
|  |  |  |
| ECE161 | Infand |  |
| HDFS222 | Famil |  |
| HDFS225 | Prena |  |
| HDFS249 |  |  |
| Term 2 |  |  |
| ECE068B | Obse |  |
| ECE151 | Obse |  |
| ECE152 | Crea |  |
| ECE155 | Child |  |
|  | or |  |
| FN225 | Nutri |  |
| ECE162 | Early |  |
| HDFS247 | Pres |  |
| WR121 | Engl |  |
| Term 3 |  |  |
| ECE068C | Obse |  |
| ECE153 | Musi |  |
| ECE154 | Child |  |
| ECE163 | Pres |  |
| HDFS229 | Deve |  |
| HDFS248 |  |  |
| 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

Term 1
ECE068A Observing Preschool Experiences ............................
ECE150
ECE161
HDFS222 Family Relationships ...................................... 3
Introduction and Observation in Early Childhood Education . . 3

HDFS225 Prenatal, Infant and Toddler Development ..................... 3
HDFS249 Introduction to Working with Infants and Toddlers .......... 3
Term 2
ECE068B Observing Preschool Experiences ............................. . .
ECE151 Observing and Guiding Behavior ............................. 3
ECE152 Creative Activities ................................................... . . 3
ECE155 Child Nutrition . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
FN225 Nutrition . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
ECE162 Early Child Educator Orientation ............................... 2
HDFS247 Preschool Child Development . . . . . . . . . . .......................... 3
WR121 English Composition-Exposition (or higher) . . . . . . . . . . . . . . . 3
Term 3
ECEO68C Observing Preschoo! Experiences ............................. 1
ECEI53 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
$\begin{array}{ll}\text { Term } 4 \\ \text { ECE251 } & \text { Environments for Young Children } \ldots . . . . . . . . . . . . . . . . . . . . ~\end{array}$

| ECE261 | Environments for Young Children |
| :--- | :--- |
| ECudent Teaching I, Early Childhood Education ...................... 6 |  |

HDFS285 Professional Issues in Early Childhood Education ........... 3

MTH052 Introduction to Algebra and Geometry (or higher) ......... 3
Term 5
ECE280D Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . 4
ED258 Multicultural Education .3

ED268
ED258257 Educating the Mildly and Severely Handicapped ............. 3
HDFS257 Home, School and Community . . . . . . . . . . . . . . . . . . . . . . . . . 3
Computer science elective . ............................... 3
Humanitiesffine arts elective* ................................ 3
${ }_{\text {Or }}^{\text {Sciencelapplied science elective* }}$. ....................... 3

Term 6
ECE262 Student Teaching II, Early Childhood Education ............ 6
ECE295 Administration of Early Childhood Education ProgTams ..... 3
Humanities/fine arts elective* . . . . . . . . . . . . . . . . . . . . . . . . 3
or
Science/applied science elective* . . . . . . . . . . . . . . . . . . . . . . 3
Communications clective* . ................................. 3
*Category may not be repeated.

(college transfer)
Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Economics are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. UO also offers a five-year program combining an undergraduate economics major and a master of business administration.
The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.
As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.
Refer to the Oregon Associate of Atts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25 .

## Term

First Year $1 \begin{array}{lll}3 & 3\end{array}$
WR121, WR122 and/or 123 English Composition or WR227 Technical Witing*
Social Science courses*
Arts and Letters/Humanities courses*
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 PSS, UO requires MTH111, 241,
242 (at UO), 243 or MTH251, 252, 253 Calcu-
lus; SOSC recommends MTH251, 252, 253 for
graduate work.*

MTH241 for PSU; UO requires MTH111, 241, 242 (at UO), 243 or MTH251, 252, 253 Calculus, SOSC recommends MTH251, 252, 253 tor graduate work.)*
PE295 Health and Fitness for Life* or electives
Electives*
6.7
*To met four-year college general cducation requirements.
**OSU recommends three or more calculus courses for students interested in graduate study.
see also Early Childhood Education, Education Certificate, 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 fifthyear 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 fifthyear Elementary Education program must obtain a baccalaureate degree in an academic major before being admitted to the fifthyear 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 Praxis I: Pre-professional Skills Test or the Califormia Basic Educational Skills Test (CBEST) or both. Check with each school for their requirement. Students transferring to EOSC or WOSC are advised to take the required test at the completion of their general education requirements or early in their sophomore year, as 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 outined 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 |  |  |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| 3 | 3 | 3 |
| 3.4 | 3.4 | 3-4 |
| 3 | 3 | 3 |
| 3 | 3 | 3 |
|  | 3 |  |
| 4 | 5 | 6 |
| (3) | (3) | (3) |
| 3 | 3 | 3 |
| $4$ | $\begin{gathered} 4.5 \\ 1 \end{gathered}$ | 4.5 |
| 3 |  |  |
| 3 | 3 |  |
| 0-3 | 3.6 | 3-6 |

## 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, and Eastern Oregon State

College, Oregon State University, Portland State University, Southern Oregon State College, and University of Oregon, which offer a fifth-year secondary education program. UO programs are limited to music, foreign language, and special education.
Admission to fifth-year education programs requires completion of a baccalaureate degree in the subject you plan to teach at a junior or senior high school. The secondary education program is at the graduate level. Admission to these programs requires maintaining a specific grade point average (GPA), usually 2.75 to 3.00 , and successfully passing the California Basic Educational Skills Test (CBEST) or Praxis I: Pre-Professional Skills Test (PPST) and the National Teacher Examination (NTE) in your major teaching area.
Admission to the four-year education program at WOSC requires maintaining a 2.75 GPA and passing the CBEST or PPST.
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 25.

## Education Certificate

(see advisor for transferability)
The Education program offers the training necessary to help you on your way to becoming an educational assistant and/or licensed teacher. The first step is the completion of the one-year certificate in education. This certificate provides the training necessary to become an educational assistant in public schools and gain valuable teaching experience. Students who complete the one-year certificate may then work towards an Associate of General Studies degree (see requirement on Page 30). Completion of the associate degree requirements enables you to transfer to Portland State University or Oregon State University where you may complete a Bachelor of General Studies/Liberal Arts degree which then allows you to apply to a teacher licensing program.
Students pursuing the one-year education certificate take a core of required courses, including practicum. The core courses offer instruction in basic teaching strategies, human relations, communication, and non-instructional support skills. In addition to the core courses, students select from one of three areas in which to specialize. These areas include working with children in multiculturalbilingual settings, helping children who are in special education programs, or assisting in a media/technology center. Each term students participate in worksite practicums to gain experience and to practice skills learned in classes.
By the end of the certificate program, you are expected to demonstrate, through transcripted courses or competency assessments, a
writing skill equivalent to completion of WR115 (or higher); a math skill equivalent to completion of MTH051 or MTH060 (or higher); and computing skills equivalent to completion of CS101 (or higher). You are required to maintain a grade of C or higher in all courses in order to participate in a practicum.
The Education 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 writing, mathematics, and computers. The length of time you take to complete the program will depend upon your skill 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 certificate program are books, $\$ 410$; class fees, $\$ 78$; measles vaccine, $\$ 10$, and criminal history check, $\$ 15$. 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 45 required credit hours:
Course
Tille
Credit Hours

Term 1
ED101 Introduction to Observation and Experience ................ 3
ED110 Psychology of Learning . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ED133 Instructional Media and Materials ............................. . 3
ED251 Overview of Students with Special Needs ................... 3
ED258 Multicultural Education ....................................... 3
Term 2
ED102 Practicum ................................................... 3
ED123 Classroom Techniques in Reading and Language ............ 3
ED131 Teaching Techniques ....................................... ${ }^{3}$
ED217 Comprehensive Classroom Management ...................... 3
Approved elective* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 3
ED103 Advanced Practicum . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
ED124 Classroom Techniques in Math and Science .................. 3
ED212 Schools and Society ......................................... . . 3
Approved elective* ......................................... 3
*Approved elective ( 6 hours required):
ED213 Advanced Instructional Techniques in Reading Strategies .... 3

ED235 Instructional Technology ................................... 3
ED236 Introduction to LibraryMedia Services . . . . . . . . . . . . . . . . . . . 3
ED253 Current Issues in Special Education .......................... . 3
ED257 Second Language Teaching Techniques ........................ 3
ED259 Bilingual Methodology . ..................................... . . 3
ED268 Educating the Mildly and Severely Handicapped ............ 3

## LECTRONICS 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 (includes integrated circuit mask design), 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 (503) 399-5120, or the electronics program chair, Gary Boyington, at (503) 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 (503) 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 (503) 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 (503) 399-5218, and the institution to which you plan to transfer.
Students entering this option must have a DOSIWindows-compatible computer ( 486 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, $\$ 1,340$; class fee, $\$ 290$; equipment and supplies, \$87; DOSWWindows-compatible computer ( 486 or better), $\$ 1,200$. Contact the Financial Aid Office to find out if you qualify for help with these costs.
You may earn an Associate of Applied Science degree by successfully completing these required 107 credit hours:

Term 1
WR121
COM051
ELE050
ELT058
ELT061
ELT094
CS140B
CS240
ES071
MTH111
MTH081
Term 2
ELE051
ELT054
ELT062
ELT066
MTH112
MTH082
Term 3
WR227
COM053
ELE052

Term 4
ELT065
ELT067
ELT091
CS133U
PH201
PH081 COM052

SP111
FE205B

## SP113

FE205B
Term 5
CS278
ELT068
ELT090
PH202
PH082
PH203
PSY246
PSY201
PSY101
Term 6
ELT070
ELT092
ELT093
ELT097
or

Entronic Concepts III .........................................................
ELT055 Semiconductor Devices . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ELT071 Linear IC Fundamentals . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
English Composition-Exposition . . . . . . . . . . . . . . . . . . . . . . 3
or
Communication Skills I .................................... . . 3
Electronic Concepts 1 . 4
Electronics Orientation .....  1
Electronics Problems I .....  1
Computer Operating Systems .....  3
Microcomputer Operating Systems .....  3
Advanced MSIDOS and Utilities ..... 3
Work Place Safety Skills ..... 5
College Algebra ..... 5
Technical Mathematics I ..... 4
Electronics Concepts II ..... 4
Transistor Fundamentals .....  5
Electronics Problems II .....  1
Digital Fundamentals .....  4
Trigonometry (or higher) .....  5
Technical Mathematics II .....  4
Technical Writing .....  3
Technical Report Writing ..... 3

ELT064 Pulse Circuits Fundamentals . . . . . . . . . . . . . . . . . . . . . . . . . . 3Linear IC Fundamentals4
Electronic Circuit Analysis .....  4
Digital Circuit Applications .....  3
Programming Concepts I (recommended) .....  4
${ }^{\circ} \mathrm{C}$ .....  . 4
General Physics ..... 4
Applied Physics .....
Communications Skills II .....  3
Fundamentals of Speech .....  3
and
Resumes and Job Search Correspondence .....  1
or .....  3
and
Resumes and Job Search Correspondence .....  . 1
Data Communications ..... 3
Microcomputer Systems .....  5
Computer Peripherals .....  4
General Physics .....  4
Applied Physics .....  4
General Physics .....  . 4
Introduction to Industrial Psychology ..... 3
$\stackrel{\text { or }}{\text { General Psychology }}$ .....  3
Psychology of Human Relations ..... 3
Video Display Systems .....  5
Programming Concepts II .....  4
Advanced Data Communication .....
-Alert!
To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
CS101 Introduction to Microcomputer Applications
OA121A Keyboarding A ........................................... 1

SKD050A Technical Learning Skills ................................... 1
WR040 Writing Skills ............................................. 3

If you have questions about the requirements call (503) 399-5248.
Failure to be assessed may delay your entry into program classes.

## 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 (503) 3995068 , and the institution to which you plan to transfer.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 1,386$; class fees, $\$ 283$; equipment and supplies, \$87. 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 | Tite | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| WR121 | English Composition-Exposition | 3 |
| COM051 | or |  |
|  | Communication Skilm 1 | 3 |
| DRF091 | Basic CAD for Electronics | . 2 |
| DRF072 | Introduction to AutoCAD | . 3 |
| ELE050 | Electronic Concepts I | . 4 |
| ELT058 | Electronics Orientation | . |
| ELT061 | Electronic Problems I | 1 |
| ES071 | Work Place Safety Skills | . 1 |
| MTH111 | College Algebra | . 5 |
| MTH081 | ${ }_{\text {or }}$ Technical Mathematic | 4 |
| Term 2 |  |  |
| ELE051 | Electronic Concepts II . . | . 4 |

Term 1
WR121
English Composition-Exposition 3

COM051 Communication Skills I ................................. 3
DRF091 Basic CAD for Electronics ................................ 2 or
duction to A
ELT058 Electronics Orientation ......................................
ELT061 Electronic Probiems I ...................................... 1
ES071 Work Place Safety Skills .................................... 1
MTH111 College Algebra ........................................ 5
MTH081 Technical Mathematics 1 . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Term 2
Electronic Concepts II
. 4

ELT054
Transistor Fundamentals . 5

ELT062
ELT066
MTH112
MTH082
Term 3
WR227
COM053
ELE052
ELT055
ELT064
ELT071
Term 4
COM052
SP111
FE205B
SP113
FE205B
CS133U
ELTO91
ELT067
PH201
PH081
ELT 065
Term 5
ELT068 Microcomputer Systems ..................................... 5
ELT072 Linear ICApplications ........................................ 3
ELT076 Antennas and Transmission Lines . . . . . . . . . . . . . . . . . . . . . . 2
ELT077 Telecommunications ........................................ 3
PH202 General Physics ................................................. . 4
PH082 Applied Physics ............................................ . . 4
Term 6
ELT070 Video Display Systems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ELT075 Advanced Industrial Electronics ............................... . . . 4
MTH083 Technical Mathematics III . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MTH241 Elementary Calculus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MTH243 Probability and Statistics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Differential Calculus ................ 5
MTH251 Differential Calculus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
ELT092 $\stackrel{\text { or }}{\text { Programming Concepts II } \ldots \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 4$
CS233U Advanced C ............................................. . . 4
PSY246 Introduction to Industrial Psychology ........................ 3
PSY201 General Psychology ....................................... . 3
PSYI01 Psychology of Human Relations . . . . . . . . . . . . . . . . . . . . . . . 3
Approved electronics elective* . . . . . . . . . . . . . . . . . . . . . . . . . 3
*Approved eiectronics electives:
ELT081 Logical Troubleshooting . .................................... 4
ELT090 Computer Peripherals ...................................... 4
ELTO93 Advanced Data Communication ............................ . . 5
ELT097 Advanced Computer Architecture . . . . . . . . . . . . . . . . . . . . . . 4
ELT280 Cooperative Work Experience
(for second-year students with prior
approval of the program chair)
MT110 Microelectronics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MT223 High Vacuum Technology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MT227A Pncumatics .................................................... 3
MTH252 Integral Calculus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
PH203 General Physics ............................................. . . . 4

## Alert!

Program requirements have changed, see "Alert" section on Page 65 for details.

## Microelectronics/ <br> Industrial Electronics Option

Students selecting this option may choose one of three sequences of technical electives. Students who select the Electromechanical sequence or Semiconductor sequence may begin careers, upon graduation, assisting in the development, manufacturing, installation, and servicing of computer integrated manufacturing systems, semiconductor and microelectronic manufacturing equipment, process control equipment, robotic, and other electromechanical systems. These two sequences stress mechanical and electronic system theory.
Students who select the Integrated Circuit Mask Design sequence may begin careers, upon graduation, as a physical design specialist or integrated circuit mask designer. This sequence stresses electronic circuit theory, microelectronics manufacturing processes, and computer-aided-drafting techniques.
All three MicroelectronicsUndustrial sequences emphasize communication skills, teamwork, and human relations which are necessary for career success. For additional information, contact the microelectronics/industrial electronics advisor, Gary Boyington, at (503) 399-5218.

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, Frank Knight, at (503) 3995046 , and the institution to which you plan to transfer.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 1,240$; class fees, $\$ 218$; equipment and supplies, $\$ 87$. 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 |
| :---: | :---: | :---: |
| Term 1 |  |  |
| DRF091 | Basic CAD for Electronics | ... . 2 |
| DRFO72 |  |  |
| ELE050 | Introduction to Autocad | 4 |
| ELT058 | Electronics Orientation | 1 |
| ELT061 | Electronic Problems I | 1 |
| ES071 | Standard First Aid | 1 |
| MTHILI | College Algebra | 5 |
| MTH081 | Or |  |
|  | Technical Mathematics | . 4 |
| WR121 | English Composition-Exposition | 3 |
|  | ${ }^{\text {or }}$ ( ${ }^{\text {a }}$ |  |
| C0M051 | Communication Skills I |  |
| Term 2 |  |  |
| ELE051 | Electronic Concepts II | 4 |
| ELTOS4 | Tratsistor Fundamentals | 5 |
| ELT062 | Electronic Problems II |  |
| ELT066 | Digital Fundamentals | 4 |
| MTH112 | Trigonometry (or higher) | . 5 |
| MTH082 | $\stackrel{\text { Tr }}{\text { Technical Mathematics II }}$ | . |

Term 3

ELT055 Semiconductor Devices . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ELT064 Pulse Circuit Fundamentals . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ELT071 Linear IC Fundamentals ....................................... 4
WR227 Technical Writing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
COM053 Technical Report Writing ................................... 3
Term 4
First course in approved technical elective sequence* . . ...... 3
COM052 Communication Skills II .................................... 3
$\stackrel{\text { or }}{\text { Furdamentals of } \text { Speech }}$............................. 3
and
Resumes and Job Search Correspondence . ................. 1
FE205B Resumes and Job Search Correspondence . . . . . . . . . . . . . . 1
SPII3 Fundamentals of Small Group Communication ............ 3
and ${ }_{\text {Resumes and }}$ Job Search Correspondence ................... 1
FE205B Resumes and Job Search Correspondence . . . . . . . . . . . . . . . 1
ELT067 Digital Circuit Applications . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ELT091 Programming Concepts I ......................................... 4
CS133U CLanguage .......................................... 4
PH201 General Physics .......................................... 4
PH081 Applied Physics ...................................... 4
Term 5
Second course in approved technical elective sequence* ....3-4
ELT068 Microcomputer Systems ................................. 5
ELT072 Linear IC Applications ......................................... 3
PH202 General Physics ....................................... 4

${ }^{\text {or }}$ Aplied Physics
. 4
PH082 Applied Physics ..... 4
Term 6
Final course in approved technical elective sequence* ..... 9-10
ELT075 Advanced Industrial .....  4
PSY246 Introduction to Industrial .....  3
PSY101 Psychology of Human Relations .....  3
PSY201 General Psychology ..... 3
*Approved technical elective sequences: IC Mask Designer Sequence*
Fall
MT110 Microelectronics .....  3
Winter
DRF079 CMOS I ..... 4
Spring
DRFO90 CMOS II ..... 3
CSI40U UNIX ..... 3
WR122 English Composition-Exposition ..... 3
BA204 Teamwork Dynamics .....  3
HD220 Life Skills Seminar 1 ..... 3
HD221 Life Skills Seminar 2 .....  3
PHL203 Elementary Ethics ..... 3
*This is a managed-enrollment sequence.
Semiconductor Technology Sequence
Fall
MT110 Microelectronics ..... 3
Winter
MT223

High Vacuum

| Spring |  |
| :---: | :---: |
| MT227A | Preumatics |
| DRF087 | Flexible Manufacturing Systems |
| CH 201 | Chemistry for Engineers |
|  | or |
| CH121 | College Chemistry |
|  | or |
| MTH243 | Probability and Statistics |
| Electromechanical Sequence |  |
| Fall |  |
| MFG079 | Industrial Systems |
| Winter |  |
| DRF086 | Power Transmissions Design |
| Spring |  |
| DRF087 | Flexible Manufacturing Systems |
| MT227A | Pneumatics |
|  | or |
| CWE280C | Comprative Work Experience |
| CH201 | Chemistry for Engineers |
|  | or |
| CH121 | College Chemistry |
| MTH243 | or <br> Probability and Statisics |
|  |  |
| CWE280D | Cooperative Work Experience |
| -Alert! |  |
| To apply for this program you must take part in an assessment to |  |
| determine if you have the skills needed to succeed. The first step |  |
| is to take the ASSET placement test and then meet with Advising |  |
| and Counseling staff. Students who lack the necessary skill level |  |
| may need to complete additional course work. They will be |  |
| assigned a program advisor to help develop an individualized pro- |  |
| gram of study. The program of study may include one or more of the following courses: |  |
| MTH060 | Introductory Algebra |
| SKD050A | Technical Learning Skills |
| WR040 | Writing |

$\begin{array}{ll}\text { SKD050A } & \text { Technical Learning Skills . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1 \\ \text { WR040 } & \text { Writing Skills . . . . . . . . . . . . . . . . . . . . . . . }\end{array}$
If you have questions about the requirements call (503) 399-5248. Failure to be assessed may delay your entry into program classes.

## Advanced Technology Endorsement

If you already have an associate degree in electronics or are a joumeyman 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, (503) 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.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 600$; class fees, $\$ 109$; equipment and supplies, \$87. 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:

Term 1

CH2OI
${ }^{\mathrm{C}} \mathrm{C}$
CHI21
College Chemistry ........................................ 5

MT110 Microelectronics* ............................................ . . . 3
MTH243 Probability and Statistics ................................... . 4
MTH241 Elementary Calculus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MTH251 $\stackrel{\text { Differential Calculus (or higher) } \ldots . . . . . . . . . . . . . . . . . . . . . . ~}{ } 5$
Differential Calculus (or higher) .............................. 55
or
MTH231 Discrete Mathematics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
WR122 English Composition-Logic and Style . . . . . . . . . . . . . . . . . . . . . 3

## Term 2

SPI13
CH202
CH 22
MT223
MFG079
CS060
BA224
BA199C
MFG079
Fundamentals of Small Group Communication ............. 3
Chemistry for Engineers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
or College Chemistry ........................................ 5

Industrial Systems* ........................................... 3
Techniques of User Training . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
$\stackrel{\text { Pr }}{\text { Personnel Management } \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 3$
or Entrepreneurship . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Total Quality Manufacturing ............................... 4
Term 3
PSY246 Industrial Psychology ........................................ . 3
PSY 101 Psychology of Human Relations . . . . . . . . . . . . . . . . . . . . . . . 3
CH203 Chemistry for Engineers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4

PH203 General Physics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
DRF089 Flexible Manufacturing* . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MT227A Pneumatics *...................................................... . . 3
ELT075 Advanced Industrial Electronics* ........................... . 4
*Cooperative Work Experience or advanced technical electives, may be substituted.

E
MERGENCY
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, $\$ 1,086$; class fees, $\$ 221$; equipment and supplies, $\$ 717$. 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 |
| :---: | :---: |
| Term 1 |  |
| BI231 | Human Anatomy and Physiology (or higher) |
| EMT051 | Emergency Medical Technician Basic, Part 1 ............5 |
| EMT075 | Introduction to Emergency Medical Services |
| H120 | Medical Terminology/Systems 1 |
| WR121 | English Composition-Exposition (or higher) ............. . 3 |
| Term 2 |  |
| AH080 | Crisis Intervention . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| BI232 | Human Anatomy and Physiology (or higher) ............. 4 |
| EMT052 | Emergency Medical Technician Basic, Part $2 \ldots . . . . . . . . . . .4$ |
| EMT280A | Cooperative Work Experience |
| MTH070 | Elementary Algebra (or higher) . . . . . . . . . . . . . . . . . . . . . . . 4 |
| Term 3 |  |
| B1233 | Human Anatomy and Physiology (or higher) . ............. 4 |
| EMT069 | EMT Rescue . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
|  | or Fire Service Rescue Practices |
| EMT070 | Emergency Communication and Patient Transportation ..... 3 |
|  | Or |
| FRP053 | Fire Incident Related Experience . . . . . . . . . . . . . . . . . 3 |
| MS259 | Death and Dying . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| PSY101 | $\stackrel{\text { or }}{\text { Psychology of Human }}$ |
|  | or |
| PSY201 | General Psychology (or higher) . ........................ 3 |
| Term 4 |  |
| CS101 | Introduction to Microcomputer Applications . . . . . . . . . . . . . 3 |
| EMT090 | Emergency Medical Technician Paramedic, Part $1 . . . . . . . . .8$ |
| EMT091 | Emergency Medical Technician Paramedic, Part 1 Clinical . . 2 |
| SPIII | Fundamentals of Speech (or higher) . . . . . . . . . . . . . . . . . 3 |
| Term 5 |  |
| EMT092 | Emergency Medical Technician Paramedic, Part $2 \ldots . . . . . . .8$ |
| EMT093 | Emergency Medical Technician Paramedic, Part 2 Clinical ... 3 |
| EMT280B | Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . 2 |
|  | Social Science elective . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
|  |  |
|  | Humanities/fine arts elective . . . . . . . . . . . . . . . . . . . . . . . 3 |
| Term 6 |  |
| EMT094 | Emergency Medical Technician Paramedic, Part $3 \ldots \ldots . .4$ |
| EMT095 | Emergency Medical Technician Paramedic, Part 3 Clinical ... 3 |
| EMT280D | Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . 4 |
| HPE295 | Heath and Fitness for Life . . . . . . . . . . . . . . . . . . . . . . . . 3 |
|  | Approved elective* (may be taken any term) .............. 3 |
| *Approved elective (3 hours required): |  |
| AH050 | Health Care Delivery . .............................. 1 |
| ASL101 | American Sign Language-Tcrm 1 ...................... . 3 |
| 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
EMT280C Cooperative Work Experience .............................. 3
FRP050 Introduction to Fire Protection ............................. 3
FRP064 Hazardous Materials Operations ........................... 3
FRP077 Fire Service Instructor Training ............................. 3
HE250 Personal Health ......................................... 3
HE262 Cardiopulmonary Resuscitiation Instuction .................... 2
HE268 Pharrnacodynamics in Health Care ........................ 3
HS101 Alcohol Use, Misuse, and Addiction . . . . . . . . . . . . . . . . . 3
HS150 Personal Effectiveness for Human Services Workers ........ 3
HS154 Community Resources .................................. 3
H101 Medical Law and Ethics . . . . . . . . . . . . . . ................ 3
H121 Medical Terminology/Systems 2 ............................ 3
H122 Advanced Topics in the Language of Medicine ........... 3
MED064 Introduction to Medical Science ........................... 3
H114 CPT IV Coding Reimbursement .......................... 3
MS259 Death and Dying . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MTH243 Probability and Statistics . . . . . . . . . . . . . . . . . . . . . . . . . . 4
PSY101 Psychology of Human Relations . . . . . . . . . . . . . . . . . . . . . 3

WR227 Technical Report Writing ................................. 3
Foreign Language ............................................. 3

## $F$ NGINEERING <br> 

## (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, Environmental, 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 25.

## First Year

GE101 Engineering Orientation
GE115 Engineering Graphics (not required for Electrical Engineering; CS161 Computer Science I required for Electrical Engineering)
GE102 Engineering Computations (not required for Electrical Engineering; CS162 Computer Science II-C Language required for Electrical Engineering)
GE103 Engineering Computations
MTH25I, 252 Calculus and Calculus with Analytic Geometry; MTH254 Vector Calculus I
CH 201 , 202 Chemistry for Engineers
Biological Science course*
WR121 English Composition WR 227 Technical Writing
HPE295 Health and Fitness for Life
Atts and Letters/Humanities or Social Science electives*
Second Year 4
ENGR211 Statics
ENGR212 Dynamics
ENGR213 Strength of Materials (not required for Electrical Engineers)
ENGR201, 202 Electrical Fundamentals I \& II (ENGR202 not required for Civil Engineering)
ENGR203 Electric Control Fundamentals (not required for Mechanical or Civil Engineering) MTH256 Applied Differential Equations
MTH253 Series Calculus and Linear Algebra
MTH255 Vector Calculus II (not required for Mechanical or Civil Engineering)
PH211, 212,213 General Physics for Engineers and Scientists
Arts and Letters/Humanities or Social Science electives and SPII Fundamentals of Speech or SPI12 Fundamentals of Persuasion
*To meet four-year college general education reguirements.

Term

3
3

4 (4)

4
$5 \quad 5 \quad 5$

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

## $A_{\text {NGLISH }}$

## (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 institu-
tion to which you plan to transfer to learn of any possible changes in a program.
Refer to the Oregon Associate of Atts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

Term

WR121, 122, 123 English Composition (Chemeketa recommends taking all courses although some colleges do not require both WR122 and 123; SOSC will accept WR123 or 227 Technical Writing)
Literature sequence (ENG204, 205, 206 Introduction to English Literature and ENG253, 254, 255 Introduction to American Literature for EOSC; choose two sequences from ENGIO7, 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; ENG204,206, 253 and 254 or 255 for WOSC)
33

Finst-year Forcign Language (required at EOSC, OSU, PSU, and UO; required for B.A. degree at SOSC and WOSC but not for B.S. degrec)
Social Science courses
Science or Math* (SOSC requires three courses in math, computer science, statistics or logic for BS degrec)
Second Year
44

ENG201, 202, 203 Introduction to Shakespeare; EOSC requires ENG201; OSU and UO require any one course; PSU and WOSC do not require any) 333
Second-year Foreign Language sequence (required at EOSC, OSU, PSU, and UO) or clectives
Arts and Letters/Humanities electives*
444

Arse295 Health and Fitness for Liff** or elective
Additional Social Science or Math/Science courses*

| 3 | 3 |
| :--- | :--- |

$\begin{array}{lll}3-4 & 3-4 & 3-4\end{array}$
Additional courses to meet major requirements or electives (J216 Newswriting and WR241, 242, or 243 Imaginative Writing for EOSC)

33
*To meet four-year college general education requirements.

see Biology


The primary mission of the Farm Business Management program is to teach farmers the basic principles of record keeping and financial management. The major emphasis is on the development and maintenance of a complete set of records and the skills necessary to interpret the records and use the information to make
sound management decisions. The program is designed for a minimum commitment of three years and includes all active members of the farm business. A variety of delivery systems are used, including classroom instruction and individualized farm visits. Upon completion of the annual farm records, a computerized business analysis is provided to eligible farms. For more information, call (503) 399-5089 or 399-5066.

## 9801 Farm Business Management I

Emphasizes setting farm business goals; developing a complete set of farm financial records; and analyzing those records for management decision making.

## 9802 Farm Business Management II

Monitors and assesses financial position of the farm business based upon records and analysis obtained in Farm Business Management I. Explores computerized farm accounting and income tax management.

## 9803 Farm Business Management III

Focuses on reorganizing the farm business based on accumulated financial data. Further develops estate, retirement, and labor management plans.

## 9804 Farm Business Management IV

Applies record keeping skills and three years' analysis data to farm reorganization and financial management decisions. Uses year-end analysis in evaluating effectiveness of reorganization and management practices implemented during the first three years.

## 9805 Farm Business Management V

Applies record keeping skills to individual farm businesses. Uses records in business dealings with off-campus agencies and individuals.

## 9809 Farm Tour

Demonstrates agricultural production and marketing outside of Oregon via tours. Provides participants with an opportunity to learn from local managers, extension agents, and business people at both on- and off-farm sites.

## 9822 Farm Business Management Workshop

Examines a selected topic of current importance to farm business management.

## $\left\{\begin{array}{l}\text { IRe } \\ \text { Protection } \\ \text { Technology }\end{array}\right.$

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 (503) 3995006. 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, $\$ 1,213$; class fees, $\$ 140$; equipment and supplies, \$594. 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 100 required credit hours:
Course Title Credit Hours

Term 1
EMT051
FRPO50
FRP051
FRP064
MTH095
MTHII
Emergency Medical Technician Basic 1, Part 1 ............. 5
Introduction to Fire Protection ................................ . 3
Fire Incident Related Experience ........................... 3
Hazardous Materials Operations ........................... 3
Intermediate Algebra . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
$\stackrel{\circ}{\mathrm{C}} \mathrm{College}$ Algebra (or higher) . 5
Term 2
CH111 Chemistry for Fire Science and Emergency Services ........ 5
CS101 Introduction to Microcomputer Applications (or higher) ...... 3
EMT052 Emergency Medical Technician Basic, Patt 2 ............... 4
EMT280A Cooperative Work Experience .................................. 1
FRP052
WR121
Fire Incident Related Experience ............................ 3
English Composition-Exposition (or higher) . . . . . . . . . . . . . 3
Term 3
FRP053
FRP054
FRP058
FRP069
PH111
Term 4
FRP060
FRPO61
HPE295

Term 5
FRP056
FRPO62
FRP066
FRP072
SP118
Term 6
FRP063
FRP071

Fire Incident Related Experience . ............................ 3
Water Supply Operations........................... .3
Fire Pump Construction and Operations ....................... 3
Fire Department Leadership . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Physical Science for Fire Science and Emergency Services ... 5
Fundamentals of Fire Prevention ........................... 3
Fire Incident Related Experience ............................. 3
Health and Fitness for Life . . . . . . . . . . . . . . . . . . . . . . . . . . 3
General education elective . .................................. 3
Approved electives* ....................................... 3
Fire Service Rescue Practices ................................ 4
Fire Incident Related Experience ......................... 3
Building Construction for Fire Suppression .................. 3
Fire Codes and Ordinances .............................. 3
Interpersonal Communication in the Health Profession. ....... 3
Fire Incident Related Experience ......................... 3
Fire Protection Systems and Extinguishers
.3

| FRP079 | Wildiand Urban Interface |
| :---: | :---: |
| PSY101 | Psychology of Human Relations (or higher) |
| WR227 | Technical Writing ................................... . 3 |
| ${ }^{*}$ Approved electives ( 3 hours required): |  |
| AH080 | Crisis Intervention |
| BI231 | Human Anatomy \& Physiology |
| B1232 | Human Anatomy \& Physiology |
| BI233 | Human Anatomy \& Physiology |
| BLD050 | Introduction to Building Inspection |
| BLD051 | Building Code I |
| BLD052 | Building Code II |
| EMT065 | Emergency Medical Technician Intermediate, Part 1 |
| EMT066 | Emergency Medical Technician Intermediate, Part 2 |
| EMT075 | Introduction to Emergency Medical Services |
| EMT090 | Emergency Medical Technician Paramedic, Part 1 |
| EMT091 | Emergency Technician Paramedic, Part 1 Clinical |
| EMT092 | Emergency Medical Technician Paramedic, Part 2 |
| EMT093 | Emergency Medical Technician Paramedic, Patt 2 Clinical |
| EMT094 | Emergency Medical Technician Paramedic, Part 3 |
| EMT095 | Emergency Medical Technician Paramedic, Part 3 Clinical |
| EMT280B | Cooperative Work Experience |
| EMT280D | Cooperative Work Experience |
| FRP059 | Major Emergency Tactics and Strategy |
| FRP070 | Fire Fighting Tactics and Strategy |
| FRP073 | Firefighters Law |
| FRP074 | Fire Investigation |
| FRP075 | Aircraft Crash/Fire Rescue |
| FRP077 | Fire Service Instructor Training |
| FRP086 | Advanced Detection and Protection Systems |
| FRP087 | Fire Insurance Fundamentals |
| HE262 | Cardiopulmonary Resuscitation Instruction |
| H120 | Medical Terminology/Systems 1 |
| MS259 | Death \& Dying |

## Fire Prevention Option

Graduates enrolled in this option may be hired by public fire departments and industrial businesses as fire prevention specialists.
Our Cooperative Work Experience program allows you to earn college credit for work you do relating to your program, such as working for a state or local fire prevention bureau. With the approval of the program chair, you may enroll in FRP280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the cata$\log$ 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

Term 1
CS101
Introduction to Microcomputer Applications
FRP050 Introduction to Fire Protection .................................. 3
FRP060 Fundamentals of Fire Prevention ............................ 3
MTH095 Intermediate Algebra .......................................... . . 4

WR121
English Composition-Exposition.............................. 3
Term 2
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 ..
PSY101 Psychology of Human Relations . . . . . . . . . . . . . . . . . . . . . . . 3

Term 3

CHII1
FRP071
FRP089
SP111
WR227
Term 4
BLD051
DRF059
FRP074
FRP080
FRP280C

Chemistry for Fire Science and Emergency Services ....... 5
Fire Protection Systems and Extinguishers .................. 3
Fire Codes and Ordinances 2 ................................... . . 3
Fundamentals of Speech ................................... 3
Technical Writing
.3

Building Codes 1 . ............................................ 3
Print Reading . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Fire Investigation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Hazardous Materials for Inspection . . . . . . . . . . . . . . . . . . . . . . 3
Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . . 3
Approved electives** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3

## Term 5

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
Term 6
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
${ }^{*}$ Approved electives (6 hours required):
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.........................
FRP079 Wildland Urban Interface . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
FRP083 Incident Repon Writing . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
FRP086 Advanced Detection and Protection Systems ............... 3

## $\mathrm{F}=$ <br> Languages

## (college transfer)

Oregon state colleges and universities offering Bachelor of Arts degrees in foreign languages are Oregon State University, Portland State University, Southern Oregon State College, University of Oregon, and Western Oregon State College. OSU offers degrees in French, German, and Spanish; PSU offers degrees in French, German, Japanese, Russian, and Spanish; U0 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 pro-
gram, 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 25.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121, WR122 and/or WR 123 English |  |  |  |
| Composition* (PSU recommends WR122 and 123) | 3 | 3 | (3) |
| Arts and Letters or Humanities courses* | 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; UO recommends history; SOSC requires 12 credits of relevant course work in art history, geography, history, political science, anthropology, sociology) | 3 | 3 | 3 |
| HPE295 Health and Fitness for Life* or elective |  |  | 3 |
| Second Year | 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; UO recommends literature, philosophy) | 3 | 3 | 3 |
| Science* | 4 | 4 | 4 |
| Electives (OSU requires a second-year foreign language sequence in addition to the one chosen for |  |  |  |
| Microcomputer.) | 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.

## Morest 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 |
| :---: | :---: | :---: |
| Term 1 |  |  |
| COM051 | Communication Skills I | . 3 |
|  | or |  |
| WR121 | English Composition-Exposition |  |

FRT051 Introduction to Natural Resources ..... 3
FRT052 Leadership Seminar ..... 1FRTO53
Computer Applications Natural Resources ..... 3
FRT055 Elementary Forest Surveying .....  3
MTH052 Introduction to Algebra and Geometry (or higher) .....  3
Term 2
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
Term 3
AUM091 Power Systems .....  . 4
DRF072 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 1-Lab .....  2
Term 4
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
Bl131 Environmental Science 1 .....  4
FRT081 Natural Resource Management 1 .....  3
Term 5
BI132 Environmental Science 2 .....  . 4
CVL061A Plane Surveying 2-Lecture .....  3
CVL061B Plane Surveying 2-Lab .....  2
COM052 Communication Skills II .....  3
SPII ..... or .....  3
FRT052 Leadership Seminar .....  1
FRT086 Methods of Supervision
Term 6
FRT052
FRT075Leadership Seminar 1
Forestry Reports and Contracts .....  3FRT082
Natural Resource Management 2 .....  3
FRT087 Forest Field Study .....  4
PSY101 Psychology of Human Relations ..... 3

(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 25.

## First Year

BII01, 102, 103 General Biology (not required for Forest Recreation Resources choose 8 hours of science electives)*
CH121 College Chemistry for Forest Management
Mathematics (per placement test through MTH241 Elementary Calculus; Forest Management also tequires MTH243, Probability and Statistics)
WR121 English Composition
Writing and/or Speech* (SPIII Fundamentals of Speech or SPII2 Fundamentals of Persuasion for Forest Management)
HPE295 Health and Fitness for Life or elective
Electives* (EC201 Introduction to Microeconomics, 202 Introduction to Macrocconomics for Forest Management; EC201 for Forest Recreation Resource)
*To meet four-year colilige general education requirements.

$G^{\text {mown }}$
(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 25. Chemeketa also offers and Associate of General Studies Degree. Specific requirements are listed on Page 30.

Term
First Year
1
23
WR121, 122 and/or 123 English Composition or WR227 Technical Writing*

33
Social Science courses*
3

Mathematics per placement test* or Science courses*
Arts and Letters/Humanities* (UO requires second year college level foreign language)
HPE295 Health and Fitness for Life*
Electives (ART204, 205, 206 Art History recommended for UO;
Second Year
Arts and Letters/Humanities*
Social Science courses*
Science sequence or electives*
Electives* or to meet Chemeketa's A.A. degree requirements. (CS101 Introduction to Microcomputer Applications and a speech course recommended, CS101 required for EOSC and SOSC; UO recommends PHL201, 202, 203 Philosophical Problems and Elementary Ethics; WOSC requires study from two or more academic areas with a minimum of 27 hours in each.)
*To mect four-year college general education requirements.
$4-5 \quad 4-5 \quad 4-5$
$\begin{array}{lll}3-4 & 3-4 & 3-4\end{array}$
$0.3 \quad 0.3 \quad 0.3$
456

| 3 | 3 | 3 |
| :--- | :--- | :--- |
| 3 | 3 | 3 |

444

## $\mathrm{G}^{\mathrm{mamm}}$ <br> G

(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 Westem 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 25.

|  | 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 , |  |  |  |
| 106, 201, 202 The Developed World and the |  |  |  |
| Developing Worid for PSU) | 3 | 3 | 3 |
| Mathematics per placement test**** (MTH1H 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. .)
HPE295 Health and Fitness for Life* or clective
Arts and Letters/Humanities electives* (Second-year foreign language required at UO )
Electives*
Second Year

| $4-5$ | $4-5$ | $4-5$ |
| :---: | :---: | :---: |
|  |  | 3 |
| 3 | 3 | 3 |
| 3 |  | $3-6$ |
| 4 | 5 | 6 |

Social Science electives* (EOSC requires EC201
Introduction to Microeconomics and PS201, 202
Americar Government)
333
Science electives* (EOSC requires G201, 202 Geology; recommended for OSU)
$\begin{array}{lll}4 & 4 & 4 \\ 3 & 3 & 3\end{array}$
Arts and Letters/Humanities electives*
3
Electives (CS101 Introduction to Microcomputer
Applications required for EOSC, PSU and
SOSC; CIS120, 121, 122 tecommended for UO) 666
*To meet four-year college general educalion requirements.
**A dhree-term sequence in calculus or MTH241, 243 , (and 242 at UO) is required for graduate work at UO.

(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, Southem 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 leam 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 25.

## Term

## First Year

WR121, 122 and/or WR 123 or $227^{*}$
Arts and Letters/Humanities courses*

| 1 | 2 | 3 |
| :---: | :---: | :---: |
| 3 | 3 | $(3)$ |
| 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 or MTH243
Probability and Statistics; UO through MTH253)
G201, 202, 203 Geology
Social Science*
Second Year

| $4-5$ | $4-5$ | $4-5$ |
| :---: | :---: | :---: |
| 4 | 4 | 4 |
| 3 | 3 | $3-6$ |
| 4 | 5 | 6 |

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)
HPE295 Health and Fitness for Life* or elective Arts and Letters/Humanities or Social Science electives* 3
CSI33F FORTRAN IV (recommended for UO; CS101 Introduction to Microcomputer Applications required for OSU)
Electives (OSU requires four credits of a biological science; CCC recommends a CS course)
*To meet fouryear college general education requirements.
Note: UO recommends that students obtain a graduate degree for most professional positions.

## T- $\begin{aligned} & \text { Ealth, } \\ & \text { Health }\end{aligned}$〕EDUCATION

(college transfer)
Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health, Health Education and/or Public 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 consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.
As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.
Those students planning to teach health will need to complete a fifth year of post-baccalaureate work to meet teacher certification at all state-system colleges except WOSC. Please refer to the section on Elementary and Secondary Education in this catalog.
Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

## Term

First Year
WR121, 122 and/or 123 or 227 English Composition or WR227 Technical Writing* (WR227 for Environmental Health and Occupational Safety at OSU and SPIII Fundamentals of Speech for Occupational Safety at OSU)

1
3
3
receptionist/clerk. Short-term programs must be taken as a block; requirements may not be fulfilled by individual courses. One-year program allows you to be trained as a health information technician. The two-year programs include health services management and medical transcription. Medical Office Assisting students
should contact the advisors for the Health Services Management program as some classes taken in the Medical Office Assisting program may apply toward the A.A.S. degree.
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.

## 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

Term 1
MED011 Health Care Skills . ...............................................
H120 Medical Terminology/Systems 1.............................. 3
H110 Health Information Sysiems Procedures I .................. 4
H114 CPTIV Coding/Reimbursement .............................. 3
OA121 Keyboarding ...................................................... . . 3
Term 2
AH199C Health Care lssues ........................................... 3
FE205A Job Search Preparation ....................................... 1
H121 Medical Terminology/Systems $2 \ldots . .$. ......................... . . 3
H115 ICD-9-CM Coding Reimbursement ......................... 3
MED280E Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
OA061A,B Electronic Calculators ....................................... 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

Term 1
MED011 Health Care Skills ......................................... . 1
H120 Medical Terminology/Systems 1............................. 3
H110 Health Information Systems Procedures 1 ................... . 4
H114 CPTIV Coding/Reimbursement ............................... 3
OA121 Keyboarding ................................................ . . 3
Term 2
FE205A Job Search Preparation ....................................... 1

H112 Heath Information Systems Procedures 2 .................. . 5
H115 ICD-9-CM Coding/Reimbursement ............................. 3
MED280D Cooperative Work Experience . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
OA210 Office Microcomputer Applications ........................... 3

## One-Year Programs

## 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 (503) 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 47 required credit hours:
Course Title Credit Hours
Term 1
HIO
Medical Law and Ethics

Term 2

| H102 | Professional Development A |
| :---: | :---: |
| H110 | Health Information Systems Procedures 1 |
| H120 | Medical Terminology/Systems |
| OA201P | Word Processing Procedures 1-WordPerfect (or higher) ...... 3 |
| WR121 | English Composition-Exposition . . . . . . . . . . . . . . . . . . . . . 3 |
| Term 2 |  |
| H103 | Professional Development B . . . . . . . . . . . . . . . . . . . . . . 1 |
| H12 | Health Information Systems Procedures $2 \ldots . . . . . . . . . . . .5$ |
| H114 | CPTIV Coding/Reimbursement . ....................... 3 |
| H116 | Introduction to Allied Health Data . . . . . . . . . . . . . . . . . . . 3 |
| H121 |  |
| Term 3 |  |
| FE205A | Job Search Preparation . . . . . . . . . . . . . . . . . . . . . . . . . . . |
|  |  |
| FE205B | Resume and Job Search Correspondence .................... 1 or |
| FE205C | Interview for Success ................................. 1 |
| H104 | Professional Development C . . . . . . . . . . . . . . . . . . . . . . . 1 |
| H115 | ICD-9-CM Coding/Reimbursement . . . . . . . . . . . . . . . . 3 |
| H122 | Advanced Topics in the Language of Medicine ............ 3 |
| H130 | Health Information Systems Office Practice . . . . . . . . . . . . 6 |
| H131 | Health Information Systems Seminar . . . . . . . . . . . . . . . . . 1 |

## -Alert!

Program requirements have changed, see "Alert" section on Page
76 for details.

## Two-Year Programs

## Health Services Management

As a graduate of this two-year program, you will be prepared for a variety of middle-management jobs in the health care field. You 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; 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, $\$ 850$; class fees, $\$ 70$; equipment and supplies, $\$ 150$. Contact the Financial Aid Office to find out if you qualify for help with these costs.
You may earn an Associate of Applied Science degree by successfully completing the required 96 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

Term 1

| H 101 | Medical Law and Ethics |
| :---: | :---: |
| H102 | Professional Development A |
| H110 | Health Information Systems Procedures \ . . . . . . . . . . . . . 4 |
| MED054 | ${ }_{\text {M }}^{0} \mathrm{Medical}$ Office Procedures |
|  |  |
| CPLI20 | Prior Learning Resume* . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| H120 |  |
| OA201P | Word Processing Procedures 1-WordPerfect (or higher) ..... 3 |
| WR121 | English Composition-Exposition ...................... 3 |61

H 103
H112
H114
H116
H121
Term 3
BA206
H104
H115
H122
MTH070
WR227
Term 4
H210

$$
\mathrm{H} 250
$$

MTH095
BA211
Professional Development B .....
Health Information Systems Procedures 2 ..... 5
CPT IV CodingReimbursement ..... 3
Introduction to Allied Health Data ..... 3
Medical Terminology/Systems 2 ..... 3
Business Management Principles .....  3
Professional Development C ..... 1
ICD-9-CM Coding:Reimbursement .....  3
Advanced Topics in the Language of Medicine ..... 3
Elementary Algebra (or higher) .....  4
Technical Writing .....  3
Introduction to Heath Services ..... 3
Health Services Management I ..... 3
Intermediate Algebra (or higher) .....  4
or ..... 4
Business elective (200 or higher) ..... 3
Economics elective (200 or higher) ..... 3
Social Science elective ( 200 or higher) ..... 3
Term 5Human Relations in Business3
CS103 Microcomputer Skills-Problem Solving (or higher) ..... 3
or
OA200 ..... 3
Job Search Preparation FE205A
orFE205B
Resume and Job Search Corespondence .....  1
Interview for Success ..... 1
H251 Health Services Management II ..... 3
Communications elective ( 100 or higher) ..... 3
Term 6Personnel Management3
Health Care Data and Statistics ..... 3
H230 Health Services Externship ..... 6
H231 ..... 1
General education elective ( 100 or higher) .....  3(HPE295 recommended)
*See advisor.

## Alert!

Program requirements have changed, see "Alert" section on Page 76 for details.

## 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 (503) 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 |
| :---: | :---: | :---: |
| Term 1 |  |  |
| B1071 | Body Structure and Function I | ..... . 3 |
|  | or |  |
| B1231 | Human Anatomy and Physiology |  |
| H120 | Medical Terminology/Systems 1 | 3 |
| H102 | Professional Development |  |
| OA084 | Business English I . |  |
| OA122 | Keyboard Skillbuilding | 3 |
| OA200 | Introduction to Information Procedures | 3 |
| OA210 | or Office Microcomputer Applications |  |
| Term 2 |  |  |
| B1072 | Body Structure and Function II |  |
|  | or |  |
| B1232 | Human Anatomy and Physiology |  |
|  | Or |  |
| B1233 | Human Anatomy and Physiology |  |
| H121 | Medical Terminology/Systems 2 |  |
| H140 | Medical Transcription |  |
| OA085 | Business English II |  |
| OA201P | Word Processing Procedures I-WordPerfect |  |
| Term 3 |  |  |
| BA214 | Business Communications |  |
| H102 | Professional Development |  |
| H122 | Advanced Topics in the Language of Medicine |  |
| MED064 | Introduction to Medical Science |  |
| HI41 | Advanced Medical Transcription 1 |  |
| OA099 | ProofreadingEditing . . . . . . |  |
| Term 4 |  |  |
| H101 | Medical Law and Ethics |  |
| H110 | Health Information System Procedures 1 |  |
| H142 | Advanced Medical Transcription 2 |  |
| 0 Oll 6 | Office Procedures |  |
| OA202P | Word Processing Procedures II-WordPerfect |  |
| Term 5 |  |  |
| FE205A | Job Search Preparation |  |
|  | or |  |
| FE205B | Resume and Job Search Cormespondence |  |
| FE205C | or |  |
| H112 | Healit Information Systems Procedures 2 |  |
| H143 | Advanced Medical Transcription 3 |  |
| H103 | Professional Development |  |
| MTH062 | Business Applications Using Mathematics |  |
| SP114 | Interpersonal Communications |  |
| Term 6 |  |  |
| $\begin{aligned} & \text { MED073 } \\ & \text { MED280 } \end{aligned}$ | Medical Transcription Seminar |  |
|  | Cooperative Work Experience. |  |
|  | Humanities elective. |  |
|  |  |  |
|  | Social Science elective |  |

## -Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized pro-
gram of study. The program of study may include one or more of the following courses:
Term 1
AH051 Health Occupations Overview A............................. 2
B1071 Body Structure and Function I .............................. 3
MED050A Introduction to Medical Terminology A...................... 1
MTH060 Introductory Algebra . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
RD090 College Textbook Reading . . . . . . . . . . . . . . . . . . . . . . . . . . 3
WR090 Fundamentals of Writing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 2
AH052 Health Occupations Overyiew 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 in the Health Profession . . . . . . . 3
WR095 Fundamentals of Composition ............................... . 3
If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.


## ISTORY

## (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 25.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121, 122 and/or 123 English Composition | 3 | 3 | (3) |
| HST110, 111, 112 World History | 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 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; SOSC requires CS101) |  | 3 | 6 |

## Second Year

HST201, 202, 203 History of the United States (not required at OSU)
Mathematics per placement test*
Arts and Letters/Humanities* (EOSC and OSU recommend second year foreign language for graduate work; UO requires second year forcign language)
Social Science courses other than history*
Additional Arts and Letters/Humanities or Social Sciences or electives*
*To meet four-year college general education requirements.


| 4 | 5 | 6 |
| :---: | :---: | :---: |
| 3 | 3 | 3 |
| 4 | $4-5$ |  |
| $3-4$ | $3-4$ | $3-4$ |
| 3 | 3 | 3 |
| 3 | 3 | 6 |

(college transfer)
Oregon State University offers a Bachelor of Science degree in Home Economics. Students major in Apparel, Interiors, Housing, and Merchandising or Human Development and Family Science; or Nutrition and Food Management. There are several options for each major. It is essential that you work closely with Chemeketa's home economics advisor or an advisor from OSU to assure that you choose appropriate courses.
The two-year program outlined below is designed to meet requirements at 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 25.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121 English Composition | 3 |  |  |
| Writing or Speech electives* or ** |  | 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 |  |  |  |
| Biological and Physical Science** | 4.5 | 4.5 | 4 |
| Social Science**(PSY 201, 202 General Psychology and HST111, 112 World History required in most options) | 6 | 3 |  |
| Literature and Arts elective* (ART115 Basic Design required in most majors) | 3 |  |  |
| Second Year | 4 | 5 |  |

> nomics 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.

## $\mathrm{H}^{\text {mamman }}$ Hzem Huwam

The Hospitality and Tourism Management curriculum focuses on the management aspects of today's exciting hospitality industry: food and beverage; travel and tourism; lodging, recreation and leisure; and meeting and convention management; and casino 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, recreation resource management, and casinos.
Cooperative Work Experience is required and nine college credit hours are needed for graduation. 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, \$1,537; class fees, \$35; equipment and supplies \$15. 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 96 credit hours required.
Course Title Credit Hours

Term 1
HTM100
HTM104
$\begin{array}{ll}\text { HTM104 } & \text { Introduction to the Travel and Iounsm Industry . . . . . . . . . . . } 3 \\ \text { Wnglish Composition-Exposition (or higher) ............. } 3\end{array}$
Introduction to the Hospitality Industry .3

English Composition-Exposition (or higher) . . . . . . . . . . . . . . . 3
Foreign language sequence . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Term 2
CS160 Introduction to Computer Science (or higher) ................ 3
HTM102 Hotel, Restaurant and Travel Law ............................ 3
HTM105 Introduction to the Food and Beverage Industry . . . . . . . . . . . 3
PSY201
General Psychology (or higher) .3
Foreign language sequence . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Term 3
HTM106 Introduction to Lodging Industry ........................... 3
HTM107 Sanitation and Safety for Managers ............................ . 3
MTH070 Elementary Algebra (or higher) . . . . . . . . . . . . . . . . . . . . . . . 4
SP111
Fundamentals of Speech (or higher) .......................... . 3
Forcign language sequence . .................................. . . 4
Term 4
HTM280I Cooperative Work Experience ............................ 9
Term 5
BA211 Financial Accounting I ..................................... . A
Computer Presentations for the Workplace-MS PowerPoint .. 3
Approved elective* 3
Foreign language sequence .....  4

Term 6
BA212 Financial Accounting II .....  4
HTM103 Marketing for the Hospitality Industry ..... 3
Approved elective* ..... 3
Foreign language sequence ..... 4
Term 7
BA224 Personnel Management .....  3
HTM101 Hospitality and Tourism Management .....  3
Approved elective* ..... 3
Foreign language sequence ..... 4 ..... 4
*Approved Electives:
HTM108 Introduction to the Leisure and Recreation Industry .....  3
HTM109 Front Desk Operations .....  3
HTM117 Travel Agency Basics .....  3
HTM119 Introduction to Casino Management ..... 3
HTMI26 Meeting and Event Planning ..... 3
-Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
BA066 Succeeding in Business .....  . 6
MTH060 Introductory Algebra .....  . 4
OA085 Business English II .....  3
OA200 Introduction to Information Processing .....  3
CS101 Introduction to Microcomputer Applications .....  3

If you have questions about the requirements call (503) 399-5296. Failure to be assessed may delay your entry into program classes.

## 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 and field trips.
Nine college credit hours of Cooperative Work Experience are required. With the approval of the CWE instructor/coordinator you may enroll in HSM280 Cooperative Work Experience. 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 fee, $\$ 20$. 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
Term 1
HTM117 Travel Agency Basics .....  3
HSM071 Travel Agency Sales and Marketing ..... 3
HTM104 Introduction to the Travel and Tourism Industry .....  3
Term 2
HSM072 Travel Agency Management .....  3
HSM073 Travel Destination Geography .....  3
SPII3 Fundamentals of Small Group Communication .....  3
SP114 Interpersonal Communication .....  3
SP115 Intercultural Communication ..... 3
Term 3
FE205B Resumes and Job Search Correspondence .....  1
HSM074 Computer Reservation Systems ..... 3
HSM280I Cooperative Work Experience .....  9
TTotel, 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 96 credits listed below will be accepted toward a degree. Students who complete all the courses outlined below will be awarded an Oregon Associate of Arts Transfer Degree with an emphasis in Hotel, Restaurant, and Resort Management.
The two-year program outlined below is designed to meet requirements at Southern Oregon State College. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.
As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling center or the Chemeketa advisor in your program. You should also make early contact with an advisor at the institutions to which you plan to transfer to learn of any possible changes in a program.
Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.
Course Title Credit Hours
Term 1
CSIO1
Introduction to Microcomputer Applications

Introduction to Fiction
HTM100 Introduction to Hospitality Industry .......................... 3
English Composition-Exposition .3
Science elective with lab........................................ . . 4
Term 2
ENG105
HTM105
MTH111
WR122
Term 3
ENG106
HTM106
MTH243
WR123
WR227
Term 4
BA211 Financial Accounting ...................................... . 4
EC201
HTM104
PSY201
WR241
Introduction to Microeconomics
. 3
Introduction to Travel and Tourism Industry . . 3

## Term 5

BA212
BA214
EC202
HPE295
PSY202
Cneal Psy Whogy . 3
Imaginative Writing ............................................... 3
Financial Accounting II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
Business Communications ....................................... 3
Introduction to Macroeconomics . . . . . . . . . . . . . . . . . . . . . . . . 3
Health and Fitness for Life . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Gencral Psychology ........................................... . . 3
History elective ........................................... 3
Term 6
BA213 Managerial Accounting : . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
EC203 Applications to Economics ................................. 3
PSY203
General Psychology .3
SP111
Fundamentals of Speech . 3

SP112
Introduction to Dramatic Literature . . . . . . . . . . . . . . . . . . . 3
Introduction to Food Service Industry .3
College Algebra .5
Composition-Logic and Style . ..... 3
Science elective with lab ..... 4
Introduction to Poetry ..... 3
Introduction to the Lodging Industry .....  3
Probability and Statistics .....  4
English Composition-Research Writing .....  3
Technical Writing .....  3
Science elective with lab ..... 4Fundamentals of Persuasion3
〕UMAN
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: Alcohol and Drug, Gerontology, or Social Services training.
This program has special admissions requirements and enrollment limits. For additional information, contact the Admissions Office at (503) 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

Term 1
HS101
HS150
HS154
HS170
WR121
Term 2
HS102 Drug Use, Misuse and Addiction .......................... 3
HS152
HS260
HS284A-
Pa
HS288A Practicum: Human Services . . . . . . . . . . . . . . . . . . . . .... . . 48
SP112 Fundamentals of Persuasion . .................................... 3
SP130 Business and Professional Speaking $\ldots \ldots \ldots \ldots . \ldots . \ldots . . .$.
Term 3
HS201 Fannily Alcoholism . ........................................ 3
HS155 Interviewing Theory and Techniques ....................... 3
HS284A- Practicum: Human Services .............................4-8
MTH052 Introduction to Algebra and Geometry (or higher) ........... 3
PSY201 General Psychology ....................................... . 3
Term 4
HS202 Counseling the Chemically Dependent Client I.............. 3
HS284A-
HS288A Practicum: Human Services ............................4.8
CS101 Introduction to Microcomputer Applications ................... . . 3
SOC204 General Sociology ............................................... 3
Term 5
FE205A
Job Search Preparation .................................... 1
or
Resumes and Job Search Correspondence . . . . . . . . . . . . . . . .
or
Interviewing for Success ..................................... 1
$\begin{array}{ll}\text { FE205C } & \text { Interviewing for Success } \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~\end{array}$
HS284A.
HS288A
Practicum: Human Services . ................................. 4.8
PSY202 General Psychology ......................................... . . 3
SOC205 General Sociology . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Humanities/fine arts elective ...................................... . . 3 or

|  | Science/applied science elective . ...................... 3 |
| :---: | :---: |
| Term 6 |  |
| HS204 | Counseling the Chemically Dependent Client III . . . . . . . . . 3 |
| HS267 | Systems Strategies .................................. 3 |
| HS284A- |  |
| HS288A | Practicum: Human Services . ........................4-8 |
| PSY237 | Growth and Development . . . . . . . . . . . . . . . . . . . . . . 3 |
| SSC150 | Ethnic Cultures of the Northwest United States ........... 3 |
| *Atcohol and drug electives ( 3 hours lotal): |  |
| HS140 | Handling the Violent Client .......................... |
| HS153 | Introduction to Residential Youth Care . . . . . . . . . . . . . . . . . 3 |
| HS160 | Addictive Behaviors . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| HS161 | Dysfunctional Relationships . . . . . . . . . . . . . . . . . . . . . . 3 |
| HS162 | Relapse Prevention . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| HS199] | Women in Treatment . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |
| HS199] | Dual Diagnosis Clients in Treatment . . . . . . . . . . . . . . . . . . . . 1 |
| HS205 | Youth Addiction . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| HS206 | The Addicted Criminal ................................ 3 |
| HS207 | Adult Children of Alcoholics/Addicts . . . . . . . . . . . . . . . . . . 1 |
| HS208 | Alcohol, Drugs \& Sexuality . . . . . . . . . . . . . . . . . . . . . . 1 |
| HS230 | Physical, Sexual and Emotional Abuse . . . . . . . . . . . . . . 3 |
| HS231 | Treatment of Sexual Abuse Victims and Offenders ......... 3 |
| HS262 | Misuse and Abuse of Alcohol and Drugs Among the Elderly . 1 |
| MS259 | Death and Dying . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| 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, $\$ 17$; 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 a gerontology placement.

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| HSI50 | Personal Effectiveness |  |
|  | for Human Service Workers | 3 |
| HS154 | Community Resources | 3 |
| HSI70 | Introduction to Practicum | 3 |
| HS220 | Aging and Sociely | 3 |
| WR121 | English Composition-Exposition | 3 |
| Term 2 |  |  |
| HS152 | Stress Management |  |
| HS221 | Physical Aging |  |
| HS260 | Group Dynamics |  |
| HS284G- |  |  |
| HS288G | Practicum: Human Services |  |
| SPIL2 | Fundamentals of Persuasion |  |
|  | or |  |
| SP130 | Business and Professional Speaking | . 3 |
| Term 3 |  |  |
| HSI01 | Alcohol Use, Misuse, and Addiction | . 3 |
| HSI55 | Interviewing Theory and Techniques | . 3 |
| HS222 | Aging and Behavior . ........... |  |
| HS284G- |  |  |
| HS288G | Practicum: Human Services | .... .4-8 |
| MTH052 | Introduction to Algebra and Geometry (or higher) | ......... 3 |

Term 4

| CSi01 | Introduction Microcomputer Applications. |
| :---: | :---: |
| HS284G. Casework Interviewing |  |
|  |  |
| HS288G | Practicum: Human Services |
| PSY201 | General Psychology |
| SOC204 | General Sociology |
| Term 5 |  |
| FE205 | Job Search Techniques |
| HS288G- |  |
| HS288G | Practicum: Human Services |
| PSY202 | General Psychology .............................. 3 |
| SOC205 | General Sociology -............................. 3 |
|  | Gerontology elective* . . . . . . . . . . . . . . . . . . . . . 3 |
|  | Humanitiesffine arts elective . . . . . . . . . . . . . . . . . . . 3 |
|  |  |
|  | Science/applied science elective ..................... 3 |
| Term 6 |  |
| HS267 Systems Strategies |  |
|  |  |
| HS288G | Practicum: Human Services . . . . . . . . . . . . . . . . . . .4-8 |
| PSY237 | Growth and Development ........................... 3 |
| SSC150 | Ethnic Cultures of the Northwest United States .......... 3 |
|  | Gerontology elective* . . . . . . . . . . . . . . . . . . . . . . 3 |
| *Geroniology lectives (6 hours total): |  |
| BA299D | Introduction to Elder Law ......................... 3 |
| ES071 | Workplace Safety Skills |
| HS165 | Activity Director TrainingLong-Term Care .............. 3 |
| HS262 | Misuse and Abuse of Alcohol and Drugs Among Elderly ..... 1 |
| HS266 | Case Management |
| MS259 | Death and Dying ............................... 3 |
| PE185DA | Beginning Low lmpact-Aerobics |
| PE185DB | Intermediate Low Impact-Aerobics |
| PE185DC | Advanced Low Impact-Aerobics |
| PHL205 | Biomedical Ethics . |

## 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 C | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| HS150 | Personal Effectiveness for Human Service Workers |  |
| HS154 | Community Resources |  |
| HS170 | Introduction to Practicum |  |
| PSY201 | General Psychology |  |
| WR121 | English Composition-Exposition |  |
| Term 2 |  |  |
| HSI52 | Stress Management |  |
| HS260 | Group Dynamics . |  |
| HS284S. |  |  |
| HS288S | Practicum: Human Services |  |
| PSY202 | General Psychology .. |  |

Term 1
HS150
HS154
HS170
PSY201
,
HSI52
HS260
HS288S
PSY202
保 ..... 3
Introduction to Practicum3
General Psychology .....  3
English Composition-Exposition ..... 3
Stosp Dy onics ..... 3General Psychology
Fundamentals of Persuasion .....  3
orSP130Business and Professional Speaking 3
Term 3
HS101HS155HS284S-
HS288S
MTH052
PSY237
Alcohol Use, Misuse and Addiction .....  3
Interviewing Theory and Techniques .....  3
Practicum: Human Services ..... 4-8
Introduction to Algebra and Geometry (or higher) .....  3
Growh and Development .....  3
Term 4CS101HS265HS284S.HS288SSOC204
Introduction to Microcomputer Applications .....  3
Casework Interviewing .....  3
Practicum: Human Services ..... 4-8
General Sociology .....  3
Social services elective* .....  3
Term 5
FE205 Job Search Technique .....  . 1HS266HS284S-
HS288S
Case Management ..... 3
Practicum: Human Services ..... 4-8SOC205
General Sociology .....  3
Social services elective* .....  3
Term 6
HS267
HS284SSystems Strategies 3
HS288S
SSC150
Practicum: Human Services .....  4.8
Ethnic Cultures of the Northwest United States .....  3
Social services elective* .....  3
Humanities/mne arts elective .....  3
or
Science/applied science elective 3

## (ndustrial Technology and Apprenticeship

## Industrial Technology

Chemeketa grants an Associate of Applied Science degree in industrial technology. Journeymen and women may earn credit for on-the-job training and related instruction. To earn the degree, you must meet the following requirements:

1. Have achieved joumeyman 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 29 of this catalog.)
4. Compile a total of 90 credit hours. You may be awarded up to 22 credit hours for joumeyman status, 47 credit hours for traderelated 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 fulltime, 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, joumeymen who wish to upgrade their skills and knowledge, pre-apprenticeship students, and others as approved by local committees.
Chemeketa has apprenticeship classes for plumbers, industrial workers, electricians, sheet metal workers, machinists, welders, bakers, and other trades, as required by local committees.


## (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: Joumalism 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 25 .

> Term

| First Year | 1 | 2 | 3 |
| :---: | :---: | :---: | :---: |
| 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 |  |

First Year
$3 \quad 3$
33
of the United States recommended at SOSC)
Mathematics per placement test*
$3 \quad 3 \quad 3$
$J 224$ Introduction to Journalism
(4) 5

3
Electives (Chemeketa recommends two additional Joumalism classes as electives chosen from J215
Publications Lab, J 216 Newswriting, J217 Fea-
ture Writing, J 225 Advertising/Public Relations,
J226 LayoutProduction; J216 required and
OA205 Desktop Publishing I recommended for SOSC)** $3 \quad 3 \quad 6$

## Second Year

456
Social Science or other elective courses* (SOSC recommends one year of political science or EC201 Introduction to Microeconomics, EC202 Introduction to Macrocconomics, EC203 Applications to Economic Issues )
Humanities or Social Science courses* (Second year foreign language or literature recommended for SOSC)

## Science courses*

Electives (Check SOSC for electives for each option; ART261 General Photography and SPI15 Introduction to Intercultural Communication meet requirements in most options; choose courses for general education requirement at UO required in most options)
io meet four-ycar college general education requirements.
**UO will only accept two journalism courses besides 1224 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, \$1,199; class fees, \$36; equipment and supplies, \$86. Contact the Financial Aid Office to find out if you qualify for help with these costs.
You may earn an Associate of Applied Science degree by successfully completing these required 98 credit hours:
Course Title Credit Hours
Term 1

BA202 Personal Effectiveness ..................................... 3
BA211 Financial Accounting [* $\ldots$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MTH062 Business Applications Using Mathematics (or higher) .....  4 .....  3
Approved Social Science elective***
Approved Social Science elective***
Term 2
Interpersonal Relations in Business .....  3
BA212 Financial Accounting II* .....  4
BA214 Business Communications**. .....  3
MTH070 Elementary Algebra (or higher) .....  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 ..... 4
Term 4BA215BA223BA226EC200Introduction to Economics (or higher)
FE205C Interviewing for Success .....  1
Humanitiesfine arts elective .....  3
Term 5
BA222Financial Management 3
Business Law II .....  3
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 .....  3
Business elective ${ }^{* * * *}$
(BA280 Cooperative Work Experience recommended) .....  .6
Business elective**** .....  3
Computer Science elective***** ..... 3
*BA051, BA052, and BA053 may be substituted for BA211 and BA212. BA211 or BA051requires concurent enrolment in MTH070 or higher math placement.
**Placement in math and English determined by testing. College transfer classes may be substituted. WR123 may be subslituted for BA214.
***Social Science electives: Choose from PSY100, 101, 201, 202, 203; SOC204, 205, 206; HSTI10, 111, 112, 201, 202, 203.
****Business electives: Choose courses with prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE except OA084, BA05I, BA052, and BA053.
*****Choose from CS125D; CS133VB; CS133C; CS133E; CS!33F; CS133R; CS133U; CS135SS; or OA20IX.

## -Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
BA066 Succeeding in Business . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6
MTH060 Introductory Algebra . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
OA085 Business English II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
OA200 Introduction to Information Processing . . . . . . . . . . . . . . . . . . 3
CSIOL or
CS101 Introduction to Microcomputer Applications
. 3
If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.

## Tanufacturing 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

## Term 1

MFG063
MFG064
MFG068
MFG092
MTH052
Term 2

MFG093
MTH053
MFG065 Tool and Work Holding Methods ............................ 5
MFG069 QC Applications/CMM Operations . . . . . . . . . . . . . . . . . . . . . . 4
Print Reading ..... 4
Manufacturing Fundamentals .....  5
Manufacturing Measuring and Quality Control .....  3
introduction to Computers in Manufacturing ..... 3
Introduction to Algebra and Geometry (or higher) ..... 3
CNC Machine Tool Operations. .....  5
Introduction to Trigonometry with Geometry (or higher)

Term 3
COM051 Communication Skills I ..................................... 3
WR121
MFG066 Material Cuting/Removal Methods .................................... 5
MFG070 Total Quality Manufacturing ................................ . . . 4
MFG076 Manufacturing Materials and Cutting Tools ................. 5
Alert!
Program requirements have changed, see "Alert" section on Page 84 for details.

## 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 |
| :---: | :---: |
| Term 1 |  |
| MFG063 | Print Reading . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| MFGO64 | Manufacturing Fundamentals .......................... . 5 |
| MFG068 | Manufacturing Measuring and Quality Control ............. 3 |
| MFG092 | Introduction to Computers in Manufacturing . . . . . . . . . . . . 3 |
| MTH052 | Introduction to Algebra and Geometry (or higher) ......... 3 |
| Term 2 |  |
| MFG065 | Tool and Work Holding Methods . . . . . . . . . . . . . . . . . . 5 |
| MFG069 | QC Applications/CMM Operations . . . . . . . . . . . . . . . . . . 4 |
| MFG093 | CNC Machine Tool Operations . . . . . . . . . . . . . . . . . . . . 5 |
| MTH053 | Introduction to Trigonometry with Geometry (or higher) .... 3 |
| Term 3 |  |
| COM051 | Communication Skills I .............................. 3 |
|  | or |
| WR121 | English Composition-Exposition . . . . . . . . . . . . . . . . . . . . . 3 |
| MFG066 | Material Cutting/Removal Methods . . . . . . . . . . . . . . . . . . 5 |
| MFG070 | Total Quality Manufacluring . . . . . . . . . . . . . . . . . . . . . . . 4 |
| MFG076 | Manufacturing Materials and Cutting Tools .............. 5 |
| Term 4 |  |
| MFG071 | CAD for CAM . ................................... 3 |
| MFG081 | Manufacturing Processing Planning . . . . . . . . . . . . . . . . . 5 |
| MFG094 | Manufacturing Programming . . . . . . . . . . . . . . . . . . . . . 5 |
|  | Science/applied science elective . . . . . . . . . . . . . . . . . . . 4 |

Term 1
MFG063
MFGO64
MFG068
MFG092
MTH052
Term 2
MFG069
MFG093
MTH053
Term 3
COM051
WR121
MEC070
MFG076
Term 4
MFG071
MFG08!
MFG094
MFG065 Tool and Work Holding Methods .......................... . 5
Print Reading .....  4Manufacturing Measuring and Quality Contro3
Introduction to Computers in Manufacturing .....  3
CNC Machine Tool Operations ..... 4
Introduction to Trigonometry with Geometry (or higher) ..... 3
Communication Skills I ..... 3
English Composition-Exposition .....  3
Total Quality Manufacturing ..... 4
Manufacturing Materials and Cutting Tools ..... 5
CAD for CAM ..... 3
Manufacturing Programming ..... 5
Science/applied science elective ..... 4
Humanities/fine arts elective . . . . . . . . . . . . . . . . . . . . . . . . . 4
Term 5
MFG079 Industrial Systems . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MFG082 Manufacturing Production/Assembly Methods . . . . . . . . . . . . 5
MFG095 CAM Applications ......................................... 5
Social Science elective ........................................ . 3
Term 6
COM053 Communications Skills III $\qquad$ or
WR227 Technical Writing .............................................. 3
MFG083 Manufacturing Production Control . ......................... 5
MFG096 CAD/CAM Integrations .................................... 5

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

| CS101 | Introduction to Microcomputer Applications |
| :---: | :---: |
| DRF072 | Introduction to AutoCAD |
| MTH051 | Basic Mathematics |
| SKD050A | Technical Leanning Skills |
| WR040 | Writing Skills |

or

If you have questions about the requirements call (503) 399-6519. Failure to be assessed may delay your entry into program classes.

## /anufacturing Engineering Technologies

## (college transfer)

Oregon Institute of Technology offers a Bachelor of Science degree in Manufacturing engineering Technology. Career opportunities for OIT graduates include supervision liaison between design and production areas, tool and process designer, plant layout planner, materials handler, technical field representative, technical writer, and plant safety engineer. You may also be prepared to set up and operate manufacturing equipment, handle inspection devices, analyze production problems, and move into front-line supervision.
The two-year program outlined below is designed to meet requirements at Oregon Institute of Technology. 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 Advising and Counseling Center or the Chemeketa advisor in your program. 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 25.
Course Title Credit Hours
Term 1
MFG063 Manufacturing Print Reading and Sketching . . . . . . . ........ 4
MFG064 Manufacturing Fundamentals .............................. 5
MFG068 Manufacturing Measuring, Inspection and Quality Control .... 3
CS101 Introduction to Microcomputer Applications . . . . . . . . . . . . . . . 3
WRI21 English Composition-Exposition .............................. . 3
Term 2
MFG065 Tool and Work Holding Methods ........................... 5
MFG069 QC Applications/CMM Operations ........................... 4
MFG093 CNC Machine Tool Operations* . . . . . . . . . . . . . . . . . . . . . . . 5
MTH111 College Algebra .......................................... 5
Term 3
MFG066 Material Cutting/Removal Methods .......................... 5
MFG070 Total Quality Manufacturing . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MFG076 Manufacturing Materials and Cutting Tools ................ 5
MTH112 Trigonometry .............................................. 5
Term 4
MFG081 Manufacturing Processing Planning ........................ 5
MFG094 Manufacturing Programming ..................................... . 5
PH201 General Physics ............................................ . 4
WLD051 Basic Arc Welding .......................................... . 5
Term 5
MFG082 Manufacturing Production/Assembly Methods . . . . . . . . . . . 5
MFG095 CAM Applications* ........................................ 5
PSY201 General Psychology .......................................... 3
WR122 English Composition-Logic and Style . . . . . . . . . . . . . . . . . . . . 3
PH202 General Physics .......................................... 4
Term 6
MFG083 Manufacturing Production Control ......................... 5
MFG096 CAD/CAM Lntegrations ..................................... 5
WR227 Technical Writing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
CH104 Chemistry for Allied Health . . . . . . . . . . . . . . . . . . . . . . . . . . 5
*Class not transferrable but required for class scquence.
Additional classes that ransfer to 0 IT:
MTH243 Probability and Statistics . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MTH251 Differential Calculus . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
MTH252 Integral Calculus . . . . . . . . . . . . ................................ 5
SPI11 Fundamentals of Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
ENGR211 Statics . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
ENGR213 Strength of Materials ..................................... . 4

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 25 .

## First Year

WR121, 122 and/or 123, English Composition and/or WR227 Technical Writing*

Term

Mathematics per placement test*MTH251, 252, 254 Calculus required (EOSC and SOSC require MTH253 Series Calculus and Linear Algebra; 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.

123
33

Arts and Letters/Humanities courses** (UO requires two second-year level languages from German, French, or Russian for admission to Ph.D. program)
Computer Science courses or electives (EOSC reguires at least 6 hours of computer science; CS161 Computer Science I-C Language or other higher level language for OSU, CS161 or CSI 133F FORTRAN IV for PSU; CS133F for SOSC; CS161 and 162 Computer Science II for WOSC)
HPE295 Health and Fitness for Life* or elective
Second Year
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 PSU, SOSC and WOSC)
Science courses* (OSU requires PH211 General Physics for Engineers and Scientists, or approved courses in the physical or biological sciences)
Social Science courses*
Arts and Letters/Humanities or Social Science electives*
Electives $\quad \begin{array}{llll}3 & 3 & 3\end{array}$
*To meet four-year college general education requirements.
**PSU strongly advises students planning to do graduate work in mathemalics to complete two years of sudy in German, French or Russian; UO requites second-year icvel of one of these languages for the Ph.D. program.

## $\mathrm{M}^{\mathrm{mamam}}$ Assisting

The 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 respon-
sible for administrative functions and processing insurance claims, accounts, fees, and collections. Students should contact the advisors for the Health Services Management program as some classes taken in the program may apply toward the A.A.S. degree.
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.
This program is a fall term entry program with special admission requirements and enrollment limits. For information, contact the Admissions Office at (503) 399-5006.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 349$; class fees, $\$ 72$; equipment and supplies, $\$ 633$; 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 Centificate of Completion by successfully completing these 45 required credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| H101 | Medical Law and Ethics | 3 |
| H120 | Medical Terminology/Systems 1 |  |
| MED054 | Medical Office Procedures |  |
| MED056 | Medical Assisting Basic Procedures |  |
| Term 2 |  |  |
| FE205B | Resumes and Job Search Correspondence |  |
| H 121 | Medical Terminology/Systems 2. | 3 |
| MED057 | Medical Assisting, Advanced Procedures | 6 |
| 0 A 090 | Bookkeeping .... | 3 |
| PSY101 | Psychology of Human Relations (or higher) |  |
| Term 3 |  |  |
| H140 | Medical Transcription | 3 |
| H 131 | Health Information Systems Serninar |  |
| MED064 | Introduction to Medical Science | 3 |
| MED079 | Medical Office Practice | . 5 |
|  | General education elective* |  |
| *General educalion clectives: |  |  |
| AH080 | Crisis Intervention | 3 |
| BA173 | Public Relations in Business | 3 |
| CS101 | Introduction to Microcomputer Applications | higher) . . . . . 3 |
| H115 | ICD-9-CM CodingReimbursement | . 3 |
| HE250 | Personal Health ... | 3 |
| HSIOI | Alcohol Use, Misuse and Addiction | 3 |
| MS259 | Death and Dying . . | 3 |
|  | Physical Education | 3 |
| SPANI01 | First Year Spanish, Term 1 (or higher) | . 4 |

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level
may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

## Term 1

AH05
Health Occupations Overview A

B1071 Body Structure and Function I ............................... 3
MED050A Introduction to Medical Terminology A. ......................... 1
MTH060 Introductory Algebra . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
RD090 College Textbook Reading . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
WR090 Fundamentals of Writing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 2
AH052 Health Occupations Overview B ............................ . 2
B1072 Body Structure and Function II . . . . . . . . . . . . . . . . . . . . . . . . 3
CS101 Introduction to Microcomputer Applications . . . . . . . . . . . . . . . 3
MED050B Introduction to Medical Terminology B ........................ 1
SP118 Interpersonal Communication in the Health Profession ...... 3
WR095 Fundamentals of Composition ............................... . 3
If you have questions about the requirements call (503) 399-5058. Failure to be assessed may delay your entry into program classes.


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).
The following four courses are required for application to the Nursing Program:

1. Algebra, MTH060 or MTH070 or one year of high school algebra, or placement in MTH095 based upon the results of the Chemeketa Placement Test.
2. Chemistry, $\mathrm{CH} 110, \mathrm{CH} 104$ or CH 121 or CH 221 , 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 courses 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 entering the Nursing Program.
In addition to the four prerequisite 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 prenursing packet that you may obtain from the Advising and Counseling Office. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact the Admissions Office at (503) 399-5006, or the Advising and Counseling Office at (503) 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 Assisting

As a nursing assistant, you may work under the direction and supervision of a registered nurse or licensed practical nurse. You may assist licensed nurses in meeting normal patient needs for safety, comfort, hygiene, activity, rest, sleep, nutrition, elimination and fluid balances, oxygen, and emotional support.
After successfully completing the required first-term nursing courses, you are eligible to apply to the Oregon State Board of Nursing for a certificate as a nursing assistant.

## Level I-Licensed Practical Nursing

A licensed practical nurse is a member of a nursing or health care team and gives care to patients of all ages under the direction of registered nurses and/or licensed physicians and dentists. As a licensed practical nurse, you assist registered nurses in applying the nursing process in complex nursing situations.
In addition to tuition, estimated costs for students who complete the entire Level I program are books, $\$ 825$; 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
Term 1
B1232 Human Anatomy and Physiology . ............................ . 4
NUR106 Nursing ................................................... 9
PSY201 General Psychology ......................................... 3
Term 2
B1233 Human Anatomy and Physiology ............................ . 4
NUR108 Nursing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 9
PSY237 Growth and Development ....................................... 3
Term 3
B1234 Medical Microbiology ....................................... 4
NUR109 Nursing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
WRI21 English Composition-Exposition . . . . . . . . . . . . . . . . . . . . . . . 3

## Level II-Registered Nursing

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
Term 4
CS1O1 Introduction to Microcomputer Applications*.............. 3
NUR206
Nussing10

## Tern 5

NUR208
Nursing 10
Social Science elective ..................................... 3
Sociology elective3

## Term 6

NUR209
Nursing
Humanitiesfine antscommunication 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.


## (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 twoyear, 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, 1997. It is important to check with OHSU in September for admission requirements and to obtain admissions materials early, as requirements may change.

OHSU provides an opportunity for licensed practical nurses and registered nurses, including those completing Chemeketa's Licensed Practical Nurse and Registered Nurse program, to complete requirements for a baccalaureate degree. Contact OHSU for transfer requirements.
The program outline below indicates courses required for admission to the nursing major and is designed to meet prerequisite requirements. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.
As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| CH104, 105, 106 Chemistry for Allied Health or CH121, 122, 123 General Chemistry | 4.5 | 4.5 | 4-5 |
| MTH111 College Algebra (begin math per placement test) | 5 |  |  |
| MTH243 Probability and Statistics |  | 4 |  |
| FN225 Nutrition |  |  | 4 |
| WR121, 122, 123 English Composition or WR227 Technical Writing | 3 | 3 | 3 |
| Humanities elective (Foreign Language, Philosophy, SP115 Intercultural Communication or ASLIOI, 102, 103 American Sign Language strongly recommended) | 3-4 | 3-4 | 3-4 |
| Second Year | 4 | 5 | 6 |
| B1231, 232, 233 Anatomy and Physiology | 4 | 4 | 4 |
| B1234 Microbiology |  | 4 |  |
| Humanities electives |  |  | 3 |
| 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; <br> CS101 Introduction to Microcomputer recommended.) | 3 | 3 |  |

The Occupational Skills Training program offers agency-sponsored students the opportunity to earn college credit for work-sitebased 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 employerttrainer 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 approved 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 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, (503) 399-5026 extension 3, on the Salem Campus.

## FFICE 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, openexit curriculum for people who want to develop or refresh their clerical skills in order to qualify for entry level 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 four options: administrative assistant, information processing, 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, keyboarding, computer knowledge, 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 call (503) 399-5114 to have an advisor assigned.
You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do on approved job sites in the business community. With the approval of the program chair, you may enroll in OA280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

## 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, calculators, 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 in other electives as your schedule allows.
The Clerical Basics program is offered on the Salem campus and at Chemeketa centers in Dallas, McMinnville, and Woodburn. For additional information, call (503) 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, $\$ 448$; class fees, $\$ 59$; equipment and supplies, \$37. 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 30 credit hours listed below. Successful completion requires that you earn a grade C or higher in all courses.

## Required Courses:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| 0A061A | Electronic Calculators A |  |
| OA084 | Business English I . | 3 |
| OA085 | Business English II | 3 |
| OA128A | Introduction to Records Management A | 1 |
| OA128B | Introduction to Records Management B |  |
| OA090 | Bookkeeping | 3 |
| 0A099A | Proofreading/Editing A |  |
| 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 |
| OA200 | Introduction to Information Processing | 3 |
| OA201X | Word Processing Procedures 1: WordPerfect | . 3 |
|  | Business elective* | 3 |

*Business elective: Choose courses with prefixes BA, CS, OA, and FE205A, FE205B, FE205C.

## 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 oneyear 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, \$608; class fees, $\$ 88$; equipment and supplies, $\$ 32$. For students who complete the general clerical required courses: books, $\$ 592$; class fees, $\$ 76$; equipment and supplies, $\$ 32$. For students who complete the word processing required courses: books, $\$ 526$; class fees, $\$ 101$; equipment and supplies, \$32. Contact the Financial Aid Office to find out if you qualify for help with these costs.
You may earn a Certificate of Completion in the one-year program by successfully completing 46 to 47 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 |
| :---: | :---: | :---: |
| Term 1 (Required for all areas of specialization.) |  |  |
| OA061 | Electronic Calculators |  |
| OA099 | Proofreading/Editing |  |
| OA116 | Office Procedures .. | 3 |
| OA118A | Current Office Software |  |
| OA122 | Keyboard Skillbuilding (for General Clerical or Word Processing) |  |
|  | or |  |
| BA051 | Accounting Procedures I (for Bookkeeping) |  |
| OA128 | Introduction to Records Management |  |
| Term 2 (Bookkeeping) |  |  |
| BA052 | Accounting Procedures II |  |
| MTH062 | Business Applications Using Mathematics |  |
| OAll8B | Current Office Software ............. |  |
| OA120 | Professional Communication Skills |  |
| OA122 | Keyboard Skillbuilding |  |
| Term 3 (Bookkeeping) |  |  |
| BA214 | Business Communications |  |
| OA091 | Computerized Bookkeeping |  |
| OA092 | Payroll Procedures |  |
| OA201X | Word Processing Procedures 1-WordPerfect | 3 |
| OA210 | Office Microcomputer Applications |  |
| Term 2 (General Clerical) |  |  |
| OA086 | Personal and Professional Development |  |
| OA119 | Exploring Office Desktop Publishing | 3 |
| OA120 | Professional Communication Skills | . 4 |
| OA201X | Word Processing Procedures 1:WordPerfect |  |
|  | Business elective |  |
| Term 3 (General Clerical) |  |  |
| BA214 | Business Communications | . 3 |
| OA202X | Word Processing Procedures 2:WordPerfect | . 3 |
| OA203 | Advanced Formatting |  |
| OA210 | Office Microcomputer Applications |  |
|  | Business electives* <br> (OA280C Cooperative Work Experience rean | $\text { nmended) . . . } 6$ |
|  |  |  |
|  | Business electives* |  |
| Term 2 (Word Processing) |  |  |
| OA086 | Personal and Professional Development | . 3 |

OA118B Current Office Software ...................................... 1

OA119 Exploring Office Desktop Publishing ......................... 3
OA120 Professional Communication Skills ........................... . 4
OA201X Word Processing Procedures 1:WordPerfect ................... 3
Term 3 (Word Processing)
BA214 Business Communications ................................. 3
OA202X Word Processing Procedures 2-WordPerfect ................... 3
0A203 Advanced Formatting ........................................ . . 1
OA210 Office Microcomputer Applications ......................... 3
OA225ABC Machine Transcription IA, IB, IC ..........................ea. Business elective*
(OA280, OA 204 X or OA 205 recommended) . 3

## -Alert!

Program requirements have changed, see "Alert" section on page 92 for details.
*Business electives: Choose courses wilh prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE , except OA121.

## Two-Year Programs

Chemeketa's Office Administration and Technology two-year programs are designed for people who want to become secretaries, administrative assistants, or other administrative support specialists.
If you are employed as an office support worker and you want to increase your skills in order to advance in your career, you may benefit from this training. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.
The program has four options: administrative assistant, information processing, 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.

## Administrative Assistant Option

The Administrative Assistant 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, and work effectively as a team member. You should be skilled in areas such as English use, keyboarding, machine transcription, computers, 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, \$1,185; class fees, \$113; equipment and supplies, $\$ 74$. 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 93 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| OA061 | Electronic Calculators |  |
| OA099 | Proofreading/Editing | 3 |
| OA116 | Office Procedures | 3 |
| OA118A | Current Office Software | 1 |
| OAL22 | Keyboard Skillbuilding | 3 |
| 0A201X | Word Processing Procedures 1-WordPerfect | 3 |
| Term 2 |  |  |
| MTH062 | Business Applications Using Mathematics | her) |
| OA118B | Current Office Software |  |
| 0A118C | Current Office Software |  |
| OA119 | Exploring Office Desktop Publishing |  |
| OA120 | Professional Communication Skills | 4 |
| OA202X | Word Processing Procedures 2-WordPerfect |  |
| Term 3 |  |  |
| BA214 | Business Commurications |  |
| OA086 | Personal and Professional Development |  |
| OA0203 | Advanced Formatting | 1 |
| OA204X | Advanced WordPerfect | .......... 3 |
| OA208 | Computer Presentations for the Workplace Social Science elective | $\begin{gathered} \text { werPoint . . } 3 \\ \\ \hline . . . . . . . . \end{gathered}$ |
| Term 4 |  |  |
| BA051 | Accounting Procedures I . . or | $\text { . .......... . } 4$ |
| BA211 | Financial Accounting I* | ....... 4 |
| OA128 | Introduction to Records Management |  |
| OA205 | Desktop Publishing I-PageMaker |  |
| OA210 | Office Microcomputer Applications | 3 |
| 0 A 225 ABC | Machine Transcription IA, IB, IC |  |
| Term 5 |  |  |
| BA202 | Personal Effectiveness |  |
| BA251 | Office Management |  |
| EC200 | Introduction to Economics |  |
|  | or |  |
| $\begin{aligned} & \mathrm{EC} 201 \\ & \text { OA230 } \end{aligned}$ | Introduction to Microeconomics |  |
|  | Executive Office Simulation |  |
|  | Humanities/fine arts elective |  |
|  | or <br> Science/applied science elective |  |
| Term 6 |  |  |
| OA232 | Integrating Office Software Applications |  |
| SP111 | Fundamentals of Speech |  |
|  | or |  |
| SP114 | Interpersonal Communication |  |
|  | or |  |
| SP130 WR227 | Business and Professional Speaking |  |
|  | Technical Writing |  |
|  | Business elective** <br> (OA280 Cooperative Work Experience | $\text { nmended) . . . . . } 6$ |
| *If you seiect BA211 or BA212, you may not use BA051 or BA052 as a business elcctive. |  |  |
| **Business elective: Choose courses with prefixes $\mathrm{BA}, \mathrm{BAN}, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE , except OA121. |  |  |
| -Alert! |  |  |
| Program requirements have changed, see "Alert" section on Page 92 for details. |  |  |
| Information Processing Option |  |  |
| The Information Processing option prepares you for a carcer in either a centralized word processing environment or an office emphasizing information processing. This program stresses training on 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, $\$ 1,119$; class fees, $\$ 164$; equipment and supplies, $\$ 74$. 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 91 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

Course Title

Credit Hours

Term 1
0 OA061 Electronic Calculators ...................................... 2
OA099 Proofreading/Editing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
OA116 Office Procedures ............................................ . 3
OA118A Current Office Software ....................................... 1
OA122 Keyboard Skillbuilding ...................................... . . 3
OA201X Word Processing Procedures 1-WordPerfect .................. 3
$\begin{array}{ll}\text { Term } 2 & \\ \text { MTH062 } & \text { Business Applications Using Mathematics (or higher) ...... } 4\end{array}$
OAl18B Current Office Software ........................................ 1

OA119 Exploring Office Desktop Publishing ......................... 3
OA120 Professional Communication Skills .......................... . 4
OA202X Word Processing Procedures 2-WordPerfect ................. 3
Term 3
BA214 Business Communications ................................... 3
CS125E Worksheets-Excel . .......................................... . 4
OA086 Personal and Professional Development ...................... 3
OA204X Advanced WordPerfect ..................................... 3
OA208 Computer Presentation for the Workplace-MS PowerPoint ... . 3
Term 4
OA128 Introduction to Records Management . ...................... 3
OA205 Desktop Publishing I-PageMaker ............................... 3
OA210 Office Microcomputer Applications ......................... 3
Humanitiesffine arts elective .............................. 3
$\stackrel{\text { Or }}{\text { Science/applied science elective } . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 3$
Business elective** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 5
BA211 Financial Accounting I* ............................... . 4
BA051 Accounting Procedures I . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
BA251 Office Management ........................................ 3
CSI25A1-A3 Micro Database Software-Access ........................... 3
CS125FX $\quad{ }_{\text {Micro }}^{\text {M }}$ Database Software-FoxPro ........................... 3
CS125P $\quad \stackrel{\text { Micro Database Software-Paradox } \ldots . . . . . . . . . . . . . . . . . . . . . ~}{ } 3$
OA206 Desktop Publishing II-PageMaker ............................ 3
OA230 Executive Office Simulation . . . . . . . . . . . . . . . . . . . . . . . . . 3
Term 6 Advanced Formatting
OA232 Integrating Office Software Applications ..................... 3
SPI11 Fundamentals of Speech ................................. 3
SP134 Interpersonal Communication . . . . . . . . . . . . . . . . . . . . . . . . . 3
Social Science elective ........................................ . 3
Business ejective*
(OA280 Cooperative Work Experience recommended) . . . . 3
*If you select BA211, you may not use BA051 as a business clective.
**Business electives: Choose courses with prefixes $B A, B A N, C S, C I S, E C, O A$, and RE, except OA121.

## - Alert!

Program requirements have changed, see "Alert" section on page 92 for details.

## 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, \$1,163; class fees, \$161; equipment and supplies, \$74. 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. Successful completion requires that you earn a grade of C or better in all courses.

| Course | Title Credit Hours |
| :---: | :---: |
| Term 1 |  |
| H110 | Health Information Systems Procedures 1 |
| H120 | Medical Terminology/Systems1 . ........................ 3 |
| OA099 | Proofreading/Editing . . . . . . . |
| 0 All 6 | Office Procedures |
| OA122 | Keyboard Skillbuilding |
| Term 2 |  |
| H121 | Medical Terminology/Systems 2 |
| MTH062 | Business Applications Using Mathematics (or higher) |
| OA061 | Electronic Calculators . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |
| OA120 | Professional Communication Skills |
| OA201X | Word Processing Procedures 1-WordPerfect . . . . . . . . . . . . 3 |
| Term 3 |  |
| BA214 | Business Communication ............................. 3 |
| H101 | Medical Law and Ethics |
| H115 | ICD-9-CM Coding/Reimbursement |
| OA086 | Personal and Professional Development . ................ 3 |
| 0A202X | Word Processing Procedures 2-WordPerfect . . . . . . . . . . . . 3 |
| Term 4 |  |
| BA211 | Financial Accounting I* . . . . . . . . . . . . . . . . . . . . . . . . . 4 |
|  | or |
| BA051 | Accounting Procedures I . . . . . . . . . . . . . . . . . . . . . . . . . . 4 |
| B1071 | Body Structure and Function 1 ......................... 3 |
|  | $\stackrel{\text { or }}{ }$ |
| B1231 | Human Anatomy and Physiology . . . . . . . . . . . . . . . . . . 4 |
| OA128 | Introduction to Records Management . . . . . . . . . . . . . . . . 3 |
| OA210 | Office Microcomputer Applications . . . . . . . . . . . . . . . . 3 |
| OA225ABC | Machine Transcription IA, IB, IC . . . . . . . . . . . . . . . . . 1 ea |
| Term 5 |  |
| BA251 | Office Management . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| B1072 | Body Structure and Function II ........................ 3 |
| B1232 | Human Anatomy and Physiology ..................... 4 |
|  | or |
| B1233 | Human Anatomy and Physiology . . . . . . . . . . . . . . . . . . 4 |
| H140 | Medical Transcription . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| MED054 | Medical Office Procedures ............................. . . 4 |
| OA203 | Advanced Formating . . . . . . . . . . . . . . . . . . . . . . . . . . 1 |
| Term 6 |  |
| MED064 | Introduction to Medical Science . . . . . . . . . . . . . . . . . . . . 3 |
| OA230 | Executive Office Simulation ........................... . 3 |
| SPII | Fundamentals of Speech . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| SP114 | or ${ }^{\text {r }}$ |
|  | Interpersonal Communication . . . . . . . . . . . . . . . . . . . . . 3 |
|  | $\begin{aligned} & \text { Business elective** } \\ & \text { (OA280 Cooperative Work Experience recommended) .... } 3 \end{aligned}$ |
|  | Social Science elective . . . . . . . . . . . . . . . . . . . . . . . . . . 3 |
| ${ }^{*}$ If you selcet BA211. you may not use BA051 as a business elective. |  |
| **Business electives: Choose courses wilh prefixes BA, BAN, CS, CIS, EC, OA, and RE, except OA121. |  |



## -Alert!

Program requirements have changed, see "Alert" section on Page 92 for details.

## 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, \$1,147; class fees, $\$ 126$; equipment and supplies, \$74. 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 93 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

## Course <br> Titte <br> Credit Hours

Term 1
BA051
BA211
MTH062
OA061
OA116
OAl18A
OA122
Term 2
BA052
BA212
BA101
OA091
OA120
Term 3
BA053
BA214
MTH070
OA201X
Term 4

Term 5
BA251
OA092
OA119
OA203
SPIII
SPII

Term 6
BA226
BA228
OA230

CS125E Workshects-Excel ............................................ . . 4
OA099 Proofreading/Editing . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
OA128 Introduction to Records Management ............................ 3
OA210 Office Microcomputer Applications ........................... 3
Business elective ${ }^{* *}$. .......................................... . 3
Accounting Procedures I ..... 4

or
Financial Accounting I ..... 4
Business Applications Using Mathematics (or higher) ..... 4
Electronic Calculators .....  2
Office Procedures ..... 3
Current Office Software .....
Keyboard Skillbuilding ..... 3
Accounting Procedures II .....  4
Financial Accounting II* ..... 4
Business Environment .....  4
Computerized Bookkeeping .....  3
Professional Communication Skills .....  4
Accounting Procedures III ..... 4
Business Communication .....  3
Elementary Algebra (or higher) .....
Word Processing Procedures I-WordPerfect ..... 3
Office Management .....  3
Payroil Procedures .....  3
Exploring Office Desktop Publishing .....  3
Advanced Formatting .....  1
Fundamentals of Speech ..... 3
or
Interpersonal Communication ..... 3
Humanities/fine arts elective .....  3
Science/applied science elective .....  3
Business Law I ..... 3
Computer Accounting Applications .....  3
Execulive Office Simulation .....  3
Business elective**

Social Science elective
*ff you sclect 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.

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:

| BA066 | Succeeding in Business |
| :---: | :---: |
| MTH060 | Introductory Algebra |
| OA085 | Business English II |
| OA200 | Introduction to Information Processing |
| CS101 | or Introduction to Microcomputer Ap |

If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.


## (college transfer)

Oregon state colleges and universities offering Bachelor of Aits 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 25 .

|  |  | Term |  |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| First Year | 1 | 2 | 3 |
| 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 |  |
| HPE295 Health and Fitness for Life* or elective |  |  | 3 |
| Electives (OSU requires 12 credits in computer sci- |  |  |  |
| $\quad$ ence and quantitative studies; UO requires two |  |  |  |

years of foreign language)

## Second Year

$\begin{array}{lll}3 & 3 & 3 \\ 4 & 5 & 6\end{array}$
Humanities courses* (PHL201Philosophical Problems: Metaphysics, PHL203 Elementary Ethics and PH 204 Introduction to Logic required at PSU); Social Science electives*
Math or Science elcctives*
Electives (second year foreign language for UO)

| 3 | 3 | 3 |
| :--- | :--- | :--- |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 6 | 6 | 6 |

*To meet four-year college general education requirements.

## Dhysical Education/ Human Movement Studies

## (college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physical Education, Human Movement Studies, or Exercise and Movement Science 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 nonteaching 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 leam 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 25.

|  | Term |  |  |
| :---: | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |
| WR121 and/or WR122 or 123 English Composition or SPl11 Fundamentals of Speech* | 3 | 3 | (3) |
| Mathematics per placement test (through MTH112 Trigonometry for OSU; MTH241 Elementary |  |  |  |
| Trigonometry for OSU; MTH241 Elementary <br> Calculus or 251 Differential Calculus for UO; to |  |  |  |
| meet general education or B.S. degree requirements at SOSC and WOSC; MTH11 or 211, 212 or 213 for EOSC) | (4) | 4-5 | 4.5 |

Arts and Letters/Humanities courses*
PE194 Professional Activities (not required at all schools)
3
$\mathrm{H} 121,122,123$ College Chemistry or $\mathrm{CH} 221,222$, 223 General Chemistry required at ESOC, OSU and UO; choose electives for other colleges; Chemistry is prerequisite for Anatomy and Physiology sequence for SOSC
PE131 Introduction to Physical Education (recommended; required at WOSC)
Elective (PH201, 202, 203 General Physics required at UO)
Second Year
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)*
HPE295 Health and Fitness for Life* (EOSC, OSU, WOSC)
HE250 Personal Health (not required at UO or EOSC or for some options at OSU)
Science courses* (B1231, 232, 233 Human Anatomy and Physiology for EOSC, OSU, and SOSC; BI101, 102, 103 General Biology for UO and WOSC)
Social Science or other electives*
Arts and Letters/Humanities* or electives (FN225 Nutrition required for some options at OSU and at EOSC, SOSC and WOSC
PE194 Professional Activities (not required at all schools; recommended as electives)
*To meet four-year colltege gencral edication requirements.

## p

## (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, Southem Oregon State College, and University of Oregon.
The twonyear 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 25.

|  | Term |  |  |
| :--- | :---: | :---: | :---: |
| First Year | 1 | 2 | 3 |

First Year
Mathematics per placement test (OSU requires MTH251 Differential Calculus through MTH256 Applied Differential Equation, PSU requires

3

| MTH253 Series Calculus and MTH254 Linear Algebra, and MTH256; SOSC requires math through MTH252; EOSC requires through MTH254) | 4.5 | 4-5 | 4.5 |
| :---: | :---: | :---: | :---: |
| CH221, 222, 223 General Chemistry (Not required 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* ** HPE295 Health and Fitness for Life* or elective | 3-4 | 3.4 | 3) |
| Second Year | 4 | 5 | 6 |
| thematics | 4.5 | (4.5) | (4-5) |
| PH211, 212, 213 General Physics for Engineers and Scientists (PSU and UO also accept 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 |  |

Electives (EOSC requires CSI 61 Computer Science I-C Language; OSU requires CS161 and B1101, 102, or 103 General Biology; PSU requires BIIO1, 102, 103; G201, 202, 203 Geology; or other approved courses in a related area of science or computer science; SOSC requires computer literacy including programming, interfacing, data acquisition, data analysis and graphical presentation of data; 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.

## Dolitical Science

## (college transfer)

Oregon state colleges and universities offering Bachelor of Arts or Bachelor of Science degrees in Political Science are Oregon State University, Portland State University, Southem Oregon State College, University of Oregon, and Western Oregon State College.
The two-year program outlined below is designed to meet requirements at these institutions. However, the program has entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, you may consult with Chemeketa's Advising and Counseling Center or a Chemeketa advisor in your program.
As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. It is advisable for you to make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.
Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 25.

## Term

First Year
WR121,122, and/or 123 English Composition*
Social Science courses*
Arts and Letters/Humanities courses*

3
(3)

3

Electives (Foreign Language, Computer Science, or Math required for OSU; CS101 Introduction to Microcomputer Applications for SOSC; Foreign Language or MTH 105 Contemporary Math, MTH111 College Algebra, MTH243 Probability and Statistics for U0)

## Second Year

PS201, 202 American Government (required at OSU, SOSC, and UO; PS201 for WOSC; PS201, 202 not required at PSU)
PS203 State and Local Government and/or PS205 International Relations recommended (required at UO and WOSC; PS205 required at SOSC and WOSC)
Math/Science courses*
Arts and Letters/Humanities courses*
Social Science courses*
Electives (Social Science electives for WOSC; second year forcign language for UO if foreign language is chosen rather than three terms of math)
*To meet four year college general education requirements.

44

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 entrylevel 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 25.

|  |  | Term |  |
| :--- | :---: | :---: | :---: |
| First Year | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |
| WR121, 122, and/or 123 English Composition or <br> approved Communications course* |  |  |  |
| CH221, 222, 223 General Chemistry (CH121, 122, |  | 3 | 3 |
| 123 Coliege 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.

## D ROFESSIONAL-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 nonrenewable 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 professionaltechnical 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 below 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 profes-sional-technical coursework determined necessary by your appraisal/advisory committee:
Course Title Credit Hours
Term 1
ED110 Psychology of Learning ................................. 3
ED133 Instructional Media and Materials . . . . . . . . . . . . . . . . . . . . 3
ED209B Introductory Observation and Experience ................... 3
ED251 Overview of Students with Special Neceds .................. 3
ED258 Multicultural Education ................................. 3
ES071 Work Place Safety Skills . . . . . . . . . . . . . . . . . . . . . . . . . . . 1
Term 2
ED131 Teaching Techniques ..................................... 3
ED209C Professional Technical Practicum I . . . . . . . . . . . . . . . . . . . . 6
ED217 Comprchensive Classroom Management ................... 3
ED292 Occupational Analysis, Curriculum and Evaluation ......... 3
Term 3
ED209D Professional Technical Practicum II ........................ 9
ED212 Schools and Society .................................. 3
ED293 Applied Integrated Academics . . . . . . . . . . . . . . . . . . . . . . . . 3

## Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the two-year program below 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. To meet graduation requirements you must earn a total of 94 credit hours.

## Term 4

CS101
Introduction to
Microcomputer Applications (or higher) ...................... 3
SPIII Fundamentals of Speech . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
SP1 14 Interpersonal Communication (or higher) ................... 3
WR121 English Composition-Exposition (or higher) . . . . . . . . . . . . . . 3
Professional-technical elective* ${ }^{*}$.............................. 6
Term 5
HPE295 Health and Fitness for Life . .................................. . 3
Science elective .................................................. 3
Approved Social Science* ${ }^{*}$.................................. 3
or
Humanities/fine arts elective* . . . . . . . . . . . . . . . . . . . . . . . 3
Professional-technical electives* . . . . . . . . . . . . . . . . . . . . . . . 6
Term 6
Math elective* . ........................................... . 3
General education elective ...................................... 3
Professional-technical electives* . . . . . . . . . . . . . . . . . . . . . . 12
*As approved by appraisal/advisory committee.

## $\int_{\text {SYCHOLOGY }}$

## (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, Southem 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 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 25.

|  |  | Term |  |
| :--- | :---: | :---: | :---: |
| First Year | 1 | 2 | $\mathbf{3}$ |
| WR121, 122, and/or 123 English Composition <br> (WR227 Technical Writing required by SOSC)* | 3 | 3 | (3) |
| PSY201, 202, 203 General Psychology (PSY201, <br> 202 for OSU, U0, and WOSC) | 3 | 3 | 3 |

Mathematics per placement test* (Mathematics through MTHII1 College Algebsa required by EOSC; PSU requires MTH241 Elementary Calculus or 251 Calculus and MTH243 Probability and Statistics)
(4) $4-5$

Arts and Letters/Humanities courses*
HPE295 Health and Fitness for Life* or elective Electives
Second Year
Social Science courses* (PSU recommends anthropology or sociology sequence)
Arts and Letters/Humanities* (EOSC requires five hours of philosophy)
Science courses* (EOSC requires 5 hours in 200 level biology, chemistry or physics; SOSC requires Bllol and 102 or 103 General Biology; UO requires biology, chemistry, or physics; PSU recommends BII01, 102, 103)
Electives (PSU requires CSIOIntroduction to Microcomputer Applications; SOSC requires CS 101 Introduction to Microcomputer Applications; Chemeketa recommends CS101 or other Computer Science courses for all schools)
*To meef four-year college general education requirements.


The goal of the Real Estate program is to prepare students for a wide variety of jobs which require knowledge of the complexities of real estate. The required courses cover factors affecting the value, control, use, appreciation, responsibilities, and privileges associated with real property. You may select individual courses to meet your needs, state license requirements, or you may work toward an Associate of Applied Science degree.
With this technical training, you may fill a variety of jobs in county assessors' or county recorders' offices, city planning departments, the Federal Housing Administration, veterans affairs agencies, title insurance companies, escrow departments, state highway departments, mortgage companies, savings and loan associations, commercial banks, state tax commissions, federal land banks, farm credit administration, building and subdivision firms, real estate brokerages, and appraising offices.
Students interested in fee appraising should consult with the real estate program chair, Jim Cockrell at (503) $399-6069$, or the business director's office, (503) 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 eam 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 96 credit hours:
Course Title Credit Hours
Term 1
BA101
BA101 Business Environment .................................... 4

MTH070 Elementary Algebra (or higher) . . . . . . . . . . . . . . . . . . . . . . . . 4
OA085 Business English II . ........................................... . 3
WR227 Technical Writing . ........................................... 3
0A121 Keyboarding................................................ . 3
Term 2
BA263 Real Estate Law ............................................. 3
BA264 Real Estate Finance . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
EC200 Introduction to Economics (or higher) ......................... 3
MTH062 Business Applications Using Mathematics (or higher) ...... 4
Computer Science elective (CS101 or higher) .............. 3
Term 3
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-Workshcets . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 4
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 and Community Planning ............. 3
(RE280/Cooperative Work Experience recommended) ..... 5
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
Experience recommended)6
*Students may choose among the following electives: Ant, Foreign Languages, Mullidisciplinary
Studies, Philosophy, General Science, Geology, Physical Science, and Physics.
**Business electives: Choose courses with prefixes BA, BAN $, \mathrm{CS}, \mathrm{CIS}, \mathrm{EC}, \mathrm{OA}$, and RE , except OA084.

## Alert!

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized program of study. The program of study may include one or more of the following courses:
$\begin{array}{ll}\text { BA066 } & \text { Succeeding in Business . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 6 \\ \text { MTH060 } 4 \\ \text { Introductory Algebra . . . . . . . . . . . . . . . . . . . . . . } 4\end{array}$
OA085 Business English II .....  .3 3
CS101 Introduction to Microcomputer Applications .....  3

If you have questions about the requirements call (503) 399-5114. Failure to be assessed may delay your entry into program classes.

The Small Business Management program has two options from which to choose. For enrollment information, call (503) 399-5181.

## 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.


## OCIOLOGY

## (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 25.

Term
First Year
WR121, 122, and/or 123 English Composition or WR227 Technical Writing* (OSU strongly recommends WR123 or 227)

123

SOC204, 205, 206 General Sociology (OSU and UO require only SOC204; SOSC and PSU require SOC204 and 205)
$3 \quad 3 \quad$ (3)

| 3 | 3 | 3 |
| :---: | :---: | :---: |
| 4.5 | $4-5$ | 4.5 |

Mathematics or Science* (PSU requires math $\begin{array}{lll}4.5 & 4-5 & 4.5\end{array}$
Arts and Letters/Humanities sequence* (OSU strongly recommends PHL 201 Philosophical Problems: Metaphysics)
$3 \quad 3 \quad 3$

## Second Year

456

Social Science electives* ${ }^{*}$ (EOSC requires ANTH101, 102, 103 Human Evolution, Archeology, Introduction to Cultural Anthropology;
SOSC requires ANTH103 Introduction to Cultural Anthropology
Arts and Letters/Humanities electives*

| 3 | 3 | 3 |
| :--- | :--- | :--- |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 3 |  |  |
| 3 | 6 | 6 |

Math or Science courses*
HPE295 Health and Fitness for Life* or elective
Electives* (CS101 Introduction to Microcomputer Applications for SOSC)
See WOSC catalog for Interdisciplinary electives.
*To meel four-year college general education requirements.

(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. Beginning fall 1994, OSU has prerequisite requirements for admission to the major. Contact the OSU Speech Department for a list of requirements.
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 25.

## First Year

WR121, 122, and/or 123 English Composition
SP111 Fundamentals of Speech
SPI12 Fundamentals of Persuasion (SP111 or 112
required at PSU; not required at SOSC and WOSC)

| Term |  |  |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| 3 | 3 | $(3)$ |
| 3 |  |  |

SP113 Fundamentals of Small Group Communication (not reguired at OSU, PSU, or WOSC; SP115 Interculfural Communications for WOSC)
SP114 Interpersonal Communication (or SP115 at SOSC)
Arts and Letters/Humanities courses*
Social Science courses*
Math or Science* (MTH243 Probability and Statistics for PSU)
Second Year
Social Science electives*
Arts and Letters/Humanities electives*
Science courses*
HPE295 Health and Fitness for Life* or elective
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 Joumalism, Speech, and Writing; J224 Introduction to Journalism recommended)
*To meet four-year college general education requirements.

The Visual Communications curriculum 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, imagesetters, 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 (503) 399-5006. This is a hands-on, intensive limited enrollment program. Interested students are encouraged to come to the Visual Communications department in building four, room 284 or call (503) $399-5070$ and ask to speak with an instructor.
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 an instructor.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 300$; class fees, $\$ 100$; equipment
and supplies, $\$ 350$. A 35 mm 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 93 required credit hours:
Course Title Credit Hours
Term 1
ART261 General Photography ...................................... . 3
MTH052 Introductory Algebra and Geometry (or higher) ............. 3
VC081 Introduction to Graphic Arts .............................. . . . . 3
VC082 Basic Macintosh for Visual Arts . . . . . . . . . . . . . . . . . ...... 3
VC090 Visual Communications Operations .......................... 1
WR121 English Composition-Exposition (or higher) . . . . . . . . . . . . . . 3
Term 2
SP111
VC0siA
Layout and Design 1 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VC052A Prepress Production 1 ...................................... 3
VC053A Small Press Operations ...................................... 3
VC090 Visual Communications Operations ............................ 1
Approved electives* ........................................ . 3

PSY 100 Introduction to Psychology (or higher) ............................ 3
VCOSO Visual Communications Operations .......................... 1
Humanities/fine arts elective*
(select course with ART or I prefix) . . . . . . . . . . . . . . . . . . 3
$\stackrel{\text { or }}{\text { Science/applied science elective } . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 3$
Select two of three ( 6 credits):
Layout and Design 2 ...................................... 3

or
VC053B Large Press Operations .................................. 3
Term 4
ART221 Graphic Design 1 ........................................... 3
or
Approved elective* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
Intermediate Photography . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VC073 $\stackrel{\text { or }}{\text { Special Problems } \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~} 3$
VC061A Layout and Design 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VC063A Advanced Press Production 1 ............................ 3
VC062B Electronic Imaging 2 ............................................. 3
VC090 Visual Communication Operations . ........................... . 1
General education elective ........................................ . . . 3
Term 5
ART264 Digital Photography ........................................ 3
VC073 Special Problems ..................................... 3
VC061B Layout and Design 4 ....................................... . 3
VC063B Advanced Press Production 2 ............................ 3
VC062A Prepress Production 2 ................................... 3
ART222 Graphic Design 2 ......................................... . 3
or Approved elective* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VC073 Special Problems .................................................. . 3
VC083 Business of Graphic Arts .................................... . 3
VC090 Visual Communication Operations ............................. 1
Term 6
ART223 Graphic Design 3 ........................................ 3 or
Approved elective* . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
VC073P Portfolio Preparation ............................................ 3
VC090 Visual Communication Operations ................................ 1
VC280F Cooperative Work Experience .................................. 6

| VC076 | Special Problems |
| :---: | :---: |
| *Approved electives: |  |
| ARTI15 | Basic Design |
| ART116 | Basic Design |
| ART131 | Introduction to Drawing 1 |
| ART221 | Graphic Design 1 |
| ART222 | Graphic Design 2 |
| ART223 | Graphic Design 3 |
| ART270 | Introduction to Printmaking: Screen Printing 1, Beginning |
| ART271 | Introduction to Printmaking: Press Process 1 |
| J226 | Layou/Production |
| OA205 | Desktop Publishing I-PageMaker |
| DRF072 | Introduction to AutoCAD |

## $\mathbf{W}^{\mathrm{jom}}$

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 sixterm 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 eam a Certificate of Completion by successfully completing these 47 required credit hours:

| Course | Title | Credit Hours |
| :---: | :---: | :---: |
| Term 1 |  |  |
| MTH051 | Basic Mathematics (or higher) | 3 |
| WLD051 | Basic Arc Welding | . 5 |
| WLD056 | Blueprint Reading and Sketching | 2 |

## Term 1

OS
Blueprint Reading and Sketching .........................
WLD061 Basic Gas Metal Arc Welding (MIG) ..... 3WLD071
Term 2
WLD052 Intermediate Arc Welding .....  5
WLD057 Layout Practices .....  1
WLD062 Intermediate Gas Metal Arc Welding (MIG) ..... 3WLD072
Oxyacetylene Cutting .....  2
WLD073 Basic Gas Tungsten Arc Welding (TIG) ..... 4
WLD081 Welding Metallurgy I .....  2
Term 3
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

As a graduate of the Welding Fabrication program you may qualify for several types of positions in business and industry, such as machinery fabrication, structural fabrication, welding fitting and layout, automatic and semiautomatic welding, automatic flame cutter operation, millwright welding, plant maintenance, and quality control and development.
The program offers you a background in manufacturing materials, processes, and systems including shear and press brake operation, blueprint reading, and shop drawing and layout. The curriculum includes written and oral communications and general education classes and emphasizes related scientific, mathematical, and general mechanical principles.
At the end of the sixth term you may take a plate or pipe certification test. The fee for this test is determined by the number of students involved and the type of test.
In addition to tuition, estimated costs for students who complete the entire program are books, $\$ 575$; class fees, $\$ 452$; 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

Term 1
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
WLD070 Oxyacetylene Processes ...................................... . 3
Term 2
WLD052 Intermediate Arc Welding . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
WLD057 Layout Practices .................................................. 1
WLD062 Intermediate MIG Welding . .................................... . . 3
WLD073 Basic Gas Tungsten Arc Welding (TIG) . . . . . . . . . . . . . . . . . . 4
WLD081 Welding Metallurgy I ........................................ . 2
Term 3
WLD053 Advanced Arc Welding ....................................... 3
WLD058 Weld Shop Problems .......................................... . . 7
WLD063 Advanced Gas Metal Arc Welding (MIG) . . . . . . . . . . . . . . . . . 3
WLD082 Welding Metallurgy II . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2
Term 4
DRF072 Introduction to Auto CAD . .................................. . . . 3
GS104 Physical Science (or higher) . . . . . . . . . . . . . . . . . . . . . . . . . . 4
MFG064 Manufacturing Fundamentals .................................. . . 5
MFG092 Introduction to Computers in Manufacturing . . . . . . . . . . . . . 3

Term 5
COM051 Communication Skills I (or higher) ......................... 3
MFG079
Industrial Systems
MFG095
MTH052
CAM Applications 3

MTH08 Introduction to Algebra and Geometry (or higher) ........... . 3
Fabrication Practices III .3
Term 6
COM052 Communication Skills II (or higher) . . . . . . . . . . . . . . . . . . . 3
MTH053 Introduction to Trigonometry with Geometry (or higher) .... 3
$\begin{array}{ll}\text { PSY100 } & \text { Introduction to Psychology (or higher) } \ldots . . . . . . . . . . . . . . . . . . . . ~ \\ 3 \\ \text { WFB088 } & \text { Fabrication Practices IV ................................ } 3\end{array}$
WFB096
Shop Projects

To apply for this program you must take part in an assessment to determine if you have the skills needed to succeed. The first step is to take the ASSET placement test and then meet with Advising and Counseling staff. Students who lack the necessary skill level may need to complete additional course work. They will be assigned a program advisor to help develop an individualized pro-
gram of study. The program of study may include one or more of the following courses:
CS101 Introduction to Microcomputer Applications . . . . . . . . . . . . . . . . 3
DRFO72 Introduction to Aut0CAD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3
MTH052 Introduction to Algebra and Geometry . . . . . . . . . . . . . . . . . . . . 3
SKD050A Technical Learning Skills . .3
WR040 Writing Skills ........................................ 3
If you have questions about the requirements call (503) 399-6519. Failure to be assessed may delay your entry into program classes.

## Z <br> see Biology

COURSE DESCRIPTIONS

## Course Descriptions

## AbOUT THESE COURSE DESCRIPTIONS

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, $\mathbf{F}, \mathrm{W}, \mathrm{Sp}$, 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.

## 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.

## Defintions 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 by numbered 050 or higher.)
Please be advised that not all courses may apply to all degrees. Consult with our Advising and Counseling Center or a Chemeketa advisor for details regarding specific program and degree requirements.
Communication 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 Science), 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 Adminisistration

## AS

## Aerospace Science

## AS111, 112, 113 The Air Force Today

1 class hri/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 hr/wk, 1 cr .
Covers officership, leadership, drill and ceremony, and customs and courtesies for cadets. Co-requisite: AS111, 112, and 113. Offered as needed.

## AS211, 212, 213 Air Power Development

2 class hrs/wk, 2 er. 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 wilh 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 lcam Air Force concepts of command, discipline, tradition, and courtesies. Co-requisite: AS211, 212 , and 213 . Offered as needed.

## AS280A Preprofessional Officer Course

$3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 1 \mathrm{cr}$.
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. Instuction is conducted within the framework of an organized cadel corps and includes a sudy 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.

## $4{ }^{4}$

## Alled Health

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

## AH050 Health Care Delivery Systems

## 1 class hr/wk, 1 cr.

Organization of resources for healch 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, $\mathrm{Sp}, \mathrm{Su}$

## AH051 Health Occupations Overview A

 2 class hrs/wk, 2 cr .Surveys essentiak aspects of health occupations. Emphasizes health care delivery systems, societal issues, consumer headth decisions, heaith promotion and wellness, and worker rights and responsibilities. W

## AH052 Health Occupations Overview B <br> 2 class hrs/wk, 2 cr .

Continuation of AHO51 with emphasis on legal and ethical concepts, death and dying, medical asepsis, safety, and
job-secking skills. Prerequisite: Grade C or higher in AH05l. 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 patterms and handling emotional stress of the individual as well as coping with emotional conflict within oneself. $\mathbf{S p}$

## 4SL

## American Sign Language

## ASL101 American Sign Language, Term 1 <br> \section*{3 class hrs/wk, 3 cr .}

An introduction to American Sign Language (ASL) and the culture of the deaf community. Study and application of ASL vocabulary and grammar is introduced. $\mathbf{F}, \mathrm{W}, \mathrm{Sp}$, Su
ASL102 American Sign Language, Term 2
3 class hrs/wk, 3 cr .
Continuation of ASLIOI. Study and application of ASL vocabulary and grammar is incorporated in more depth.
Prerequisite: ASL101. F, W, Sp
ASL103 American Sign Language, Term 3 3 class hrs/wk, 3 cr .
Contituation of ASL102. Study and application of ASL vocabulary and grammar is further incorporated. Prerequisite: ASL102. sp

## 4 NTH

## Anthropology

## ANTH101 Human Evolution

3 class hrs $/ \mathrm{wk}$, 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. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## ANTH102 Archaeology

## 3 class hrs/wk, 3 cr .

An overvicw of human's prehistoric development. Covers basic archacological method and theory and the techniques used for dating the prehistoric past. Focuses on the agricultural revolution and the rise of the world's eartiest civilizations, and provides a gencral overview of the time of unrecorded human experience and the cariy beginnings of recorded history. W, Sp

## ANTH103 Introduction to Cultural

## Anthropology

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
A survey of culture and bow it shapes "human nature." Examines cross-cultural methodology and anthropological theory, language, economic systems, technology, social organization, political systems, art, religion, and the future of humanity. $\mathrm{F}, \mathrm{Sp}$

## 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 anturopological theory, the structure of language and how it transmits culture, the varicties of human subsistence pattems and tectrnologies, and interdependence of heredity, sociely, and environment. Offered as needed.

## ANTH208 Cultural Anthropology

## 3 class hrs/wk, 3 cr .

An exploration of human culturc. 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 .

Explores the processes of cultural growth and expansion and the nature of culture change. Analyzes the nature of culture as it relates to such conditions as acculturation and assimilation, the implication of technical assistance programs in developing nations, the ethics of applied antiropology, and the future of humanity. Prerequisite: ANTH207 and ANTH208 recommended. Offered as needed.

## 4RT

ART

## ART101 Understanding Art

3 class hrs 1 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 ant; subject, form, and content; media and techniques; critical, historical, analytical, and interpertive approaches to art; artists; and intentions. Prerequisite: College-level witing skills. F, W, Sp, Su

## ART115, 116, 117 Basic Design

2 class and $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
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, coniour, and value approaches to drawing, using a variety of monochromatic media. Covers traditional methods of representing shape and space on a two-dimensional suface. Provides individualized instruction is practical drawing skills designed for the beginner. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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 porfolio 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 vistual form of communication and expression. Prerequisite: ARTi31 and ART132, or consent of instuctor (based on porfolio review). W, Sp

## ART154 Pottery l.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, decoration, 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, decorating, glazing, and firing of projects, as well as visual and functional form considerations. Class fee $\$ 9 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## 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 $\$ 9 . \mathrm{Sp}$

## ART198A-E Independent Studies <br> Variable 1.5 credits

By use of the college leaming contract, provides student and instructor with vchicle to allow 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: <br> European Foreign Study Tour

 3 creditsDesigned 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 outtined, 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 att in the Westem 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 att in the Western tradition from the Middle Ages to A.D. I590. W

## ART206 Introduction to Art History

3 class hrs/wk, 3 cr.
Examines art in the Westem tradition from A.D. 1500 to the presen. 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, or VC082. Specific sofiware knowledge is not required. Class fee $\$ 15$. $\mathbf{F}$ Offered as needed.

## ART222 Graphic Design 2

2 class and $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Continues cxploration of graphic design with multiple colors, using the Macintosh computer and illustration software as a design and production tool. Prerequisite: ART115 and ART221. ART116 is recommended. 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, ART221, and ART222. ART116 is recommended. Class fec $\$ 15$. Sp , Offered as needed.

## ART230 Drawing: Anatomy for Artists

I class and 4 lab hrs/wk, 3 cr.
An introductory anatomy course designed specifically for art sudents. Includes a brief overview of body organization and temminology, an examination of body proportions and of the skeietal and musculature systems, and a summary of surface features (e.g. skin, supericial 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: ART231 or consent of instructor. ART232 recommended. Sp

## ART234 Figure Drawing 1

$6 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Uses the human figure as a constant subject matter. Offers intensive study of the problems the figure presents to the artist. Proportion, composition, and dynamic representation are emphasized. Prerequisite: ART131 or consent of instructor. Class fee \$9. W, Sp

## ART244 Stained Glass

## 6 lab hrshuk, 3 cr.

Provides individualized instruction for the beginner in the design and construction of two moderately challenging stained glass windows madc of both smooth cicar and textured colored glass. Introduces techniques in designing, pattern making, glass cutting, assembling, soldering, and puttying using both lead came and copper foil. Students produce original designs based on sources selected by the student. Class fee \$9. F, W, Su

## ART245 Intermediate Stained Glass

6 lab hrswk, 3 cr .
Provides individualized instaction for the intermediate level student who has taken ART244 or equivalent as determined by instructor. Students will meet and consult with the instuctor and complete project(s) which is significantly orignal, chatlenging, and complex. Sudents will learn special techniques such as stageblasting, fusing, and slumping. Prerequisite: ART244. Class fee \$9. F, W, Su

## ART246 Advanced Stained Glass

6 lab hrsiwk, 3 cr.
Continuation of ART245. Projects will reflect an in-depth investigation of sources, including personal influences, and exhibit technical mastery of the medium. Prerequisite: ART244, 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, including both low-lech and high-lech application and processes. Prerequisite: ART154, ART155, ART156, or consent of instructor. Class fee $\$ 9$. Offered as needed.

## ART261 General Photography

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

Basic introduction to 35 mm black and white photography. Includes camera equipment, correct exposure calibrations, film processing, darkroom techniques, and presentation of enlargements. Class fee \$10. F, W, Sp, Offered as needed.

## ART262 Technical Photography

2 class and 4 lab hrswk, 3 cr.
Introduction to studio and technical photography. Includes 35 mm , large format cameras, lighting, art direction, and copystand work. Prerequisite: ART261. Class fee $\$ 10$. Offered as needed.

## ART263 Intermediate Photography

2 class and $4 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Introduces color techniques, special effects, and commercial photography. Further development of traditional darkroom skils. Prerequisite: ART261 and ART262. Class fee $\$ 10$. Offered as needed.

## ART264 Digital Photography

2 class and 4 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Adds digital imaging and manipulation to taditional photographic skills. Prerequisite: ART261, ART262, and ART263, or consent of instructor. Class fee $\$ 10$. Offered as needed.

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

6 lab hrswk, 3 cr.
Introduction to the methods, materials, and technigues 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: <br> Press Process 1

6 lab hrswk, 3 cr.
Demonstrates methods, matcrials 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: ARTi31 or consent of instructor based upon demonstrated skill in drawing. ART115 and 116 recommended. Class fee \$9. W

## ART272 Introduction to Printmaking:

Press Processes 2
6 lab hrs/wk, 3 cr.
Demonstrates advanced techniques, methods, and materials of priztmaking using media such as relief (woodcu, linocut, embossing), intaglio (etching, engraving, collography), monotype/monoprint, and lithography. Emphāsizes studio practice and experimentation with all printmaking processes and slyle development as a means of personal expression. Relates historical and modem contexts. Prerequisite: ART27. Class fee $\$ 9 . \mathrm{Sp}$

## ART273 Printmaking: Press Processes 3

6 lab hrswk, 3 cr .
An integration of the melhods and matcials introduced in ART271 and ART272 to create mixed media p̈rints. Emphasizes collage plate printmaking and mixed media monoprinting. Offers lectures, demonstrations, and studio experience. Prerequisite: ART271 and ART272. Class fee $\$ 9 . \mathrm{Sp}$

## ART274 Printmaking: Screen Printing 2,

## Intermediate

6 lab hrs'wk, 3 cr.
Skill building in techniques of silkscreen printing introduced in ART270, including pholographic processes. Prerequisite: ART270. Class fee $\$ 9$. Offered as needed.

## ART275 Printmaking: Screen Printing 3,

Advanced
6 lab hrs/w, 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

$6 \mathrm{lab} \mathrm{hrswk}, 3 \mathrm{cr}$.
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 based upon dem:onstrated skill in drawing. ART115 and ART116 recommended. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## ART285 Intermediate Watercolor

6 lab hrs/wk, 3 cr.
Continuation of ART284 to develop technical control and acquire formal knowledge of an in general. Prerequisite: ART284 or consent of instructor. F, W, Sp

## ART286 Advanced Watercolor

6 lab hrs/wk, 3 cr.
A continuation of projects and explorations begun in ART284 and ART285. A self-motivated contract class. Prerequisite: ART284 and ART285, or consent of instructor. F, W, Sp

## ART291 Sculpture

6 lab hrs/wk, 3 cr.
An introduction to the use of materials, tools, and methods of sculpture, and an exploration of the three-dimensional form. Class fee $\$ 9 . \mathbf{F}$

## ART292 Ceramic Sculpture

6 lab hrs/wk, 3 cr.
$A n$ introduction to the potential and characteristics of clay as a creative sculptural medium. Class fee $\$ 9$. W

## ART293 Sculpture/Lost Wax Casting <br> 6 lab hrs/wk, 3 cr.

$\mathrm{An}_{\mathrm{in}}$ introduction to the casting and finishing of bronze scuipture through the lost wax process using ceramic shell technologies. 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 concems 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

## GUM

## Automotive Technology

## AUM050 Introduction to Automotive

4 class and $8 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
An in-depth look at automotive mechanics' duties and job opporturities, including present and future employment trends. Focuses on the complex and rapidly changing expectations of auto mechanics. Su

## AUM051 Basic Automotive Engines

3 class and $5 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 5 \mathrm{cr}$.
Designed to familiarize the student with construction, working principles, and methods of servicing a gasoline internal combustion engine. Proper use of tools, forque wrenches, micrometers, and equipment is stressed. Discusses theory and operation of simple and complex machines involving levers, cams, inertia, and momentum. Class fee \$15.F

AUM052 Automotive Machine Shop
2 class and $6 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
Designed to familiarize the student with the methods, technical aspects, theory, checks, and procedures used to recondition internal combustion engines and related components. Classroom theory along with hands-on laboratory experiences using precision measuring tools, torque wrenches, and machining equipment will introduce the student to the duties of an automotive machinist. Examines procedures, precision measuring devices, and special tools as well as theories of leverage, pressure/volume, expansion, momentum, inertia, and work related to engines. Prerequisite: AUM051 or consent of instrutor. Class fee \$15.W

## AUM056 Automotive Shop Safety

1 class hr/wk, 1 cr.
Guidelines for safefy in the automotive industry. Rules, regulations, and methods for the safe use of automotive shop equipment and work areas will be studied through class discussion and the use of filmstrips. $F$

## AUM057 Automotive Brake Systems

2 class and 7 lab hrs/wk, 5 cr.
Designed to provide instruction in the theory, service, and principles of automotive brake systems. Covers repair of disc and drum brakes, manual and power brakes, brake system control, indicating devices, and A.B.S. systems. Class fee \$15.F
AUM058 Auto Steering and Suspension
2 class and 8 lab hrs/wk, 5 cr .
Principles of automotive wheel, steering, and suspension systems. Includes study of front and rear suspension alignment; theory of suspension operation, wheel service and balance; and application of accepted repair procedures on automotive suspension. Class fee \$15. W

## AUM061 Manual Drive Trains and Axles I

## 3 class and 6 lab hrs/wk, 5 cr.

Theory and service of automotive power trains. Covers clutches and clutch linkage, dive shafts and universal joints, front wheel drive axles, manual transmissions, manual transaxles, rear axles, and differentials (including open and limited slip), Includes friction, gear reduction, and torque multiplication through use of gearsets, inertia, and momentum as they apply to power train components. Class fee $\$ 15 . \mathrm{Sp}$

## AUM062 Manual Drive Trains and Axles II

## 1 class and 6 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.

A continuation of AUM061 concentrating on diagnosis and service of automotive power train componeats on vehicles in the lab. Practical application of diagnosis, service, and repair of clutches, drive shafts, universal joints, front wheel drive axies, manual transmissions, manual transaxles, rear axles, differentials, and four-wheel drive transfer cases. Prerequisite: AUM061. Class fee \$15.F

## AUM063 Automatic Transmissions and

## Transaxle

3 class and 6 lab hrs/wk, 5 cr .
Fundamentals of automatic transmission operation, incleding methods of gear change, power flows, and basic hydraulic principles used in automatic transmissions. Emphasizes servicing and proper overhaul of automatic transmissions. Class fce \$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 venuri principle, fucl systems, gasoline, and engine variables pertinent to gasoline. Basic one-, two-, and four-bartel carburetor overhaul, service and adjustment, and fuel pump testing and inspection, Class fee $\$ 5 . \mathrm{F}$

## AUM067 Advanced Carburetion and Fuel

 Injection3 class and 5 lab hrs/wk, 5 cr.
Includes hands-on experience with advanced carburetor systems; 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. 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 instuctor. Class fee \$5. 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

7 lab hrswk, 3 cr .
Provides hands-on laboratory experience on prescribed automobile repairs in an operational shop. Speed and accuracy are stressed. The laboratory time will be dedicated to sepair and service of automatic transmissions, automatic transaxies, and external combustion engines. Prerequisite: Sixth-term standing in Automotive Technology program or consent of instructor. Class fee $\$ 15$. Sp

## AUM076 Automotive Electrical Systems II <br> 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. Class fee $\$ 5 . \mathrm{F}$

## 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 er.
Outines duties and responsibibities 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 habils, ethical practices, and interaction with employers, potential employers, and other employces. Sp

## AUM081 Tune-up and Driveability <br> \section*{3 class and 8 lab hrs/wk, 6 cr .}

Designed to familiarize the student with tune-up and diag. nosis procedures of the gasoline intemal combustion engine, including use of diagnostic equipment on the vehicle during laboratory practice, with emphasis on proper diagnosis and tuneup of modern computer-controlled vehicles. Computer scanners, exhaust analyzers. engine analyzers and oscilloscopes, along with all necessary general tools and equipment, will be used for tune-up procedures. Prerequisite: AUM067 and AUM077, or consent of instructor. Class fee $\$ 15 . \mathrm{Sp}$

## AUM082 Electronic Vehicle Controls

3 class and $4 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 5 \mathrm{cr}$.
Familiarizes the student with the theory, operation, and testing of automotive electronic engine control sysiem.

Includes emission control systems, automotive computer systems, anti-lock brake systems, turbo charging, and fuel injection systems as they relate to engine control systems. Prerequisite: AUM066 and AUM067, AUM076 and AUM077. Class fee $\$ 5$. W

## AUM086 Automotive Heating and Air Cond:tioning <br> <br> 3 class and 5 lab hrs/wk, 5 cr

 <br> <br> 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 condilioning systems, and troubleshooting techniques. Class fee $\$ 15$. W

## AUM088 Automotive Machine Shop-Upper

## Engine

1 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 2 \mathrm{cr}$.
Instruction in the theory and practice of automotive machining. Includes precision measuring tools, torque wrenches, valve and seat grinding, valve guide and seat repairs, resurfacing, valve springs, and cylinder head assembly. Class fee $\$ 10$. F

## AUM089 Automotive Machine Shop-Lower Engine

1 class and 3 lab hrs/wk, 2 cr.
Instuction in the theory and practice of automotive machining. Includes precision measuring tools, torque wrenches, cylinder block boring and honing, cylinder block tesurfacing, mainline checks and repairs, and connecting rod reconditioning. Class fee $\$ 10$.W

## AUM090 Automotive Machine ShopEngine Assembly

1 class and 3 lab hrs/wk, 2 cr.
Instruction in the theory and practice of automotive machining. Includes precision measuring tools, torque wrenches, camshaft timing checks, clearancing, blueprint measurement, and engine assembly and sealing techniques. Class fee $\$ 10 . \mathrm{Sp}$

## 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 $\$ 5 . \mathrm{Sp}$

## AUM092 Automotive Diesel Engines

2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Construction, working principles, and methods of servicing automotive diesel engines. Prerequisite: AUM051. Class fee $\$ 5$. Sp

## AUM280A-L Cooperative Work Experience

1-12cr.
Places students in a business, industry, of agency for on-the-job training and experience related to instruction. Field experience supervised by college instructors and work experience coordinators. Offered as needed.

## BA <br> BuSiness Administration

BA031 AMA Managing and Resolving Conflict 2.5 class hrs/wk, for 5 weeks, 1 cr .

Besigned for managers and supervisors. Presents skills to resolve conflicts effectively and devclop productive working relationships among staff. Class fee $\$ 89$. Offered as needed.

## BA032 AMA Communication Skills for <br> Managers <br> 2.5 class hrs/wk, for 5 weeks, 1 cr.

A step-by-step guide to effective oral, non-verbal, and written communicalion. For business, industry, and gov-
emment 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 supcrvisors 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 Finan-

 cial Statements2.5 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.

## BA036AMA 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 comfortabie with delegating responsibilities. Class fee $\$ 89 . \mathrm{Sp}$

## 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 nceds 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 <br> 2.5 dass hrdwk 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.

Techniques for management negotiators in business, industry, and govemment. Ranges from determining negotiation strategies to planning seating arrangements and selecting meeling sites. Class fee $\$ 89 . \mathrm{W}$

## 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 revicwing 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 hrswk, 1 cre 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 II2.5 class hriwk, 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: BA0SI. W, Sp

## BA053 Accounting Procedures III

## 4 class hro $/ \mathrm{wk}, 4 \mathrm{cr}$.

A stady of accounting for corporations, capital stock, corporate earring, corporate bonds, investments, analysis of financial staements, and manufacturing firms. For students who do not plan to atend a four-year college and/or who are not cnrolied in Chemeketa's Accounting program. Prerequisite: BA052 and BA101. Sp

## BA054 Governmental/Nonprofit Accounting I

3 class hrs/wk, 3 cr.
Comprehensive study of accounting for governmental and non-profit enitities. Considers budgcts, revenue and expendisure 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 instractor. F

## BA055 Governmental/Nonprofit Accounting II

3 class hrs/wk, 3 cr.
Compares and contrasts principles of accounting and reporting for state and local govermment with those of state and local school systems, collcges and universities, hospitals, and the federal govemment. Familiarizes the student with budgeting, cost deternination, and audits of governmental and nonprofit entities. Prerequisite: BA054. 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, monctary assets, valuations of inventorics, and current liabilities. Prerequisite: Concurrent enrollment in BA213 or consent of instructor. $\mathrm{F}, \mathrm{Sp}$

## BA057 Intermediate Financial Accounting II

## 4 class hrs/wk, 4 cr .

Compreheasive study of piant assets, depreciation, depletion, intangible assets, long-term liabilities, stockholders equity, earnings per share, and long-term investments. Prerequisite: BA056 or consent of instructor. W, F

## BA058 Intermediate Financial Accounting III

4 class hris/wk, 4 cr .
Comprehensive study of revenue recognition, accounting changes, error analysis, income taxes, pension plans, leases, statement of changes in financial position, financial stalement analysis, full disclosure, and price level adjusted financial statements. Prerequisite: BA057 or consent of instructor. $\mathrm{Sp}, \mathrm{W}$

## BA059 Auditing

3 class hrowk, 3 cr .
Outlines responsibilties and duties of independent, external auditors in applying acceptable audditing slandards, assisting with Enancial audits, preparing audit work papers, and making cucucial decisions. Emphasizes internal control and collection of sufficient evidence. Prereq-
uisite: BA057 or consent of instructor. Offered as needed.

## BA061 AMA Accounting for Managers

## 2.5 class hrs/wk, for 5 weeks, 1 cr.

Non-technical, basic accounting for managers. How to interpret financial information and incorporate it into decision making. For non-financial executives in general management, manufacturing, marketing, personnel, and research and development. Class fee $\$ 89$. Offered as needed.

BA062 AMA Writing for Management Success 2.5 class hrs/wk, 5 weeks, 1 cr .

How business, government, and industry employees may communicate more effectively by improving their writing and grammar skills. Class fee $\$ 89$.

## BA066 Succeeding in Business

6 class hrs/wk, 6 cr.
Integrates reading, writing, and study skills with a variety of business simulation activities to develop and apply an understanding of today's business environment. Includes activities in problem-solving, analyzing business trends, managing records, and colaborating wbile creating a business plan, a marketing plan, and business operations procedures. Offered as needed.

## BA070 Merchandising

## 3 class and $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.

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 on 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

 Reporting1 class hriwk, 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 hr/wk, 1 cr.
Introduces reconciliation procedares 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 hriwk, 2 cr.

Accounting for fixed assets in govermmental and proprietary funds. Includes study of capitalization policy, propetty disposition, and generally accepted accounting principles (GAAP) and financial reporting requirements. Prerequisite: Six credit hours of accounting or consent of instrictor. Offered as needed.

## BA095 State Financial Management System: RSTARS INTRO

3 class hrs $/ w k, 3 \mathrm{cr}$.
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 Slate of Oregon, specifically for the Oregon Statewide Financial Management System. Prerequisite: BA211 and BA054. Sp

## BA097 Supervisory Communication

1 class hr/wk, 1 cr.
How supervisors may work sogether 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. Prerequisite: BA066. 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 stadent 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, storckeeping, 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.

## BA199D USPAP

2 class hrs/wk, 2 cr .
A thorough examination of the Uniforn Standards of Professional Appraisal Practice (USPAP) used by govemment and the appraisal industry. Prerequisite: RE061 or one course in real estate appraising. $\mathrm{F}, \mathrm{Sp}$

## BA199E USPAP Plus

## 3 class hrs/wk, 3 cr .

A thorough examination of the Uniform Standards of Professional Appraisal Practice (USPAP) used by govemment and the appraisal industry, and examples of valuation problems and concepts commonly encountered in appraisal practice. Prerequisite: One course in real estate appraising. $\mathrm{F}, \mathrm{Sp}$

## 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 $/ w k, 3 \mathrm{cr}$.
Focuses on the use of Uniform Residential Appraisal Report (URAR) forms. Presents and explains the appraisal products, techniques, and requircments demanded by institutional lenders and the secondary mortgage market. Prerequisite: RE061 and CS101. F, Sp

## BA200K Conflict Resolution at Work

## 1 class hr/wk, 1 cr.

Stresses skills and methods which lead to conflict resolution in the workplace. Offered as needed.

## BA201 Community Leadership

1 class hr and $7 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
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 smail group exercises to improve skills in self-awareness, communication, values clarification, individual problem-solving, and presents strategies to assist the student in maintaining employment and in demonstrating a professional image and work behavior. F , $\mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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, intervicwing skills, coworker relations considering individual and cultural differences, customer relationships, conflict management, and coachingtteaching. Prerequisite: BA202 recommended. W, Sp

## BA204 Teamwork Dynamics

3 class hrs/wk, 3 cr.
Fundamentals of effective work team relationships. Covcrs team building, group problem solving, self-directed teams, cultural diversity in the Northwest, and diversity and team management. Prerequisite: BA202 recommended. Sp

## BA206 Business Management Principles

3 class lirs/ $\mathrm{wk}, 3 \mathrm{cr}$.
Analyzes and synthesizes historical and current theories in icadership, group processes, organizational structures, personnel policies, motivation, and training that allow an individual to plan, organize, control, staff, and direct subordinates in an organization. Prerequisite: BA066 and OA085. F, W, Sp, Su

## BA207 Collective Bargaining and Labor <br> 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 feceivable, notes and interest, and accounting for inventories. For accounting program students and students transfering to four-year institutions. Prerequisite: MTH070 or MTH061. F, W, Sp, Su

## BA212 Financial Accounting II

## 4 class hrs/wk, 4 cr.

Covers liabilities associated with payrolls; payroll transactions, special payroll records and forms, pricing invertories; accounting for inventories; inventories; costing of capital assets; current, long-term, and partnership liabilities; formation and division of eamings; changes in ownership and liquidation; capital acquisition and reporting; dividends; stock splits; donated capital; carnings measurement theory and practice; reporting income taxes on financial statements; corporate bonds; corporation accounting principies; and cash flow statements. Prerequisite: BA101, 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, fiexible 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 hr/wk, 3 cr .
Applies principles of written, oral, and nonverbal communication to the business environment. Covers practice in preparing business letters, memorandums, reports, resumes, job-application letters, and job interviews. Assignments may require swdents to work as individuals and groups, perfoming written and oral assignments. Prerequisite: OA120 or consent of instructor based on the proficiency exam. F, W, Sp, Su

## BA215 Cost Accounting

3 class hrs/wk, 3 cr.
Analysis of methods of detailed and specific identification of cost elements in business. Emphasizes job orders, processes, and standard cost accounting systems and their related theory; principles, techniques, and managerial use of cost accounting data; and use of budget and performance reports as related to cost accounting. Prerequisite: BA211, BA212, and BA213.F,W

## BA221 Production and Operations

## Management

3 class hrs/wk, 3 cr.
Overview of the functions an organization must perform to produce goods or services. Emphasis or 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 hrsiwk, 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 intemal rate of return), cost of capital, and cash and credit management. Prerequisite: BA212.W, Sp

## BA223 Principles of Marketing

3 class hrs $/ w k, 3 \mathrm{cr}$.
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. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## 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, intervieving 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: $\mathrm{BA} 226 . \mathrm{W}, \mathrm{Sp}$

## 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 BA 052 or BA 212 . 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 transpontation, 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. $\mathrm{Sp}, \mathrm{Su}$

## BA233 Marketing Research

3 class hrs/wk, 3 cr .
Research design and the development of infomation gathering systems as applied to marketing. Use of secondary and primary data and the interpretation of information gathered. Prerequisite: One term of psychology or sociology. Offered as needed.

## BA234 International Business

3 class hrs/wk, 3 cr .
A managerial view of intemational marketing. Presents theories and trends in global marketing of goods and services. Analyzes cultural, legal, political, and monetary factors; development of an appropsiate marketing mix; import management; and trade promotion. Prerequisite: BA101, BA223, or equivalent business background as determined by instuctor. 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 nedia. 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 $/ \mathrm{wk}, 3 \mathrm{cr}$.
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 portiolic. Prerequisite: BA101, BA211, or equivalent as determined by instructor. F, W, Sp

## BA243 Introduction to Consumer Behavior

 3 class hrs/wk, 3 cr .How befavioral science concepts, theories, and research observations apply to various aspects of consumer behavior. A discussion of the influences of perception, personality, attiludes, culture, family life, and social class on how and why people buy and consume products. Offered as needed.

## BA244 Records Management

3 class hrs $/ w \mathrm{k}, 3 \mathrm{cr}$.
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. Offered as needed.

## 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 $/ \mathrm{wk}, 3 \mathrm{cr}$.
Studies current supervisory processes, reviews supervisory responsibilities, provides practical instuction for new and current supervisors; and examines the role of supervision in business and industry. Offered as needed.

## BA256 Income Tax Accounting I <br> 4 class hrs/wk, 4 cr .

First of two courses in preparing federal and Oregon individual income tax retums. Completing BA256 and BA257 meets the Board of Tax Service Examiners' educational requirements to take the Oregon tax preparer's \}icensing examination. Prerequisite: BA212 or BA052, or consent of instructor. $\mathrm{F}, \mathrm{Sp}$

## BA257 Income Tax Accounting II <br> 4 class hri/wk, 4 cr.

Second of two introductory courses in preparing federal and Oregon individual income tax retums. 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

## 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 creait. Forces that modify the operation of the morgage 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 hr/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, tust services, bank loans, and investments. Offered as needed.

## 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. Offered as needed.

## BA271 Analyzing Financial Statements 3 class hrs/wk, 3 cr .

Techniques recessary 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, advertisisg, 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: Offered as needed.

## BA277 Business Ethics

3 class hrs/wk, 3 cr.
A comparative study of ethical and cconomic systems designed to increase decision-making capabilitics. 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. Offered as needed.

## BA280 Cooperative Work Experience see AUM280.

## BA281 Consumer Lending

3 class hrs/wk, 3 cr .
A survey of yarious 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, sequirements of making credit decisions, loan documentation, and closing. Prerequisite: BA269 and current employment in a financial institution of enrollment in the Banking and Finance program. Offered as needed.

## BA282 The Trust Business

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
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. Offered as needed.

## BA284 Law and Banking- Applications

3 class hrs/wk, 3 cr .
An introduction to laws pertaining to secured transactions, leters of credit, and bank collection processes. Discusses check iosses and a broad range of legal issues related to processing checks. Includes up-to-date summaries of laws related to collateral, perfection, and defautt. Case studies illustrate imporiant legal points related to banking practices. Prerequisite: BA269. Offered as needed.

## BA299 Business Policy

## 3 class hrs/wk, 3 cr.

An analysis of management decisions, exccutive responsibilities, and company objectives within the framework of today's society. Policy development is studied through business cases and field study. Emphasis on written communication of decisions, policies, and plans. Prerequisite: BA206, BA223, BA226, and BA215. Offered as needed.

## BA299B Special Studies: Budgeting

## in the Public Sector

## 3 class hrs/wk, 3 cr .

Provides an overview of the techniques and politics of public sector budget preparation, modification, and implementation. Includes history, decision-making process, methods, and implementation of public sector budgeting. Prerequisite: Basic math skills. F

## 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.PM. Exam Modules I (purchasing) and II (administration). Sample tests are used to help students leam 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 longterm decisions. Sp

## 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, $5 \mathrm{wks}, 1 \mathrm{cr}$.
Provides a basic understanding of lending and associated career opportunities in the banking field. 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 porfolios. 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; cxamination and processing of documents accompanying notes secured by bonds, stocks, and savings accounts; and concepls of attachment. perfection.
prionity, defaults, and foreclosure. Specifically useful for notetellers and commercial lending clerks. Prerequisite: Employment in banking or enrollment in Banking and Finance program. Offered as needed.

## 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-AlB

3 class hrs/wk, 3 cr .
Discusses theory and practice of tnust department investment services. Covers securities market, alternatives to securitics 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 $5 \mathrm{wks}, 1 \mathrm{cr}$.
Customer service procedures in opening new bank accounts. Offered as needed.

## BAN063 Product Knowledge

3 class hrs/wk for 5 weeks, 1 cr.
Inciudes three separate modules: consumer products, corporate products, and trust products. Emphasizes the range of services barks offer to mect customer needs and increase sales opporunities. Prerequisite: Employment in banking or enrollment in the Banking and Finatce program. Offered as needed.

## BAN064 Personnel and the Law

## 3 class hrs/wk for $5 \mathrm{wks}, 1 \mathrm{cr}$.

Concentrates on numerous laws that shape banking's personnel policies and procedures. Includes Civil Rights Act, Equal Pay Act, equal employment opportunity, and laws and legislation affecting Vietnam-era veterans. Offered as needed.

## BAN064A Understanding and Selling Bank

## Services

3 class hrs/wk, 3 cr.
Provides the skills needed to sell bank services and mect customer necds while cultivating a positive attitude towards selling. Offered as needed.

## BAN066 Supervisory Training-AIB

## 3 class hrs/wk, 3 cr.

Theoretical and practical skills for supervisors. Covers management roles and responsibilitics, management teamwork, task analysis, job performance techniques, employee orientation, and delegation of responsibilitics. Prerequisite: Current or previous employmens in banking. Offered as needed.

## BAN066A Pre-Supervisory Training

3 class hris/wk for 5 wks, 1 cr .
Preparation for changing from non-supervisory to supervisory role. Covers basic functions of job supervision, providing guidelines for managing this change successfully. Offered as needed.

## BAN067 Teller Training and Development

3 class hrs/wk for $5 \mathrm{wks}, 1 \mathrm{cr}$.
Helps bank lellers develop and improve abilities and knowledge essentia! in pefformance of their duties. Emphasizes dealing with customers and following normal banking procedures. Offered as needed.

## BAN070 Economics for Bankers

3 class hrs/wh, 3 cr .
An introduction to the principles of economics as they pertain to banking. Special emphasis on macrocconomics. Offered as needed.

BAN072 Consumer Compliance
3 class hrs/wk for $5 \mathrm{wks}, 1 \mathrm{cr}$.
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. Offered as needed.

BAN077 Bank Management Fundamentals 3 class hrs/wk, 3 cr.
Introduces a variety of moderm 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 wks, 1 cr .
How to develop better communication skills in working with bank customers. Covers effective ways of establishing contact, determiring needs, defining and resolving problems, and closing transactions. Prerequisite: BA269 or employment in banking. Offered as needed.

## 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. Emptasis is on the system rather than the product. Prerequisite: BA269. Offered as needed.

## BAN081 Trust Operations

3 class hriswh, 3 cr.
Discusses concepts and ideas that comprise the various trist functions and translates them into workable procedures. Prerequisite: BA269. Offered as needed.

## BAN085 Fundamentals of Analyzing Financial

 Statements3 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. Offered as needed.

## BAN093 International Banking

3 class hry/wk, 3 cr.
An overview of fundamentals of international banking. Discusses how money is transferred among countries, how trade is financed, what international mmancing 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 activitics. Prerequisite: BA269. Offered as needed.

BAN280 Cooperative Work Experience see AJM280.

## BI <br> Brology

BI060 Basic Science Principles
2 class and 2 lab hrs/wk, 3 cr .
Designed for dental assisting and hospitality systems management students. Presenis intoductory concepts of cell biology, microbiology, chemistry, and physics as applied to specific topics. Includes practical application of problem solving, scientific observation and measurement, use of equipment, and basic laboratory techniques. Class fee $\$ 8 . \mathrm{F}$

## B1071 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. Includes lecture, demonstration, and laboratory practice. Class fee $\$ 8$. Offered as needed.

## BI072 Body Structure and Function II

2 class and 2 lab hrs/wk, 3 cr .
A continuation of B1071. Prerequisite: B1071. Class fee $\$ 8$. Offered as needed.

## Bl101 General Biology

3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
Investigates the diversity of organisms, principles of ecology, and effects and corsequences of ecosystem aleration by humans. This sequence need not be taken in order, although some caryover from one term to the next does occur. Class fee \$12.F, Sp
BL102 General Biology
3 class and 3 lab hrs/wk, 4 cr .
Covers basic principles of genetics, natural selection, evoIution, origin of species, population genetics, and animal behavior. Class fee $\$ 12$. F, W, offered summer as needed.

## BI103 General Biology

3 class and 3 lab hrs/wk, 4 cr .
Covers principles of animal stracture and function (physiology). Emphasizes human reproductive, nervous, circulatory, immune, and respiratory systems. Covers fertilization and development to birth. Includes plant tissues and organ structure, reproduction, seedling development, nutritional needs, water transport, and hormonal responses to environment stimuli. Prerequisite: None. This sequence need not be taken in order, although some carryover from one term to the next does occur. Class fee $\$ 12$ W, Sp , offered summer as needed.

## 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

## B1132 Environmental Science 2

3 class and 3 lab hrr/wh, 4 cr.
Examines environmental problems and issues related to resource use and managemen! such as deforestation, global warming, soil erosion, water and food shortages, the loss of biodiversity, and energy issues. Prerequisite: BII31 or BI101. Class fee \$12. W

## BI133 Environmental Science 3

3 class and 3 lab hre/wk, 4 cr .
Examines environmental probiems 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 $\$ \$ 12$. $\mathrm{Sp}_{\mathrm{p}}$

## B1200 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: BLI01, 102 , or consent of instuctor. Class fee $\$ 12 . \mathrm{Su}$

## BI231 Human Anatomy and Physiology

3 class and 3 lab hrs $/ \mathrm{wk}, 4 \mathrm{cr}$
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 the study of cells, tissues and the integumenary, skeletal, and nervous systems. Prerequisite: $\mathrm{CH} 110, \mathrm{CH} 104$ or equivalent, 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/wh, 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: B1231 with a grade of C or higher; CH 110 or CH 105 and CH 106 (CH106 must be taken concurrently with B1232 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 thre--term sequence providing an in-depth examination of the stucture of the hurnan body. Includes the sudy of the endocrine, digestive, urinary, and reproductive systems, as well as an examination of body fuids, electroiytes, pH balance, and medical genetics. Prerequisite: BI232 with a grade of C or higher; CH 110 or CH 104 , CH 105 , and CH 106 ; or consent of instuctor. Class fee $\$ 12$. 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: CH110, CH 104 . Class fee $\$ 12$. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$, offered summer as needed.

## BLD

## Bulding 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 1

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.

Contimues BLD051. Covers building construction hazards such as vertical shafts, treatment of exterior and interior surfaces, cxit requirements, fire protection systems, public property, and weather protection. Prerequisite: BLD051.W

## BLD053 Building Codes III

## 3 class hrr/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 $/ \mathrm{wk}, 3 \mathrm{cr}$.A study of building department administration including the laws and principtes 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 materiais. Class fee $\$ 10 \mathrm{~W}$

## BLD060 Fire Protection for Buildings

## 3 class hrs/wk, 3 cr.

Installation, functions, and requirements of sprinkier systens. 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 <br> 3 class hrswk, 3 cr.

Specific code requirements for all types of masonry construction, both structural and nonstrectural. Includes an introduction to fireplace construction. Class fee $\$ 10 . \mathrm{Sp}$

## BLD063 Structural Inspection-Concrete

## 3 class hrs/wk, 3 cr.

Concrete as a construction material. Covers physical properties, including mix design, handling, storage, deliyery, 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: BLDOG9. W

## BLD067 Nonstructural Plan Review

2 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
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, constuction of foundation and retaining structures, and general grading. Enphasizes 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 hirs/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 as determined by instructor. $F$

## BLD071 Plumbing Codes I

3 class hrs/wk, 3 cr .
Investigates certain standards of the Uniform Plumbing Code. Covers principles of plumbing design, materias, 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 slandards. 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 twofamily dwelling applications. W

## BLD092 CAB0 One-and Two-Family Dwelling

 Code3 class hes 1 wk, 3 cr.
A study of the CABO Onc- and Two-Family Dwelling Code as it relates to residential construction and applicable codes. Includes administrative, stuctural, 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 oppostunity to apply knowledge gained in the classroom to actwal field conditions. Class fee $\$ 10$ each. F, W, Sp

## BLD280 Cooperative Work Experience see AUM280.

## BOT

## Botany

## BOT201 General Botany

3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
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 $\$ 12$. $\mathbf{F}$

## BOT202 General Botany

3 class and 3 lab hrs $/ 4 \mathrm{kk}, 4 \mathrm{cr}$.
Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the study of genelics, 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 $/ \mathrm{wk}, 4 \mathrm{cr}$.
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, hommones, water, and nutricalts. Laboratory work emphasizes the classification of flowering plants. Prerequisite: High school biology and chemistry recommended. Class fee $\$ 12 . \mathrm{Sp}$

## CH

## Chemistry

## CH104 Chemistry for Allied Health

4 class and 2 lab hrs $/ \mathrm{wk}, 5 \mathrm{cr}$.
First course in a three-term sequence for nursing and allied health students taking a one-year survey course in Chemistry. The first term describes the applications of chemical principles to the life sciences and is a prefequisite to understanding the function of living organisms. Includes: matter, atomic structure, chemical bonds, reactions, molecules, and solutions. Prerequisite: MTH060 or MTH070. Class fee \$8. F, W, Sp, Su

## CH105 Chemistry for Allied Health

## 4 class and 2 lab hrsiwk, 5 cr .

Continuation of CH 104 . Intended for nursing and allied health students. Introduces and investigates organic reactions. Includes: energy, radiation, acids, bases, and organic compounds. Prerequisite: CH 104 . Class fee $\$ 8$. F, W, Sp, Su

## CH106 Chemistry for Allied Health

4 class and $2 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 5 \mathrm{cr}$.
Continuation of CH 105 . Covers the chemistry and metabolism of carbohydrates, lipids, proteins, and nucleic acids. Prerequisite: CH 105 . Class fee $\$ 8 . \mathrm{Sp}$

## CH110 Foundations of General, Organic, and

 Biochemistry4 class and 2 lab hry $/ \mathrm{wk}, 5 \mathrm{cr}$.
A one-term survey course of basic general, organic, and biochemistry designed to introduce students to the chemistry needed for understanding the functions of living organisms. Intended to serve as a minimum prerequisite for students entering beginning anatomy and physiology courses. Prerequisite: MTH060 or MTH070. No previous background in chemistry is required. Class fee \$8. F, W, Sp, Su

## 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: MTH060 or MTH070. Class fce $\$ 8$. Offered as needed.

## CH115 Consumer Chemistry

3 class and $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.
A general cducation approach to chemistry, emphasizing the meaning of science and how chemistry is connected to other discipines and to the students' lives. Covers science vs. technology, scientific method, atonic structure and theory, nuclear chemistry, chemical bonding, nomenclature, chemical reactions, acids and bases, oxidation and reduction, and chemistry of the earth. Class fee $\$ 8 . \mathrm{F}$

## 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 the starving 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 thre-term sequence for the non-science student. Covers carbohydrates, fats, proteins, vitamins, brewing, baking, food additives, household chemicals, cosmelics, chemotherapy, dnugs, sports medicine, and
chemical toxicology. Prerequisite: CH 116 or consent of instuctor. Class fee $\$ 8 . \mathrm{Sp}$

## CH121 College Chemistry

4 class and $2 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 5 \mathrm{cr}$.
First of a three-term sequence. Introduction to the fundamentals of chemistry. A transer 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, anergy, periodicity, atomic stucture, and bonding. Prerequisite: MTH070 or equivalent as determined by instructor. Class fee \$12. F, W

## CH122 College Chemistry

## 4 class and 2 lab hrdwk, 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 hrr/wk, 4 cr .
Second of a thre-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 Engincers

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

Third of a three-temn sequence. Covers chemical bonds, polar molecules, the periodic table, conductivity, bonding theories, molecular shapes, crystals, nonconductors, semiconductors, liquid crystals, metals, alloys, ccramic materials, polymers, electrochemistry, oxidation and reduction, electrochemical cells, galvanic celis, electrolysis, and electrolytic processes. Prerequisite: CH202. Class fee $\$ 12 . S p$

## CH221 General Chemistry

## 4 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 5 \mathrm{cr}$.

The first of a three-term sequence for students majoring in science and related professional fields. Covers matter and measurement; atorns, 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 $3 \mathrm{labhrs} / \mathrm{wk}, 5 \mathrm{cr}$.
The second term of a three-term sequence course designed specifically for students majoring in science and related professional fields. Covers periodic properties; molecular bonding; hybridization; resonance; solutions and solids; intermolecular forces; rates of reactions and organic polymers. Prerequisite: CH 221 . Class fee $\$ 12$. W

## CH223 General Chemistry

4 class and 3 lab hrs/wk, 5 cr .
The third term of a three-term sequence course for students majoring in science and related fields. An in-depth study of equilibria; acids and bases; ionic reactions; complex ions, oxidation and reduction; electrochemistry, qualitative analysis, and biopolymers. Prerequisite: CH 222 . Class fee $\$ 12 . \mathrm{Sp}$

## 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 cycioalkanes, conformational analysis, stereochemistry, and alkenes and akynes. Microscaic laboratory will reinforce concepts. Prerequisite: CH 123 or CH 223 . Class fee $\$ 12$. F

## CH242 Organic Chemistry

3 class and $4 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 5 \mathrm{cr}$.
Principles of organic chemistry for students majoring in the heaith, biological and cnvironment sciences. Emphasizes the structure, nomenclature, physical properties, and chemical reactivities of organic molecules. 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 .
Principles of organic chemistry for students majoring in the health, biological and environmental sciences. Emphasizes the structure, nomenclature, physical properties and chemical reactivates of organic molecules. Stresses carboxylic acids and their derivatives, amines, condensation reactions, carboxylics, lipids, amino acids, proteins, and nucleic acids. Prerequisite: CH242 or consent of instuctor. Class fee $\$ 12$. Sp

## CJ

## Crminal Justice

## CJ100 Survey of the Criminal Justice System

## 3 class hrs/wh, 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 feviews 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 pbilosophy of law enforcement and the administration of justice. Previcw 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 hro $/ \mathrm{wk}$, 3 cr .
An introduction to the history and development of the prison system and the role of imprisonment as a cortectional tool. Surveys some of the more significant activities involved in the treatment of incarcerated prisoners. Offered as needed.

## CJ132 Introduction to Parole and Probation

3 class hrs/wk, 3 cr.
Basic principles and techniques involved in correctional programs of probation and parole and a critical analysis of their individual roles in the administration of criminal justice. Offered as needed.

## CJ200 Police and Public Policy

3 class hrs/wk, 3 cr .
Discusses the role of criminal justice practitioners in maintaining community relations. Examines the interrelationships and role expectations of agencies and the public, police and community tension, minority groups, social forces, and police image. Offered as needed.

## CJ206 Crime and Delinquency

3 class hrs/wk, 3 cr.
Study of crime and delinquency data using age, sex, race, socioeconomic and educational status, urbanization, and other variables. Makes an in-depth inquiry into victimological studies together with collective and political criminality. Discusses class culture and its relationship with gang delinquency. Offered as needed.

## CJ207 Seminar in Criminal Justice

## 3 class hrs $/ w k, 3 \mathrm{cr}$.

Anaiysis 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 Code3 class hrs/wk, 3 cr .
Origin and structure of common-law crimes and procedures, and statutory crimes. Definitions and distinctions between criminal and civillaw, 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 hrsww, 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 procedares. 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 jovenile court philosophies and curent 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 curreat prevention, control, and rehabilitative programs. Offered as needed.

## CJ232 Introduction to Corrections Casework

 3 class hrs/wh, 3 cr .Approaches to behavior modification through intervicwing and counseling. Tectriques in counseling and ineerviewing 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 SKILL
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 assignmeats intended to replicate technical and professional wititng needs. Class fee $\$ 2$. F, W, Sp, Su

## COM052 Communication Skills II

3 class hris $/ w \mathrm{k}, 3 \mathrm{cr}$.
Designed to improve the student's speaking, reading, writing, and listening skills. Provides practice in effective habits of communication through listering, participating in interpersonal communication, presenting demonstrations orally, working in groups, interviewing for jobs, and leaming about persuasion. Prerequisite: COM051 or equivalent as determined by instructor. $\mathbf{F}, \mathbf{W}, \mathbf{S p}$

## 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 clacity, coherence, conciseness, and accuracy. Prerequisite: COM051 or consent of instructor. Class fee $\$ 2 . \mathrm{Sp}$

## CPL <br> Credit for Prior Learning <br> CPLI20 Prior Learning Resume <br> 3 class hris/wk, 3 cr . <br> How to obtain credit hours for prior leaming. Focuses on identifying career and educational goals; defining college level leaming; 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. Prereqvisite: MTH070 and RD115, or equivalent \}evel of ski!] 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 enrolment, or consent of instuctor. Class fee \$12.F,W

## CIS122 Computer Information Science III

4 class hrs/wk, 4 cr .
Third in a threc-course sequence. Includes introduction to integrated information application systems; analysis and comparison of flat file information systems in relation to
those of database management systems; basic spreadshect concepts and considerations necessary for the interchange of information among spreadsheets, word processing, database files, and flat file systems; and discussion of network fundamentals and communication packages. Concepts are reinforced in a laboratory environment. Prerequisite: CIS121 or consent of instructor. Class fee $\$ 12 . \mathrm{Sp}$

## 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 hr/wk, 1 cr.
An introduction to the use of microcomputers in an office. A brief overview of necessary hardware and software, proper use of the equipment, operation of a microcomputer, use of purchased programs, and maintenance of computer files. Class fec $\$ 8$. F, W, $\mathrm{Sp}, \mathrm{Su}$

## CS101 Introduction to Microcomputer Applications <br> 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 detemined by the instructor, RD090 or equivalent as determined by the instructor, and keyboadd familiarity. Class fee \$12. F, W, Sp, Su

## CS103 Microcomputer Skills Problem Solving

4 class hrs/wk, 4 cr .
Use of microcomputers as a tool to solve information processing problems. Presents skilis necessary to keep up with the rapidly changing developments in computer hardware and software. Includes critical thinking, logical analysis, discovery leaming, and other problem-solving techniques. Prerequisite: C 101 or CIS 120 , or consent of instuctor. Class fee $\$ 12$. Offered as needed.
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, and creation and updating of a relationas database. CS125A2: Simple queries, reports, and forms. CS125A3: Complex queries, reports, and forms. Prerequisite: CS125Al: CS101 or consent of instructor; CS125A2: CS125A1; CS125A3: CS125A2. Class fee $\$ 4$ cach. $\mathrm{W}, \mathrm{Sp}$

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: $\mathrm{CS101}$ or equivalent experience. Class fee \$12. W

## CS125E Worksheets-Excel

4 class hrs/wk, 4 cr .
A course in the use of the Excel electronic spreadsheet software in a multi-workshect environment. Prerequisite: CS101 or equivalent as determined by the instructor. Class fee $\$ 12 . \mathrm{Sp}$

## CS125FX Micro Database Software-FoxPro

3 class hri/wk, 3 cr.
Beginning course covering the use of the relational database language. The Foxpro language is used to introduce personal computer (PC) database language concepts. Prerequisite: CS101 or equivalent as determined by the instructor. Class fee $\$ 12 . \mathrm{W}$

## 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 $\$ 12$. Offered as needed.

## CS125Q Worksheets-Quattro

4 class hrs/wk, 4 cr.
Includes concepts associated with data type (labels and values) and how to build arithmetic formulas and use internal functions. Applications may include financial functions, statistical functions, and the use of commands to perform data distribution and general change of the worksheet appearance as well as graphics representation. Prerequisite: CS 101 or equivalent as detemined by the instructor. Class fee $\$ 12$. F, offered as needed.

## CS125SS Lotus I-Worksheets

4 class hrswiw, 4 cr.
Use of clectronic spread sheets in a multi-worksheet environment. Electronic spread sheet software may vary from term to term. Prerequisite: CS101 or equivaleat as determined by instructor. Class fee $\$ 12$. W

## CS131 Introduction to Data Processing

3 class hrs/wk, 3 cr .
Concepts, clements, and structure of business data processing systems. Includes classifying, calculating and reporting functions, programming, and computer fundamentals. Prerequisite: RDOOO or equivalent as determined by the instructor. Class fee $\$ 12$. Offered as needed.

## CS133A Assembler I

## 4 class hrs/wk, 4 cr .

Introduces IBM System Assembler language, using standard and decimal instuction sets. Prerequisite: CIS121. Class fee $\$ 12$. As needed.

## CS133C COBOLI

4 class hrs/wk, 4 cr .
An introduction to ANS COBOL programming. Coding, debugging, and documenting simple business-oriented programs. Emphasizes language stucture and problem solving by applying top-down structured programming techniques. Prerequisite: CIS121 or equivalent as determined by the instructor. Class fee $\$ 12 . \mathrm{W}$

## CS133E EASYTRIEVE PLUS

## 3 class hrs $/ w k, 3 \mathrm{cr}$.

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 $\$ 12$. Offered as needed.

## CSI33F FORTRANIV

## 4 class hrs/wk, 4 cr .

An introduction to language structure, manipulation of arrays, inpit and oulput formats, coding lechniques, function, subroutines, disk files, and memory-dump debug-
ging. 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: CIS 121 or equivalent as deternined by the instructor. Class fee $\$ 12$. Offered as needed.

## CS133U C Language

4 class hros/w, 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 $\$ 12$. Offered as needed.

## CS133VB Yisual Basic • Event-Driven Pro gramming

4 class hrs/wk, 4 cr .
An introduction to the Visual Basic programming environment. Emphasizes application event-driven and structured problem-soiving and programming techniques to develop software. Students will design, code, test, and debug several programs. Prerequisite: ClS121 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. As 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; 3) inquiry and reporting programs. Prerequisite: CS 125 DB or $\mathrm{CS125FX}$, word processing skills, and some programming experience would be helpful. Class fee \$12. Sp

## CS135FX Advanced Micro Database-FOXPRO

## 3 class hirs/wk, 3 cr .

Advanced course in development of an application system using FoxPro. As a minimum, the system is to include 1) a menu program which involves multiple menu levels and waich 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; 3) inquiry and reporting programs. Prerequisite: CS125DB or CS125FX, word processing skills, and 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 $\$ 12$. Offered as needed.

## CS140A 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: CSI33C. Class fee $\$ 12 . \mathrm{Sp}$

## CS140B Microcomputer Operating Systems

3 class hros/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 hri/wk, 1 cr

A study of the MS/DOS operating system used on IBMPC type microcomputers. Includes practice in using MSDOOS to run a microcomputer and access files. Prerequisite: CS101 or equivalent as determined by the instructor. Class fee $\$ 3$. Offered as needed.

## CS140U UNIX

## 3 class hr/wk, 3 cr .

A study of the UNIX operating system. Includes experience in using the UNIX operating system to run a microcomputer, access files, and communicate with other microcomputers. Prerequisite: CS101 or equivalent as determined by instuctor. Class fee $\$ 3$. Offered as needed.

## CS145 Microcomputer Hardware/Software Evaluation

3 class and 2 lab hours $/ \mathrm{wk}, 4 \mathrm{cr}$
A study of the hardwate concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and hardware. Prerequisite: Concurrent earoliment in CS240, or CS140B and ELT067. Class fee $\$ 12$.W

## CS160 Introduction to Computer Science

3 class hrs/wk, 3 cr.
Presents the history and current and future trends in computer science, as well as hardware and software development. Surveys campus computing resources, and introduces use of lnternet facilities, and network basics. Prerequisite: CS101 or equivalent as determined by instructor. F

## CS161 Computer Science I-C Language <br> 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 $\$ 12 . \mathrm{F}$

## 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 soting 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-casking 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 informa-
tion. Compares access tools and providers. Class fee $\$ 40$. Offered as needed.

## CS233A Assembler II

3 class and 6 lab hirs/wk, 5 cr .
A programming option for students interested in becoming systems programmers. Subprogram modules and macros are written, linked, and tested. Prerequisite: CS133A. Class fee $\$ 12$. Offered as needed.

## CS233B BASIC for Programmers

3 class and 3 lab hrs/wk, 4 cr .
Features and instructions of BASIC language. How to write computer programs using BASIC that print feports and build and maintain files. Students develop reports and file contents. Prerequisite: CS133B or equivalent as determined by the instructor. Class fee $\$ 12$. As nceded.

## CS233C COBOL II

## 4 class hris/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 $\$ 12 . S p$

## CS233U Advanced C

## 4 class hrs/wk, 4 cr .

A continuation of CSI33U. 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/CICS Programming <br> 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 plaming, 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: CS 233 C or consent of instructor. Class fee $\$ 12 . \mathrm{F}$

## CS237 Software Design

## 3 class and 3 lab hrs $w k, 4 \mathrm{cr}$.

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 MSDOS capabilities and commands. Incorporates the use of third-party utility programs, hard disk management concepts, MSDOS in a network environment, and MSDOS-OS-AIX migration considerations. Prerequisite: CSI4OB or consent of instuctor. 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. Mcthods 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. $\mathbf{F}$

## CS246 Systems Analysis II

3 class hriswk, 3 cr.
Fundamentals of automated systems and procedures. Techniques and principles of top-down systems analysis and design, data gathering, feasibiitity studies, problem analysis, systems economics, forms design and control, procedure writing, and the planning involved in the instal. lation of electronic data processing systems. Prerequisite: CS244. W

## CS260 Computer Science III: Data Structures

 4 class hrs/wk, 4 cr.The third term of computer science concepts, emphasizing the implementation and analysis of algorithms for searching and sorting, using linear and recursive data structurcs. Prerequisite: Grade of C or higher in CS162 or equivalent as determined by the instructor. Class fee $\$ 12.5 \mathrm{p}$

## CS275 Database Management

4 class hrs/wk, 4 cr
An overview of database management. 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 modeis. Presents techniques of implementing these models into a relational database scheme and discusses relational algebra concepts. 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 perforn typical query commands. Prerequisite: CISI21 or equivalent as determined by the instructor. Class fee $\$ 12$. Offered as needed.

## CTX

## Construction

## CTX050 Fundamentals of Construction

## 10 lec and 22 lab hrs $/ \mathrm{wk}$, 18 cr .

Provides an orientation to constuction 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, Su

## 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, and framing. 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 $\$ 452 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## 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 $/ w k, 3 \mathrm{cr}$.
A begimning stuady of surveying techniques, including fundamentals of taping and leveling, care and handling of surveying instruments, and office procedures. Prerequisite: MTH081 and concurrent enroilment in CVLO60B, or consent of instructor. $\mathbf{F}$

## CVL060B Plane Surveying I-Lab

6 lab hrs/wk, 2 cr
A beginning study of basic survey field techniques, and care and handing of survey equipment. Prerequisite: Concurrent earoliment in CVL060A or consent of instructor. Class fee $\$ 10 . \mathrm{F}$

## CVL061A Plane Surveying II-Lecture

3 class hrs/wk, 3 cr .
A continuation of CVL 060 A . Study of distance and direction measurement using theodolites, steel tapes, traversing and associated office computations, areas, stadia, circular curves, as well as a brief outtine of public land surveys. Exposure to electronic distance measuring devices. Prerequisite: CVL060A; concurrent enrollment in MTH082 and CVL06IB. W

## CVL061B Plane Survey Il-Lab

6 lab hrs/wk 2 cr.
Continuation of CVLO60B. 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 CVLO64B, or consent of instructor: Sp

## CVL064B Construction and Route Surveying.

 lab
## 6 lab hrswk, 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 CVLO64A or consent of instructor. Class fee $\$ 10 . \mathrm{Sp}$

## CVL066A Surveying for Drafters

## 2 class $\mathrm{hrs} / \mathrm{wk}, 2 \mathrm{cr}$.

Basics of surveying terminology and practices. Calculations are made to balance a traverse, solve curves, and detemine 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, sladia, and steel tape. Simple procedures for the care and adjustment of survey equipment is covered. Prerequisite: Concurent enrolment in CVLO66A or consent of instructor. Class fee $\$ 10 . \mathrm{Sp}$

## CVL069 Survey Equipment Operation Review

3 lab hr/wk, 1 cr .
A sixth-term course for Civil-Structural Engineering Technology students. Reviews and practices the operation of surveying equipment and surveyingdrafting-oriented computer software. Prerequisite: CVLD64. Class fee $\$ 10 . \mathrm{Sp}$

## CVL074 Construction Estimating, Contracts

 and Specifications3 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.
Study of construction estimating, specifications, and contracts. Instuction 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-fevel 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 concrece in order to selate 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. $\mathbf{F}$

## 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 combined 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, soii characteristics, and soil reports. Various types of foundations and theit requirements will also be studicd. 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 instuctor. W

## 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 disposai. Class fee $\$ 10$. Prerequisite: MTH082. Sp
CVL092 Reinforced Concrete Design and Construction
3 class hrs/wk, 3 cr .
Covers reinforced concrete design and constuction practices. Structural design calculations emphasize the Ultimate Strength Design Method and will include the fundamental concepls for rectangular beams, T-beams, slabs, columns, footings, and foundations. Prerequisite: MTH082 or cquivalent as determined by the instructor, 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 bloodbome pathogen and hazard communication standard, anesthesia, dental office emergencies and pharmacology. Prerequisite: Current enrollment in the Dental Assisting program, or consent of instuctor. $F$

## DEN051 Introductory Concepts in Dental Assisting

2 class and 3 lab hrs/wk, 3 cr .
Abasic 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 instuctor. 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. Paticular attention is directed toward physiological processes of the body, the oral cavity and its associated structures, and anatomical terminology. Discussion will inciude 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: Enrolment 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 suppiemented by instructional demonStration. Prerequisite: Enrolment in the Dental Assisting Program or consent of instnictor. Class fee $\$ 15$. F

## DEN054 Preventive Dentistry

1 class hr/wk, 1 cr .
Introduces the sudent to basic techniques and information relevant to prevention of plaque-related disease. Includes causative factors, nutritional influences, prevention products and their uses, patient motivation, and public health programs. Prerequisite: Enrollment in the Dental Assisting program or consent of instructor. $\mathbf{F}$

## DEN060 Dental Sciences II

3 class and 3 lab hrs $/ w k, 4 \mathrm{cr}$.
A study of the various fields of specialized dentistry rec. ognized by the American Dental Association, and the sciences associated with them. Includes operative dentistry, orthodontics, and public health dentistry. Applied psychology through role playing and clinical experience in the specialsies will be introduced in the laboratory. Prerequisite: Second-tern standing in the Dental Assisting program. W

## DEN061 Dental Assisting Practicum I

1 class and 7 lab hrs/wk, 3 cr .
This course is 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: Secondterm standing in Dental Assisting program and proof 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. Inciudes 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 $/ w k, 3 \mathrm{cr}$.
Provides information pertinent to the primciples 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 <br> \section*{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: Successful completion of winter term. Sp

## DEN071 Dental Assisting Practicum II

10 class and 24 lab hrs/wk, 9 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: Thind-term standing in the Dental Assisting program. Class fee $\$ 10 . \mathrm{Sp}$

## DEN072 Expanded Functions II

2 class and 3 lab hrs/wk, 3 cr .
A continuation of DENO62. Includes discussion, demonstration, and practical application of the following: preventive dentistry, coronal polish, topical fluoride, amalgam polish, instrument sharpening, cement temoval, and periodontal dressing removal. Prerequisite: Third-term standing in the Dental Assisting program. Class fee $\$ 15$. Sp

## DEN074 Dental Radiology If

1 class and 3 lab hrs/wk, 2 cr .
A continuation of DENO64. 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 scries. Lectures include information to assist the student in taking pedodontic films, film in edentulous areas, films taker while the patient is in a supine position, endodontic films, occlusal films, and extra-oral films. Students leam use of automatic film processors. Students process and evaluate all exposed films and are efigible 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 fec $\$ 15$. 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: Fouth-term standing in the Dental Assisting program. Sp

## 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, W

## 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

## 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 constraction, selection of views, sectional auxiliary views, and standard dimensioning practices, including metrics. Class fee $\$ 5$. Offered as needed.

## 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 instractor. Class fee $\$ 5 . \mathrm{Sp}$

## DRF056 Architectural Drafting

1 class and 6 lab hrs/wk, 3 cr .
Basic architectural drafting techniques and methods. Covers architectural lettering, layout, arrangements, symbois, 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 hrswk, 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 instuctor. W

## DRF056B Architectural Drafting-B

3 lab hrsiwk, 1 cr
Basic architectural dratting 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

## 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 $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 2 \mathrm{cr}$.
Develops the sudent'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 instuctor. Sp

## DRF061 Technical Illustration I

1 class and 6 lab hrs/wk, 3 cr .
Methods of pictorial drawing, exploded view drawings. Introduces computer aided color and rendering techniques. Prerequisite: DRF075 or consent of instructor. Class fee $\$ 5 . \$ p$

## 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 enroliment in MTH060 or higher, or consent of instructor. F, W

## DRF066 Tool Design

1 class and $6 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Intoduction to modem principles of tool design including gauging, locating, clamping, and fixture design. Covers modern high production techniques and tooling, limit dimensioning, and tolerancing. Prerequisite: MFG057 or consent of instructor. Class fee $\$ 5$. W

## DRF068 Geometric Tolerancing

1 class and $6 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Study of curent dimension and geometric tolerancing practices based on ANSI standard. Stresses the close relationship between geometric tolerancing, gauging, and quality control. Prerequisite: Concurrent enroliment in DRF075 or consent of instructor. Class fee $\$ 5$. Offered as needed.

## DRF070 CAD Pipe Systems

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

Uses Integraph Microstation PC software. Covers schematic diagrams and pictorial layouts, othographic projection with double line drawings, proper use of piping catalogs, and the development of a menu. Ali of the draft-
ing in this course will be done on the computer. Prerequisite: DRF077. Class fee \$5.Sp

## DRF071 Machine Design

1 class and 6 lab hrs/wh, 3 cr .
Practical design situations related to the drating room. Selected design project(s) demonstrate a comprehensive study of parts relationships, materials application, and product design. Includes duo dimersioning (English-metric), geometric tolerancing, and welding applications. Prerequisite: MFG053. Class fee $\$ 5 . \mathrm{F}$

## DRF072 Introduction to AutoCAD

2 class and 3 lab hrs/wk, 3 cr.
Incorporates hands-on experience with AutoCAD, a PCbased computer-aided drafting program. Includes standard graphics commands for two-dimensional drawings. Class tee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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: DRF075, MTH081, or consent of instuctor: Class fee $\$ 5 . \mathrm{Sp}$

## DRF075 AutoCAD 3.D

2 class and 3 lab hrs/wk, 3 cr .
Uses 3-D capabilities to generate three-dimensioral models of mechanical parts. Covers Advanced Modeling Extension (AME). Gencration of 2-D projections utilizing AutoCAD Designer. Prerequisite: DRF073 or consent of instructor. Class fee $\$ 5 . \mathrm{W}, \mathrm{Sp}$

## DRF077 Introduction to MicroStation PC

2 class and 3 lab hrs/wk, 3 cr.
Introduces the MicroStation PC drafting softwase. Covers the basic drawing, editing, and display commands. Contrasts operations to AutoCAD. Prerequisite: DRF072. Class fee $\$ 5$. W, Su

## DRF078 AutoLISP Programming

2 class and 3 lab hrs $/ \psi \mathrm{wk}, 3 \mathrm{cr}$.
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 CMOS I

## 2 class and 6 lab hrsiwk, 4 cr .

Entry-jevel integrated circuit design in Complimentary Metal Oxide Silicone (CMOS) tecthnology. Covers layou and dratting of logic diagrams, schematic diagrams, and stick diagrams. Prerequisite: DRF073 or consent of instuctor and MT110. Class fee $\$ 5$. Offered as needed.

## DRF081 Mapping and Platting

1 class and $6 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Covers map components, legal descriptions, plot plans and contours. Introduces Geographic Information System (GIS) and Global Positioning System (GPS). Prerequisite: DRF073 or consent of instuctor. Class fee $\$ 5 . \mathrm{Sp}$

## DRF082 Civil Drafting-Softdesk

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

Introduces projects that would be drawn in a civil enginecring office using computers and civil enginecring software. Stresses mathematics, survey skills, and the use of a calculator. Prerequisite: DRF073 or consent of instructor. Class fee $\$ 5$. W

DRF083 Project Development
1 class and 6 lab hrs/wk, 3 cr.
Brings logether methods of applying mathematics, survey knowledge, and drating 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: DRF082 or consent of instructor. Sp

## DRF084 GIS Applications Lab

## 3 lab hrs/wk, 1 cr

Uses Arc View 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 <br> (GIS)

1 class and 6 lab hrs/wk, 3 cr .
Uses PC ARCINFO software in Geographic Information Systems (GIS) applications. Studies GIS basic concepts and covers ARCINFO commands and operations. Prerequisite: DRF073 or consent of instructor. Class fee $\$ 5$. w

## DRF086 Power Transmission Design

3 class hros/wk, 3 cr.
Covers power transmission systems. Includes hydraulics, pneumatics, eiectric motors, chains, sprockets, V.belts, beanings, and speed reducers. Emphasizes analysis of system requirements, sizing of machine ceements, and selection of components from industrial catalogs. Prerequisite: MTH082, PH081, or consent of instructor. W

## DRF087 Flexible Manufacturing Systems

## 2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.

Application of hydraulic, pneumatic, and electronic circuits for automated control of industrial systems. Includes digital design, Boolean algebra, combinational logic, and sequential logic. Lab excreises cover programming of industrial robots and programmable logic controllers. Prerequisite: DRF086 or consent of instructor.

## DRF089 Structural Drafting

1 class and 6 lab hrs/wk, 3 cr.
Practice in producing working drawings using computers, sofiware, board drating, and standard drafting equipment. Builds on an already-cstablished knowledge of Auto-CAD software. The steel manual will be used as a reference. Prerequisite: DRF073 or consent of instructor. Class fee $\$ 5 . \mathrm{F}$

## DRF090 CMOS II

## 1 class and $6 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.

Advanced concepts of integrated circuit mask design. Uses specialized CAD tools to produce major team integrated circuit layout project. Prerequisite: DRF079 or consent of instructor. Class fee $\$ 5$. Offered as needed.

## 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, wiing diagrams, block diagrams, and packaging drawings in addition to basic CAD operations. Class fee \$5.F, W

## DRF092 CAD System Administration

2 class and 3 lab hrs/wk, 3 cr .
Enhances performance of AutoCAD software through the selection of hardware components; use of conventional, system, expanded, and extended memory; customization of operating commands; installation of ADI drivers; and use of local area network. Prerequisite: DRF073 or consent of instructor. Class fee $\$ 5$. Sp

## 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 DesignVariable hoursi-3 credits
Student and instructor identify dafting 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 arcas of consideration include community development projects, computer progranming 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 Dratting 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, govermment 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 hrj $/ w \mathrm{k}, 3 \mathrm{cr}$.
A study of price elasticity, production costs, the competitive firm, monopoly, imperfect competition, market power and antitust, (de)reguiation of business, and the labor market. Prerequisite: MTH095. F, W

## EC202 Introduction to Macroeconomics

3 class hriwk, 3 cr.
A study of aggregate spending, fiscal and monetary policics, money and banking, Federal Reserve, business cycle, unemployment, and inflation. Prerequisite: MTHOOS. W, Sp

## EC203 Applications to Economic Issues

3 class hrs/wk, 3 cr .
Emphasizes global macroeconomics, cconomic 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 hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on child development. Prerequisite: Consent of instuctor. Course may be repeated for a maximum of two credits. F

## ECE068B Observing Preschool Experiences

1 class hr/wk, 1 cr.
Students observe various aspects of a preschool with emphasis on child guidance. Prerequisite: Consent of instructor. Course may be repeated for a maximum of two credits. W

## ECE068C Observing Preschool Experiences

1 class hriwk, 1 cr .
Students observe various aspects of a preschool with emphasis on the classroom environment and curriculum. Prerequisite: Consent of instructor. Course may be repcated for a maximum of two credits. Sp

## ECE086 Family Day Care I (Basic)

1 class hr/wk, 1 cr .
Provides the caregiver with basic information on manag. ing 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. E, W, Sp, Su

## ECE087 Family Day Care II (Advanced)

1 class hr/wk, 1 cr.
Continues information on managing a family day care home. Focuses on environments and activities and how children grow and learn. Covers childsen of different ages, cultures, and abilities. Offered as needed.

## ECE150 Introduction and Observation in Early Childhood Education

## 3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.

An overview of early childhood education including the history, professional opportunities, and different philosophies of early education. Covers the value and use of objective observation as a teaching tool. Includes occasional field trips during class time, weekly lecture-discussion, and written observations. $\mathbf{F}$

## ECE151 Observing and Guiding Behavior

3 class hrs/wk, 3 cr.
Emphasizes the role of the teacher and techniques of individual and group guidance and management. Prerequisite: ECE150 or consent of instructor. W

## ECE152 Creative Activities

2 class and 2 lab hrs/wk, 3 cr .
Focases on understanding and implementing a developmental approach to creative activities for the young child. Invoives 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 childen. 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 $\$ 5 . \$ p$

## 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 <br> 2 class hroskk, 2 cr .

Introductory course in human nutrition and health with emphasis on the nutritional needs of the young child. Includes praclical 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 toddiers 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 chisdthood 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 .
Experience working young children in a laboratory preschool setting. Students will assist with supervision of the various activities in a preschool program. Includes some planning, executing, and evaluation of curiculum materials appropriate for the young child. Prerequisite: Grade of C or higher in HDFS225, HDFS249, ECE151, and ECE162. Class fee $\$ 10$. F, W, Sp

## ECE251 Environments for Young Children

3 class hro $/$ wk, 3 cr.
Planning and evaluating environments for preschool children. Includes how to facilitate play in the environment, room arrangements, outdoor areas, equipment selection and sources, and locating materials usable in the preschool environment. Prerequisite: Second-year standing in the Early Childhood Education program or consent of instructor. $\mathbf{F}$

## ECE261 Student Teaching I, Early Childhood

 Education2 class and $12 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 6 \mathrm{cr}$.
Supervised teaching of young children in a laboratory setting. Prerequisite: Grade C or higher in ECE163, secondyear standing in the Early Childhood Education program, and consent of instructor. Class fee $\$ 10 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## ECE262 Student Teaching II, Early Childhood

 Education2 class and 12 lab hrs/wk, 6 cr .
Supervised teaching of young children in a preschool laboratory. Prerequisite: Grade C or higher in ECE261, and 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 .
An exploration of areas of administrative responsibility in child care centers, including finances, budget, sources of income, selection and purchase of materials and equipment, standards and regulatory agencies (local, state, federal), personnel, philosophy, staffing patterns, job descriptions, interviewing processes, evaluation, in-service training, overall program planning, parentcommunity attitudes, and relationships. Students will practice administrative responsibilities in a role play situation. Prerequisite: Second-year standing in Early Childhood Education program or consent of instructor. Sp

## ED <br> Education

## ED051 Teaching Basic Reading and Writing to

 Older Non-Readers1 class and 2 lab hrs/wk, 2 cr .
Designed to train volunteer futors in the Laubach method of basic language instruction. Introduces writing simple stories using a controlled vocabulary. Develops skill in
conducting tutored teaching sequences using Lauback method. Offered as needed.

## ED101 Introductory Observation and

Experience
2 class and 3 lab hrs/wk, 3 cr .
Designed to provide an introduction to the role and work of instructional assistants through casework and weekly field trips. Covers occupational opportunities, career ladders, and other training models. Provides students direct experience with educational settings and opportunities to examine the attitudes and work habits which influence job effectiveness and satisfaction. $\mathbf{F}$

## ED102 Practicum

1 class and 6 lab hris/wk, 3 cr .
Field experience in a varisty 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, Summer as needed.

## ED103 Advanced Practicum

1 class and 15 lab hrs/wk, 6 cr .
Field experience in a variety of classroom settings closely paralleling dutties regularly assigned to instuctional assistants in a school. Allows students to apply in-depth knowledge, methods, and skills gained from education coarses. Seminars cover classroom experience and prob-lem-solving techniques. Prerequisite: ED102, and current First Aid Card. Class fee \$5. F, W, Sp, Su

## ED110 Psychology of Learning

3 class hrs/wk, 3 cr.
Modern theories of behavior, motivation, and human development as applied to the classioom and techniques derived from these theories. $F$

## ED123 Classroom Techniques in Reading and

 Language3 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 comections, and appropriate uses of graphophonics. W

## ED124 Classroom Techniques in Mathematics

 and Science3 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 hris/wk, 3 cr .
Introduces a variety of teaching techniques and provides practice for students in lesson planning and peer teaching. Sudents 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 hrswh, 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 leaming 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. Materials fee $\$ 5$ paid to instructor first class. $F$

## ED179 Literature for Preschool Children: <br> Jump Over the Moon <br> 3 class hrswk, 3 cr.

A telecourse about the history and diversity of childen'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. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## ED199E Teaching at the Community College

 3 class hrs $w k$, 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 teachinglearning 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 teamers. Following completion of course basics, additional options provide instuction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers leaming styles and tutoring with the aid of a computer. 0 ffered as needed.

## ED209B Practicum: Introductory Observation and Experience (LDC)

3 class hrsskk, 3 cr.
A one-term introduclion to education for students exploring education as a career. F, offered as needed.

## ED209C Professional Technical Practicum I

1.5 class and 4.5 lab hrs/wk, 6 cr .

Prepares students for extended teaching responsibility in a public school setting. Students will assess, plan, and implement a five day (four periods a day) unit of instruction at the practicum placement site. Seminar experiences will support STFR-development. Prerequisite: ED209B. Offered as needed.

## ED209D Professional Technical Practicum II

 2 class and 7 lab hrs/ $/ \mathrm{wk}, 9 \mathrm{cr}$.Prepares students for full teaching responsibility in a public school setting. Sudents will assess, plan, and implement all instuctional programs for a period of four weeks (four periods a day) at the practicum placement site. Seminat experiences will support full-time teaching experience. Prerequisite: ED209B and ED209C. Offered as needed.

## ED209V1-V4 Professional Technical Practicum

 variable 3-6 cr.Provides for additional field experience in a classroom setting. Prerequisite: ED101 or ED209B or consent of instinctor. Offered as needed.

## ED212 Schools and Society

3 class hrs 1 wk, 3 cr .
Pablic 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. Sp

## ED213 Advanced Instructional Techniques in

 Reading
## 3 class hrs/wk, 3 cr .

Designed to prepare students to use a variety of instrictional strategies which build upon the foundations of reading developed in EDI23. Compares and contrasts current instructional strategies and explores the interactive nature of language, reading, wriling, and spelling. Prerequisite: EDI23. Offered as needed.

## ED214 Advanced Instructional Techniques in Mathematics and Science

## 3 class hrs/wk, 3 cr.

Designed to prepare students to use a variety of instructional strategies built upon the foundations of mathematics taught in EDI24. Explores manipulative mathematics across the curriculum as well as additional areas of math instruction including operations with rational numbers, probability, geometry, measurement, time, and money. Prerequisite: EDI24. Offered as needed.

## ED217 Comprehensive Classroom Management

 3 class hrs/wk, 3 cr .Provides current theory and methodology for managing small and large groups of students effectively. Covers understanding students' persona/Psychological and learning needs, establishing positive teacher-student relationships, implementing instructional methods that facilitate optimal leaming, and using organizational and group management methods that maximize on-lask student behavior. W; Offered as needed.

## ED235 Instructional Technology

3 class hris/wk, 3 cr .
Introduces students to current technology availabie in education. Presents the tools to evaluate, select, and implement appropriate technology in the instructional setting. W

## ED236 Introduction to Library/Media Services

 3 class hrs/wk, 3 cr .Introduces students to the role of the instructional assistant in library/media centers. Common features in the organization of these centers will be explored and students win peform routine duties to maintain the collection and provide service to library/media pattons. Sp

## ED251 Overview of Students with Special <br> 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 leaming disabilities, mental retardation, severe emotional disturbances, speech and language impairments, visual impaitments, hearing impairments, physical disabilities and other health impairments, autism, traumatic brain injuries, Tourette syndrome, and attention deficit disorder. Although not a disability or medical condition, the needs of at-risk youth will be covered also. F

## ED253 Current Issues in Special Education

3 class hrs/wk, 3 cr .
Designed to provide students interested in special education an opportunity to explore in-depth current issues in
special education. Students will be exposed to current philosophical frameworks, legislative changes, emerging conditions, and technological advances. Prerequisite: ED251 or consent of instructor. Sp
ED257 Second Language Teaching Techniques 3 class hrs/wk, 3 cr .
Covers philosophy, activities, materials, and various techniques used to teach English as a Second Language. W

## ED258 Multicultural Education

3 class hrs/wk, 3 cr.
Covers philosophy, activities, and materials used in developing a culurally-sensitive multiculural classroom and curricalum. F

## ED259 Bilingual Methodology

3 class hrs/wk, 3 cr .
Covers philosophy, techniques, activities, and materials used in bilingual/hicultural education programs. Examines the philosophy, rationale, and legal implications of
 English and Spanish reading materials in a bilingual classfoom. Sp

## ED268 Educating the Mildly and Severely Handicapped

3 class hrs/wk, 3 cr .
Covers theories and teckniques for working with students with disabilities. Studies services and funding provided for students with mild and severe disabilities. Prerequisite: ED251 or consent of instructor. W

## ED292 Occupational Analysis, Curriculum, and

 Evaluation
## 3 class hrs/wk, 3 cr.

Course provides students with the opportunity to analyze their professional-technical specialty area in order to develop curriculum and evaluation strategies for profes-sional-technical programs. Includes community surveys, occupational advisory committees, occupational analysis, program goals and objectives, and evaluation. Prerequisite: ED209B. W

## ED293 Applied Integrated Academics

3 class hrs/wk, 3 cr.
Designed for students in the Professional Technical Teacher Preparation program. Prepares professional-technical teachers to integrate mathematics, language arts, and science content into their professional-technical courses. Prerequisite: ED209B. Sp

## BLE avd ELT

## Electronics

## ELE050 Electronic Concepts I

## 3 class and 4 lab hre/wk, 4 cr .

First course in a three-tem sequence. Covers electrical and atomic theory applicable to the field of electronics. Introduces DC and $A C$ theory, test equipment use, schematic reading, and circuit construction. Prerequisite: High school algebra, or consent of instuctor. Class fee \$16.E,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 or consent of instructor. Class fee \$16.W,Sp

## ELE052 Electronic Concepts III

3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
Last course in a three-term sequence. Covers electric circuit analysis and atomic theory applicable to passive circuits used in clectronics. Applies the fundamental con-
cepts leamed in ELE50 and ELEO51. Prerequisite: ELE05I and Trigonometry. Class fee $\$ 12$. $\mathrm{Sp}, \mathrm{Su}$

## ELE056 Concepts of Electronics

4 class and $4 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 6 \mathrm{cr}$.
Inclades $D C$ and $A C$ theories, troubleshooting concepts, use of test equipment, and safety. Prerequisite: MTH070 or equivalent as determined by the instructor. Offered as needed.

## ELT034 Transistor Fundamentals

3 class and 6 lab hes/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: Concurent enrollment in ELE05!. Class fee \$16. W, Sp

## ELT055 Semiconductor Devices

2 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Covers the fundamentals of basic power supplies, including both discrete and integrated devices in current and voltage regulating circuits. Surveys the operating principles of solid-slate devices such as unijunction transistors, special purpose diodes, hyyristors (SCR's, TRIAC's, etc.) and photoelectric devices. Prerequisite: ELT054 or consent of instructor. Class fee $\$ 12$. Sp , Su

## ELT058 Electronics Orientation

## $2 \mathrm{lab} h \mathrm{r} / \mathrm{wk}, 1 \mathrm{cr}$.

Introductory course in the field of electronics. Covers carcer 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 clectronic problem solving. Emphasizes the use of MSIDOS, 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 clectronic curriculum. Prerequisite: ELTO61. 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 $\$ 12 . \mathrm{Sp}, \mathrm{Su}$

ELTT065 Electronic Circuit Analysis

## 2 class and 6 lab hrs/wk, 4 cr.

A study of basic electronic devices and circuit designs with emphasis on proving design concepts using the " $R$ " parameters. Covers small-signal amplifiers, bipolar circuits, EET circuits, oscillators, and power amplifiers. Circuits are analyzed using P-Spice and Electronic Workbench simulation software in conjunction with laboratory test equipment. Prerequisite: ELT054. Class fee \$16. F

## ELT066 Digital Fundanzentals

3 class and 2 lab hrs/wk, 4 cr .
First course in a two-part sequence covering digital electronics, an introduction to digital logic theories. Includes number systems and conversions, Boolean algcbra, simplification theorems, combinational logic, and an intro-
duction to arithmetic circuits. Prerequisite: ELE050 or consent of instuctor. Class fee \$8. W, Sp

## ELT067 Digital Circuit Applications

2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
A continuation of ELT066. The course is laboratory-oriented to give students hands-on experience with sequential logic circuits such as fip-flops, counters, registers, combinations circuits, and arithmetic logic units. Prerequisite: ELT066. Class fee \$12. F

## ELT068 Microcomputer Systems

3 class and 6 lab hrs/wk, 5 cr .
Covers hardware and software concepts used by microcomputers. Covers interfacing criteria and techniques and stresses hardware and soffware troubleshooting techniqques. Prerequisite: ELT066, ELTO67, 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 .
A circuit analysis of video systems, including theories of operation, and interfacing of components and circuits in a complex system. RF receivers, video monitors, and computer displays are used for live circuit tracing and troubleshooting of system malfunctions. Setup and adjustment of systems is practiced using hardware and software generated test signals. Prerequisite: ELT065 and ELT072, or equivalent as determined by instructor. Class fee $\$ 24 . \mathrm{Sp}$

## ELT071 Linear IC Fundamentals

3 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.
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 $\$ 12 . \mathrm{Sp}, \mathrm{Su}$

## 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. Applics 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, three-phase electricity, control devices and circuits, process control systems and servos, measurement transducers, and programmable controlless (PCLs). Prerequisite: ELT054, ELT055, ELT072, or consent of instructor. Class fee $\$ 12 . \mathrm{Sp}$

## 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: Concurent enrollment in ELT076. Class fee $\$ 12$. W

## ELT090 Computer Peripherals

3 class and 3 lab hrs/wk, 4 cr.
A study of computer architecture and peripherals. Covers the theories of operation and concepts of interfacing both software and hardware. Laboratory sessions emphasize installation and troubleshooting techniques. Prerequisite: Electronics experience. 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 programming. Prerequisite: MTH081 or consent of instructor. Class fee $\$ 8$. F

## ELT092 Programming Concepts II

3 class and 2 lab hrs $/ \mathrm{wk}, 4 \mathrm{cr}$.
Surveys various professional software applications. Students will leara and demonstrate one major software application. Prerequisite: ELTO91 or any high-level programming class. Class fee $\$ 8 . \mathrm{Sp}$

## ELT093 Advanced Data Communication

3 class and 6 lab hrs/wk, 5 cr.
Covers the theories and concepts of information exchange between computers via data networks. Discusses a variety of communication methods. Laboratory sessions emphasize the installation, maintenance, and operation of data communication network systems. Mutiple network hardware configurations are constructed and tested using Novell's Netware operating system. Prerequisite: ELTO68, CS278, DOS, and a hightlevel programming language, or consent of instuctor. Class fee $\$ 12$. Sp

## ELT094 Computer Operating Systems

3 class hrs/wk, 3 cr .
A stady of the fundamentals of microcomputer and minicomputer operating systems. Prerequisite: ELTO66, CS103, or consent of instructor. Offered as needed.

## ELT097 Advanced Computer Architecture

 3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.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: Secord-year standing in Electronics or consent of instrictor. Class fee $\$ 24 . \$ p$

## 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 .
Designed to instruct a student in the skills of Emergency Medical Technician-Basic, formerly the EMT-1. Includes all skills necessary to provide emergency medical care as outined by the Oregon Board of Medical Examiners. This two-part course is one of a series comprising a national and state EMS training program. Class fee $\$ 7 . \mathrm{F}$

## EMT052 Emergency Medical Technician Basic,

## Part 2

3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
This course is designed to instuct a student in the skills of Emergency Medical Techniciar-Basic, formerly the EMT-1. Includes all skills necessary to provide emergency medical care as outlined by the Oregon Board of Medical Examiners. This two-part course is one of a series comprising a national and state EMS training program. Prerequisite: Successful completion of EMT05: and concurrent enroliment in EMT280A. Class fec $\$ 5$. W

EMT061, 062,063 Health Care Skills
2 lab hrswh, 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. Co-requisite, cumen enrolment in any EMT course. Offered as needed.

## EMT065 Emergency Medical Technician

Intermediate, Part 1
4 class and 2 lab hrs $/ \mathrm{wk}, 5 \mathrm{cr}$.
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 <br> 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 certiffcation 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 sescue tools. Introduction to techniques and tools of patient extrication, emphasizing application to traffic accidents, as required for paramedic certification. Prerequisite: EMT05 I 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 $\$ 5 . \mathrm{Sp}$

## EMT075 Introduction to Emergency Medical

## Service

3 class hrs/wk, 3 cr.
Covers role and responsibilitics of the paramedic, emergency medical services systems, medical-legai considera. tions, major incident response, hazardous materials awareness, and stress management. $F$
EMT090 Emergency Medical Technician Paramedic, Part 1
7 class and 3 lab hrs $/ w \mathrm{k}, 8 \mathrm{cr}$.
Discussion, demonstration, and practical application of medical teminology, patient assessment, airway management, ventilation therapy, respiratory emergencies, shock treatment, parenteral drug and fluid administration, pharmacology, and cardjology. Prerequisite: B1231, B1232, B1233, CS101, MTH095, SP111, WR121, cument Oregon Basic or Intermediate certification and concurrent enrollment in EMT091. Class fee \$15. F

## EMT091 Emergency Medical Technician Para-

 medic, 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 studert will experience in the pre-hospital care situation. Prerequisite: Current immunizations and concurrent enollment 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 discases, 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 .
Cinical 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-bospital care situation. Prerequisite: Concurrent enrollment in EMT092. Class fee $\$ 15$. W

EMT094 Emergency Medical Technician Paramedic, Part 3
3 class and 3 lab hrs $/ \mathrm{wk}, 4 \mathrm{cr}$.
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 $\$ 15 . \mathrm{Sp}$
EMT095 Emergency Medical Technician Paramedic, Part 3 Clinical
9 lab hrsjwk, 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 enrolment in EMT094. Class fee \$15. \$p

## 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, chronological, or stylistic approach, etc.), and terninology. F, W, Sp, Su
ENG105 Introduction to Dramatic Literature
3 class hrs/wk, 3 cr.
Features drama by an intentational range of playwrights. Emphasizes students' perceptions of literary issues and how they relate the issues to their own perceptions of drama and life through written and oral discussions of dramatic conventions, literary uses of language and setting, characterization, and themes. 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 pocts of various cultural backgrounds. Introduces poetic concepts, principles, and terminology, explores various stuctures, types, and elements of poctry. F, W, Sp, Su

## ENG107 Introduction to World Literature

3 class hrsivk, 3 cr .
Features discussion and analysis of histories, stories, poems, and plays of the Westem and non.Western world between 2000 B.C.E. and 1450 .F

ENG108 Introduction to World Literature
3 class hrs $/ w k, 3 \mathrm{cr}$.
Features discussion and analysis of literary works of the
Western and non-Western world between 1450-1850. W
ENG109 Introduction to World Literature
3 class hrs/wk, 3 cr .
Features discussion and analysis of literary works of the nineleenth and twentieth centuries. Sp

ENG201 Introduction to Shakespeare

## 3 class hrs $/ w k, 3 \mathrm{cr}$

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 18 th century. Focuses on literary works as products of a historical period and on the analysis and intergretation 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 lierary works as products of a historical period and on the analysis and interprectation of works. Sp

## ENG253 Introduction to American Literature

 3 class hrs $/ w k, 3 \mathrm{cr}$.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 hirs/wk, 3 cr.Covers Transcendental, Realistic, and Naturalistic literature from 1850-1914. Inciudes the works of Ralph Waldo Emerson, Henry Thoreau, Wait 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 hiterature 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 Waiker. Sp

## ENG260 Introduction to Women Writers

## 3 class hrs/wk, 3 cr .

Focuses on the ackievements and perspectives of women writers through analysis of their litefary works and strategies. W

## ENG261 Introduction to Science Fiction

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Features exposure to and analysis of science fiction through the reading of representative works that explore the history and typology of this literary genre. Short stories and novels by a variety of authors are read, discussed, and written about. A chronological, thematic, or stylistic approach may be taken. Because there is no prerequisite for the course, the basic literary concepts and terminology of ENG104 are also introduced, explained, and illustrated. Sp

## ENG262 The American Western

3 class hrs/wk, 3 cr.
Features exposure to and analysis of the American western through the reading of representative works that explore the history and typology of this literary genre. Short stories and novels by a varicty of authors are read, discussed, and written about. A chronological, thematic, or stylistic approach may be taken. Because there is no prerequisite for the course, the basic literary concepts and terminology of ENG104 are also introduced, explained, and illustrated. 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 voltagc and curent 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 $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.
Studies the Fourier-Series representation of periodic timevarying 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 Transformand it 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 hro/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/wh, 4 cr .
Designcd for non-native speakers of English who can satisfy survival needs and routine work demands, and can foliow oral instructions in familiar and some unfamiliar situations. Focuses on the improvement of conversation skills, listening skills, and cultural understanding. Prerequisite: Completion of intake procedure and consent of instructor, or a score of $30+$ on the oral assessment instrument. Class fee $\$ 2$. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## ENL012 Reading IV

5 class hrr/wk, 5 cr .
Designed for non-native speakers of English who can satisfy survival needs, and routine work and social demands. Focuses on vocabulary development and reading comprehension with an emphasis in preparing to take college credit classes. Prerequisite: Completion of intake procedure and a score of 40 on the CELSA test. Must be taken in conjunction with 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 speakers of English who can satisfy survival needs, and routine work and social demand. Emphasizes the writing skills needed for communication, including correct sentence stucture, punctuation, and paragraph organization. Stresses preparation for college credit classes. Prerequisite: Completion of intake procedure, score of 40 on the CELSA test, and a writing sample, or consent of instructor. Must be taken in conjunction with ENL012. Class fee \$2.E, W, Sp

## ENL110 English as a Non-Native Language:

Speaking and U.S.Culture
4 class hrs/wk, 4 cr .
Designed for non-native English speakers of English who can participate effectively in social and familiar work situations. Focuses on improving knowledge of current U.S. culture and English oral skills. Prerequisite: A score of $30+$ on the oral assessment and a score of $50+$ on CELSA test, or consent of instructor. Class fee $\$ 2 . \mathrm{F}, \mathrm{Sp}$

## ENL1II 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 procedures and a score of 50 or higher on the CELSA test, or consent of instructor. In addition, a writing sample will be requested. 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: Successful completion of

ENL111 or a scorc of $58+$ on the CELSA test, or consent of instructor. Class fee $\$ 2 . \mathrm{W}, \mathrm{Sp}$

## GS

## 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.玉,W, $\mathrm{Sp}, \mathrm{Su}$

## EA

## Fllm Arts

FA255 Understanding Movies
2 class and 3 lab hrs/wk, 3 cr.
An introduction to the art of film and the ways in which a movic can be understood. Emphasis is on the feature length movic. Class fee $\$ 20$. F

## FA256 Understanding Movies: The Great Film

## Directors

2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
An analysis of films from the standpoint of the ditectorcreator. Studies works of one or two directors in an effort to understand and critique individual films as the works of atists, 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 $3 \mathrm{labh} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
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 $\$ 20 . \mathrm{Sp}$

## EE

## Field Experiences

## FE205A Job Search Preparation

1 class hr/wk, 1 cr.
How to find the job you want. Self-analysis of what you have to offer an employer, the ideal job for you, the job search process, and employer research. Includes informational interviewing, follow-up procedures, and portfolio documentation. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## FE205B Resumes and Job Search

Correspondence
1 class hr/wk, 1 cr.
How to apply for the job you want. Covers composition and analysis of all written correspondence used in applying for employment, including applications, resumes, and other employment-related communications. F, W, Sp, Su

## FE205C Interviewing for Success

1 class hr/wk, 1 cr .
How to interview for the job you want. Focuses on development of interviewing techniques and effective methods of follow up. F, W, $\mathrm{Sp}, \mathrm{Su}$

FE280 Cooperative Work Experience see AUM280.

## FN

## Foods/Nutrition

see also Hospitality Systems Management

## FN225 Nutrition

4 class hros/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 <br> 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, of consent of instructor. FR103: FR101, FR102, one year of high-school-level French, or consent of instuctor. Class fee \$2 each. FR101: F; 102: W; 103: Sp

## FR150 First Year French, Accelerated Term 1

 6 class hrs/wk, 6 cr .An introduction to the grammar and vocabulary of the French language. Emphasizes use of common French expressions with a basic understanding of grammatical principles. Includes some kistory and culture of France.
This course covers the same content as FRIOL and the First half of ER102. Class fec \$3. W

## FR151 First Year French, Accelerated Term 2

## 6 class hrs/wk, 6 cr .

Continued study of the grammar and vocabulary of the French language. Emphasizes the use of common French expressions with a basic understanding of grammatical principles. Includes French customs, culture, living conditions, and history. This course covers the same content as the second half of FR102 and FR103. Prerequisite: FR150 or equivalent as determined by the instructor. Class fee $\$ 3 . \mathrm{Sp}$

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 seff-expression. Includes some study of French literature and culture. Prerequisite: FR201: one year of college French, two years of high-school-level Freach, or consent of instuctor. 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 liecrature, survey of professional career opportunities and requirements, and development of resume.

## FRP051Fire Incident Related Experience

## 9 lab hrs/wk, 3 cr.

Orientation to fire incident related experiance, which fulgills the requirements of OR-OSHA and the Board on Public Safety Standards and Training for Basic Firefighter. These standards must be met prior to an individual responding to emergency incidents.
Prerequisite: Admission is restricted to the students chosen through an application process. Consent of instructor required. Class fee $\$ 15$. Offered as needed.

## FRP052 Fire Incident Related Experience

$9 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Provides information about large diameter hose uses, attack hose procedures, ICS and passport information, firefighter responsibilities, and ISI SCBA procedures. Includes SCBA use under extreme working loads, SCBA botlle refilling procedure, cascade systems use, live-fire attack practices, salvage operations, overhaul practices, fire cause investigation, fircfighter responsibility, district familiarization, map book use, radio procedures, driving laws and practices, power tool operation and maintenance, ventilation principles, and vertical ventilation. Prerequisite: FRP051. Class fee $\$ 15$. Offered as needed.

## FRP053 Fire Incident Related Experience

## 9 lab hrs/wk, 3 cr

Covers emergency driving practices, a comprchensive officer sclection assessment center, single company evolutions, drafting and tender operations, and flammable and combustible liquids operations. Prerequisite: FRPOS2. Class fee $\$ 15$. Offered as needed.

## FRP054 Water Supply Operations

3 class hrs/wk, 3 cr .
Covers water supply operations in fire sevice, including pre-fire planning operations, water quantity calculations, water source options, delivery systems and options, and hydraulic calculations. Designed to meet the competencies as set forth by the Firc Standards and Accreditation Board in Fircfighter II, Apparatus Operator I and II. Prerequisite: MTH070, ERP052, or consent of instructor.

## FRP056 Fire Service Rescue Practices

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

Presents elementary procedures of rescue practices, systems, components, support, and control of rescue operations. Introduces basic ladder procedures, ropes/knots, and basic rescue tools and equipment. Applies techniques and tools of extrication, emphasizing applications to traffic accidents. Prerequisite: FRP051, ERP052, or consent of instructor. Class fee \$5.

## FRP058 Fire Pump Construction and

## Operation

2 class and 2 lab hrs/wk, 3 cr .
Theory of pump operation, types and features of various pumps, 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 prorities, resource management, and tactical operations. Prerequisite: FRP050, FRP051, FRP052, FRP053, FRP070, or consent of instructor.

## ERPO60 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, curtent and future fire protection problems, and firc prevention laws and regulations. Students develop an awareness of and positive attitude toward fire
prevention as a method of accomplishing the fire department mission.

## FRP061H, $062 \mathrm{H}, 063 \mathrm{H}$ 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 raining 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 $\$ 15$.

## FRP061 Fire Incident Related Experience

 9 lab hrswk, 3 cr.Introduces annual performance evaluations conducted within fire departments, and continues progress towards the Board on Public Safety Standards and Training standard Firefighter I status. Also provides practicum for Driver and Apparatus Operator I and II status. Prerequisite: FRP053. Class fee $\$ 15$. Offered as needed.

## ERP062 Fire Incident Related Experience

$9 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Continues progress towards the standard Firefighter I from the Board on Public Safety Standards and Training. Also provides practicum for Driver and Apparatus Operator I and II status. Prerequisite: FRP061. Class fee $\$ 15$. Offered as needed.

## FRP063 Fire Incident Related Experience <br> 9 lab hrswk, 3 cr.

Prepares the student for entering the job market and assists them in becoming more successtul in fire service entry processes. Continues progress towards the standard Firefighter I from the Board on Pubic Safety Standards and Training, and provides praclicum for Driver and Apparatus Operator I and Il status. Prerequisite: FRPO62. Class fee $\$ 15$. Offered as needed.

## FRP064 Hazardous Materials Operations

## 3 class hris/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 <br> 2 deass 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: FRPO60 or consent of instuctor. Offered as needed.

## FRP066 Building Construction for Fire <br> Suppression

## 3 class hrs/wk, 3 cr .

Fire problems inherent in stuctural elements of buildings. How knowledge gathered through interprectaion of blueprints and inspection of various building types provides a basis for applying effective extinguishment practices, with adcquate safeguards for personnel.

## FRP067 Hazardous Materials Regulations

3 class hrs/wk, 3 cr .
Provides an overview of the numerous federal, state, and local laws, codes, and regulations goveming hazardous materials. This course is confined to the storage, handling, and release of hazardous materials. Describes the legal limitations and liabilities of responders, as weil as business owners. Gives an in-depth profile of deaiing with the disposal of hazardous waste. Prerequisite: Consent of instructor. Offered as needed.

FRP068 Law Enforcement Procedures for Fire Prevention
2 class and 2 lab hrswk, 3 cr .
Deals with the enforcement of fire laws. Covers the preparation of cases for prosecution. Prerequisite: FRP072, FRP073, FRP074, or consent of instractor. Offered as needed.

## FRP069 Fire Department Leadership

## 3 class hrs/wk, 3 cr.

Develops the role of fire service leaders in managing the daily operations of a fire company. Provides insight into attitudes, strengths, and weaknesses, while covering leadership concepts, including supervisory styles, atitudes, cooperation, individual differences, motivation, communications, counseling, and the management cycle.
Prerequisite: FRP050. Offered as needed.

## 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. Offered as needed.

## FRP071 Fire Protection Systems and Extin-

 guishers3 class $\operatorname{hrs} s w k, 3 \mathrm{cr}$.
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, standpipe systems, and systems designed to detect and report fires. Offered as needed.

## 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 Statues, National Fire Protection Associalion (N.F.P.A.) and other codes relating to fire prevention and life safety. Offered as needed.

## ERP073 Firefighters' Law <br> 3 class hro/wk, 3 cr.

Firefighters' legal responsibiiities in driving, imspection, alams and communications, and other fire protection activities. Firefighters' rights, dutics, liabilities, and participation in legal activities including state and local fire marshal laws relating to fire protection. Offered as needed.

## FRP074 Fire Investigation

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

Stresses importance of fire cause determination. Covers the bum characteristics of combustibles and effects of fire on materials; the interpretation of bum patterns and isolation of the arca and point of origin; ; identification of incendiary indications, sources of ignition, and materials ignited; and preservation of fire scene and evidence. Prerequisite: FRP050 or consent of instuctor. Offered as needed.

## FRP075 Aircraft Crash/Fire Rescue

## 1 class and 3 lab hrsifor 4 weeks, 1 cr.

Pre-planning activitics for on- and off-aiport emergencies. Approach, positioning, rescue procedures, and application of control techniques. Offered as needed.

## FRP077 Fire Service Instructor Training

12 class and 10 lab hrsifor 1 week, 2 cr .
The fire service instructor and the job, including learming principles, teaching procedures (preparing course outlines and lesson plans, managing a classroom, and evaluation techniques), and training aids and devices. Offered as needed.

## 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, uban interface problems, fire suppression methods, and fireground management. Offered as needed.

## 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 $\operatorname{lr} \mathrm{s} / \mathrm{wk}, 3 \mathrm{cr}$.

Methods of contemporary fire prevention inspection practices. Includes preparation, pre-approach information, writen inspection notices, relations with owners and occupants, and compliances. Prerequisite: FRP060, FRP066, FRP072, or consent of instructor. 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: ERP073, FRP074, WR121, or consent of instructor. Offered as needed.

## FRP084 Public Information for the Fire Service

## 1 class and 3 lab hrr/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.

## 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.

## ERP088 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: FRPO60 or consent of instuctor. Offered as needed.

## FRP089 Fire Codes and Ordinances 2

3 class hrs/wk, 3 cr .
Study of the Uniform Fire Code, State Firc Marshal Fire Safety Regulations and related Oregon revised statues, N.F.P.A., and other codes relating to fire prevention and life safely. Offered as needed.

FRP280 C0operative Work Experience see AUM280.

## FRT

## Forest Resources Technology

## FRT051 Introduction to Natural Resources

## 3 class hrs/wk, 3 cr .

$A_{B}$ 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, wildife, and watersheds. Topics currently in the media will be discussed as well as current perspectives in forestry. Class fee \$5.F

## FRT052 Leadership Seminar

1 class hr/wk, 1 cr.
Includes group and individual research and sharing of information valuable to the student for both summer, seasonal, and permanent employment in national resourcesrelated 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 $1 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Gives the student experience using hand-held calculators, MSIDOS computers, and electronic data recorders. Class fee $\$ 5$. $\mathbf{F}$

## 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 shnubs that are native to Western Oregon. Use of the Dichotomous Genus Key to identify species during frequent ficld 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 $\$ 10 . \mathrm{Sp}$

## FRT063 Forestry Photo Interpretation

2 class and 3 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Designed to introduce the student to the basic principles of photogrammetry and photo interpectation, 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 hrv/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 trecs, 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 .Carc 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 cmrollment in FRT071A. Class fee $\$ 10 . \mathrm{Sp}$

## FRT072A Forest Resources Inventory II-

## Lecture

3 class hrs/wk, 3 cr.
Second of two forest inventory courses. Covers variableplot 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 enroliment 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 variabie-plot and 3-P cruising methods. Also introduces stand inventory methods, growth and yield, surveys, and the field procedures for $\log$ scaling. Prerequisite: FRT071A, FRT071B, FRT053, and concurrent enrollment in FRT072A. Class fee $\$ 10$. F

## FRT075 Forestry Reports and Contracts

3 class hrs/wk, 3 cr.
Principles and specifics of preparing maps and writing memos, letters, and technical forest resources reports. Special knowledge and skills necessary to successfully execute a legal contract involving forest resources. Prerequisite: COM051 or equivalent as determined by the instructor, FRT061, FRT065, and FRT071A. Sp

## FRT081 Natural Resource Management I

3 class hrs/wk, 3 cr.
A study of tree flabits, forest ecology, and silivicultural 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 $/ w k, 3 \mathrm{cr}$.
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 .
Bring logether the knowledge and skills that the student has leamed 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 $\$ 10 . \mathrm{Sp}$

## FRT280 C0operative Work Experience

 see AUM280.
## FS

## Food Service

see Hospitality and Tourism Management

## $G$

## 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 scuppture. Includes iccture, laboratory, and field trip. Class fee $\$ 8$. Offered as needed.
G143 Pacific Northwest Rocks and Minerals 3 class and 2 lab hrs $/ w k, 4 \mathrm{cr}$.
Studies identification, occurrence, and origin of common Northwest rocks and minerals and properties of precious, seniprecious, and ornamental stones, and economically important rocks and minerals. 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 the extensive Northwest fossil record. Includes lecture, lab, and field trips. 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 evering orientation session prior to a weekend of field study with a follow-up evening seminar. Trip workstects, field diary, and term paper are required. A: Crater Lake Story B: Oregon Coastal Landforms C: The John Day Country and Thundereges/Agates D: Origin of the Columbia Gorge E: Oregon Moon CountryBend 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-quantilative, descriptive survey of geologic landforms. Map interpretation activities applied in laboralory 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 $\$ 12 . \mathrm{Sp}$

## GE

## General Engineering

## see also Engineering

## GE101 Engineering Orientation

1 class and 2 lab hrs/wk, 2 cr .
An introduction to the engincering profession. Examines disciplines, principles, ethics, and practice. Includes creative and logical problem solving. Covers the use of handheld calculators. Prerequisite: MTHI11. 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 sypical engineering problems. Structured programming techniques will be emphasized. Prerequisite: MTH11. W

## GE103 Engineering Computations

## 2 class and 2 lab hrr/wk, 3 cr .

Systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing, and database operations using spreadsheet software. Prerequisite: GE102. Sp

## GE115 Engineering Graphics

2 class and 3 lab hrr/wk, 3 cr.
Graphic communication, multiview and pictorial representation, graphical analysis and solutions, and computeraided drafting. Prerequisite: DRF072 or consent of instructor. F, W

## GEOG

## Geography

## GEOG105 Introductory Geography

3 class hrs/wk, 3 cr .
An introduction to the physical eiements 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.
An introduction to the culural elements of geography, including the study of human population, migration, language, religion, folk culture, popular culture, ethnic culture, cultural landscapes, and geopolitics. W

## GEOG107 Introductory Geography

3 class hri/wk, 3 cr .
An introduction to economic geography, including the study of devclopment and underdevelopment, agriculture, industry, settlement, urban landscapes, and natural resource problems. Sp

## GER

## GERMAN

## GER101, 102, 103 First Year German,

Terms I, II, III
4 class hirs $/ \mathrm{wk}, 4 \mathrm{cr}$.
Introduction to understanding, speaking, reading, and writing the German language, and to the culture of Ger-man-spcaking countries. Emphasis on developing listening and speaking skills. A variety of activities and audiovisual materials arc used to practice these skills. Prerequisite: GER102: GER101 or equivalent as determined by the instructor. GER103: GER 102 or equivalent as determined by the instructor. Class fee $\$ 2$ each. GER101: F; 102: W; 103: Sp

## GS

## General Sciences

## GS104 Physical Science

3 class and 3 lab hrswk, 4 cr .
An integrated study of forces and motions in the physical world. Class fee $\$ 12 . \mathrm{F}$

GS105 Physical Science
3 class and 3 lab hrs/wk, 4 cr .
A broad, nonquantilative, descriptive survey of chemical principles which are relevant to everyday lif. 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 $\$ 12 . \mathrm{Sp}$

## GS107 Introduction to Astronomy

3 class and 3 lab hr/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. Prerequisite: MTH052 recommended. 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 precipitaioa types, weather instruments, thunderstorms, cyclones, hurricanes, air masses, fronts, and weather forecasting. Offered as needed.

## GS141 Earth, Our Planet

3 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 4 \mathrm{cr}$.
A telecourse which investigates geoscience topics by introducing students to intemationally-recognized experts who share their theories, models, and opinions. On-location film footage will take students to places and events they might not otherwise sec. Includes video viewing, written worksheet lessons, at-home quizzes, topical outside reading summaries, and an on-campus exam. Class fee $\$ 8 . \mathrm{F}$

## GS142 Earth Revealed

## 3 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.

A telecourse which introduces geology, the science of Earth, and the study of the restless planet on which we five. 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 tclecourse which focuses on the marine environment as a unique feature of planet Earth. Includes video viewing, writen worksheet lessons, at-home quizzes, topical outside reading summaries, and an on-campus exam. Class fee \$8. Sp

## GS199 Applied Physical Science

3 class hrs/wk, 3 cr.
Provides a foundation of physical science concepts, knowledge, and skills needed to enter specific industrial and engincering systems programs, and course material will be presented in a format applicable to such programs. This course is linked to, and must be taken concurrently with, SKD050A, a one-credit study skills.

## H

## Health Services Management

See also Allied Health and Medical Assisting

## H101 Medical Law and Ethics

3 class hrs/wk, 3 cr .
An exploration of the relationships between the law, ethics, and bioethics and the health care professional. An interactive class using case studies, independent and group projects, and personal reflection to identify common legal and ethical problems. F, W, Sp

## H102, 103, 104 Professional Development

1 class hr/wk, 1 creack
Designed to develop students' leadership qualities, and present opportunities for student-community participation. Provides a setting for self-improvement in conjunction with bealth occupations student organizations. H102:F; H103:W; H104:Sp

H110 Health Information Systems Procedures 1 2 class and 4 lab hrs/wk, 4 cr .
Focuses on knowledge, skills, and practice required for health care information and management entry occupations. Includes admitting and bed control, patient's chart and transcription of physician's orders, admissions, preoperative and postoperative procedures, management techniques and human relations, and confidentiality of medical records. Commonly used medical application and computer procedures are introduced. Prerequisite: Admission to one of the Health Services Management programs. Class fee $\$ 5 . \mathrm{F}$

## H112 Health Information Systems Procedures 2

 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 infornation, medical records, and health record processing (medical transcription) of various medical reports. Provides entry-level skills for the health record technician/medical transcription students and others in the Health Services Management programs. Prerequisite: H110. Class fee \$5. W

## H114 CPTIV CodingReimbursement

3 class hrs $/ w k, 3 \mathrm{cr}$.
Introduces basic medical and insurance terminology and abbreviations and use of Current Procedural Terminology (CPT) and Relative Vake Studies (RVS). Covers rembursement protocol for Unemployment Compensation, Disability, Workers' Compensation, federal Medicare, Medicaid, Blue Cross/Blue Shield, Champus, and cross reference reimbursement with health maintenance organizations. Prerequisite: $\mathrm{H} 120, \mathrm{H} 121$, or consent of instructor. W

## H115 ICD-9-CM Coding/Reimbursement

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Introduces basic differences between nomenclature and classification systems, as well as basic coding systems, including C.P.T. (Current Procedure Terminology) and I.C.D. 9-C.M. Covers basic abbreviation and description of coding manual format, and presents fundamental application of coding in basic forms, computerized billing, and state and federal agencies. Prerequisite: $\mathrm{H} 120, \mathrm{H} 121$, or consent of instructor. Sp

## H116 Introduction to Allied Health Data

## 3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.

Introduces the basic data sets and statistics used every day in health care organizations. Emphasizes the case-based and experiential leaming process to facilitate familiarity with occupancy and discharge rates, discase incidence and prevalence, and minimum and universal data sets used in all accredited organizations. W

## H120 Medical Terminology/Systems 1

3 class hrs/wk, 3 cr.
Emphasizes the terminology related to the heaith care professions and specialities, equipment, drugs, symbols, and abbreviations, and the anatomy, physiology and pathophysiology of the musculoskeletal, integumentary, nervous systems as well as the sensory organs. The approach is one of practical application in the workplace using case studies and operative, autopsy, diagnostic, and laboratory reports. F, W, Sp, Su

## H121 Medical Terminology/Systems 2

3 class hrs/wk, 3 cr .
A continuation of Hi20. Focuses on the digestive, cardiovascular, respiratory, blood, lymphatic, genitourinary, female reproductive, and endocrine systems. Explores the origin of terms and the use of anatomical, general, operative and symptomatic tems using a variety of case-based and experiential learning techniques. Prerequisite: H120 or conseat of instructor F, W, Sp, Su

## H122 Advanced Topics in the Language of

 Medicine3 class hrsiwk, 3 cr.
An advanced course dealing with the language of clinical medicine in a variety of settings, including oncology, diagnostic radiology, the clinical laboratory, and pharmacology. Focuses on the reading, analyzation, and use of clinical research and literature to explore advanced topics. Emphasizes written and verbal presentation of the findings of individual and group student research projects. Prerequisite: H 120 and H 21 or consent of instructor. Sp

## H130 Health Information Systems Office <br> 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 Cor higher in ail required courses in the first two terms of the program. Class fee $\$ 20 . \mathrm{Sp}$

## H131 Medical Practice Seminar

## 1 class hr/wk, 1 cr.

Study of the relationstip of practicum in a health care setting with theoretical course content, as well as its application to career and personal goals. Prerequisite: Concurrently enrollment in MED079. Sp

## H140 Medical Transcription

2 class and 2 lab hrs/wk, 3 cr .
An introduction to the lechniques of transcribing from the recorded voice to the computer, and operation of the transcriber. ncludes transcribing letters, case histories, pathological reports, and other medical reports. Prerequisite: $\mathrm{H120}$, keyboarding at 40 words per minute or consent of instructor. Class fee $\$ 10$. W

## H141 Advanced Medical Transcription 1

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

Introduction to in-depth transcription in all ficlds of medicine. Speling, grammar, punctuation, and formating will be emphasized. Production goals will be set and assessed regularly with timed tests. Prerequisite: $\mathrm{H} 160, \mathrm{H} 120$ and H121 (may be concurrent), or consent of instructor. Class fee $\$ 10 . \mathrm{W}, \mathrm{Sp}$

## H142 Advanced Medical Transcription 2

1 class and 4 lab hrs/wk, 3 cr .
Continuation of H141. Includes transcription of comprehensive dictation in medical specialty areas including radiology, pathology, and cardiology using American Association of Medical Transcriptionist course tapes. Prerequisite: $\mathrm{H} 120, \mathrm{H} 121, \mathrm{H} 140, \mathrm{H} 141$, enrolment in the Medical Transcription program, touch typing ability of 55 words per minute, and OA20IP or equivalent as determined by instructor. Class fee $\$ 10$. $\mathbf{F}$

## H143 Advanced Medical Transcription 3

1 class and 4 lab hrs/wk, 3 cr .
Continuation of H 142 . Includes transcription of 20 advanced tapes in all fields. Prerequisite: $\mathrm{H} 120, \mathrm{H} 121$, $\mathrm{HI} 40, \mathrm{H} 141, \mathrm{H} 142$, carollment in the Medical Transcription program, and touch typing ability of 65 words per minute or proficiency in WordPerfect at an intermediate level. Class fee $\$ 25$. W

## H210 Introduction to Health Services

## 3 class hrs/wk, 3 cr.

Provides in overviaw 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

## H216 Health Care Data and Statistics

## 3 class hes/wk, 3 cr.

Provides the student with a working knowledge of basic statistical techniques and their application to various
health care literature and clinical environments. Uses the concepts of experiential and case-based-leaming to facilitate the leaming process. Prerequisite: MTH095 or BA211, H116 or consent of instuctor. Sp

## H230 Health Services Externship

16 lab hrs/wk, 6 cr.
One hundred sixty hours of workplace experience in a health care or related setting. Prerequisite: $\mathrm{H} 210, \mathrm{H} 250$ and H 251 , or consent of instructor. Current enroliment in H231. Class fee \$27. Sp

## H231 Health Services Seminar

1 class hr/wk, 1 cr .
Study of the relationship between clinical practicum in health care or related setting with theoretical course content and application to career and personal goals. Prerequisite: Concurrent enrolment in H 230 , or consent of instructor. Sp

## 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 healsh services organization and the health services delivery system. F

## H251 Health Services Management II

3 class hros $/ w k, 3 \mathrm{cr}$.
Continuation of H 250 . Emphasizes the arca of human resource management in healkh 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. W

## HD

## Human Development

## HD090 Peer Assistance Training

3 class hrs/wk, 3 cr.
Provides traning 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 perrs with personal, social, or academic problems. Offered as needed.

## HD100 Orientation to Chemeketa: Successful

 Entry into College11 class hrs/wk for $1 \mathrm{wk}, 1 \mathrm{cr}$.
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, ghest speakefs, group activitics, 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. Prereq. uisite: Reading placement test score of 34 or consent of instuctor. F, W, Sp

## HD200 Applied Learning Strategies

3 class hrs/wk, 3 cr.
In conjunction with a linked course, heips students strengthen their study, reading, and vocabulary skills. Emphasizes the development of higher-level critical thinking skills. Prerequisite: Enrollment ia linked course or consent of instructor. Offered as needed.

## HD220 Life Skills Seminar I

3 class hrswk, 3 cr .
Seminar includes personal development, career planning, skills and strategies for leaming, support systems and networking, and exploration of non-traditional training. $\mathbf{F}$, $\mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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/schoolfamily conflicts, goal setting, and action plan development, $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## HDF and HDFS

## Human Development <br> 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 entolled. F, W, Sp

## HDF050 Parent/Infant

## 1 class $\mathrm{hr} / \mathrm{wk}, 1 \mathrm{cr}$.

Covers infants' growh, leaming, behavior, guidance, heaith, 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 hr/wk, I cr.
Covers toddlers' growth, lcarning, behavior, guidance, health, and nutrition; expectations of parenthood; and activitics with toddlers. Parents and children attend class together. Course may be repeated for a maximum of six credits. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## HDF052 Parent/Preschooler

1 class $\mathrm{hr} / \mathrm{wk}$, 1 cr .
Covers preschoolers' growth, leaming, 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. $F, W, S p$

## HDF065 Parenting and Cooperative Child Care

 1 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 2 \mathrm{cr}$.Emphasizes working with young children by active pazticipation 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 requied parent seminars. Course may be repeated without limitation of credits. F, W, Sp

## HDFS222 Family Relationships

3 class hrowk, 3 cr.
Examines communication patterns and relationships between adults, aduits and children, and within intimate personal relations (marriage, families, and couple relations). Emphasis is placed on understanding the role of the family and is 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, intellec-
\{ual, emolional, and social growth and development of young children. $F$

## HDFS226 A Time to Grow

3 class hrs $/ w \mathrm{k}, 3 \mathrm{cr}$.
Designed to look at children, ages birth through adolescence, from a developmental perspective, reflecting how childres 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

HDES229 Development in Middle Childhood 3 class hrs/wk, 3 cr .
Sludy 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. $S p$
HDFS242 Balancing School, Work, and Family 1 class hriwk, 1 cr.
Presents information on balancing the demands of school, work, and family. Covers the work-family lifestyle, handing stress, communication skills, and time and money management. F, W, Sp

## HDFS247 Preschool Child Development

3 class hrs/wk, 3 cr.
Covers the principles of development as they apply to the young child, primarily ages 2-1/2 through five. Emphasizes physical, intellectual, emotional, and social growth in children. W

## HDFS248 Learning Experiences for Young Children

4 class hrs/wk, 4 cr .
Focuses on planning and implementing preschool curriculum based on development theory. Involves weekly lectures and experiences covering presentation, development, analysis, and evaluation of materials and concepts which facilitate development of the whole chidd (physical, social, emotional, and cognitive development). Prerequisite: HDFS225 and HDFS247. Class fee $\$ 5 . \mathrm{Sp}$

HDFS249 Introduction to Working with Infants and Toddlers
3 class brs/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 $/ \mathrm{wk}, 3 \mathrm{cr}$.
How kindergatten 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 transtion 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 cliild 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 intervicws 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, leaching, and other areas. Includes causes of abuse, the abused child, abusive parents, the role of teachers, areas of treatment, cducation, 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 govemmental 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. $F$

## HI

## 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 drags. Focuses on a "decision-making" approach to drug use and abuse. F, W, $\mathrm{Sp}, \mathrm{Su}$
HE199S H.I.V. , A.I.D.S. and other S.T.D.'s
(Human Immunodeficiency Virus, Acquired
Immunodeficiency Syndrome and other Sexu-
ally Transmitted Diseases/Infections)
3 class hrsiwk, 3 cr .
Presents basic infommation about H.I.V., A.I.D.S., and other sexually transmitted diseases/infections. Explores newest research available. Focuses on decision-making and behaviors which help prevent contracting sexually transmitted diseases/infections. F, W, Sp

## HE199W Health Assessment

1 class hriwk, 1 cr .
Designed to enhance the understanding of the student's fitness level and fitness capabilities, health standing, and state of wellness. Students will assess their current healh and nitness level, and develop a program for improvement. Offered as needed.

## HE204 Nutrition, Weight Control, and Physical Fitness

3 class hrs/wk, 3 cr .
Methods of maintaining or improving fitness by considering diets and dieting, obesity, types of exercise, physical testing, cardiovascular fitness, and nutritional concepts. F, $\mathrm{W}, \mathrm{Sp}$

## HE209 Human Sexuality

3 class brs $/ w k, 3 \mathrm{cr}$.
Covers mental, physical, and social aspects of human sexvality. Emphasizes development of a decision-making model that enables a person to make personal choices. Class discussion will be a vital part of the course. F, W, Sp

## 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 altematives. Explores how to choose and use a care provider, and how to stay as healthy as possible. Sp

## HE250 Personal Health

3 class hrs $/ w \mathrm{k}, 3 \mathrm{cr}$.
Presents basic infomation concerning the social, emotional, intellecual, physical, spiritual, and environmental aspects of personal health and wellness. Emphasizes health enthancing skills and behaviors. Provides an opportunity for students to apply and practice decision-making models regarding their own personal health issues. F, W, Sp

## 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 recentification 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 $/ w \mathrm{k}, 3 \mathrm{cr}$.
Facts and principles required for safe administration of medicines in caring for patients. Provides comprehensive base for clinical application. F, W, Sp

## HPE <br> 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, Su

## High School Completion

## see Page 27

## HS

## Human Services

## HS101 Alcohol Use, Misuse, and Addiction

3 class hrs/wk, 3 cr.
Presents basic information conceming 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 hri/wk, 3 cr .
Examines drugs and their effects. Groups drugs according to the ways they enter persons' lives. Includes addilives in food, prescription drugs, chemicads in air and water, and the physiological and psychological effects these drugs have on the lives of users and possible implications for the tratment and prevention of dug problems. Prerequisite: HS101.W

## HS140 Handing the Violent Client

1 class hr/wk, 1 cr .
An iniroduction to the recognition, prevention, and control of aggressive bethavior. Stresses prevention of violence through early intervention and includes information on pre-aggession warning signs, as well as practice in defusing aggeession and the use of physical defense responses. Sp
HS150 Personal Effectiveness for Human Service Workers

## 3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.

An introduction to the clements 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 Scr-
vices program and concurrent enrolment in HS 154 , 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 hr/wk, 1 cr ,
Introduces stress management, relaxation techniques, and their impact on health and well-being. Covers a variety of major relaxation techniques and emphasizes the development of a personalized stress management plan. Class fee \$2.F, W, Sp

## HS153 Introduction to Residential Youth Care

 3 class hrs/wk, 3 cr.Training for child care workers, foster parents, and persons interested in working in residential child care facilities. Includes developmental planning, developmental necds, 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 HS 150 and HS 170 . 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 obscrvation 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 leam to identify the disease process of dependency, understand the connection between values and behavior, and develop goals for life changes. Prerequisite: HS 10 I. 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 leam - 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 skills to assist clients in recovery with information and tools for change. Covers communication, selfunderstanding, strategies for change, commitment to and maintenance of support networks and self-care skills. Emphasizes long-term recovery and the identification of ongoing emotional problems that hamper continued abstinence and recovery. Students will learn through lecture, discussion, and experiential exercises how to develop healthy relationships with self and others and be able to assist clients in experiencing balanced living by design. Prerequisite: HS101. Sp

## HS165 Activity Director Training/ Long.Term

## Care

## 3 class hrs/wk, 3 cr .

Mects training requirements of activity directors in longterm 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-tem care residents. F, offered as needed.

## HS168 Mental Health and Aging

3 class hrs/wk, 3 cr .
Presents issues in mental health and aging from both normal aging and psychopathological points of view. Focuses will be on the understanding of psychological problems more prevalent in old age, including specific organic and functional disorders. A variely of approaches to assessment, diagnosis, treatment, and heaith promotion will be explored. 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 HS284-288A,G,S. Prerequisite: Admission to Human Services program and concument 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 hr/wk, 1 cr.
Covers basic information about simultaneous diagnosis of addiction and chronic mental illness in the same patiens/client. Stresses the importance of assessing and treating both areas equally. Prerequisite: HS101. W

## HS199Y Strategies to Promote Positive Youth

Development
3 class hrs $/ w \mathrm{k}, 3 \mathrm{cr}$.
Designed to help Human Services students leam 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: $\mathrm{HS} 101 . \mathrm{Sp}$

## HS202 Counseling the Chemically Dependent

## Client 1

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 skilks in group counseling with chemically-dependent clients. Prerequisite: HSi01. W

## HS204 Counseling the Chemically Dependent

 Client III3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Assists advanced students in expanding their skills in working with chemicaily-dependent clients. Includes information about the possibilities for wellness and wholeness for chemically-dependent persons. Prerequisite: $\mathrm{HS} 101, \mathrm{HS} 150, \mathrm{HS} 155, \mathrm{HS} 202$, and $\mathrm{HS} 203 . \mathrm{Sp}$

## 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: $\mathrm{HS} 101 . \mathrm{Sp}$

## HS206 The Addicted Criminal

## 3 class hrs/wk, 3 cr.

Assists students in developing skills with chemicallydependent clients who are convicted criminals: Includes information on recognizing, confronting, and surviving an addicted criminal. Prerequisite: HS101. Offered as needed.

## HS207 Adult Children of Alcoholics/Addicts

 1 class hr/wk, 1 cr.Explores the relationship between growing up in a chem-ically-dependent or dysfunctional family and problems which surface in adulthood. Includes discussion of family dynamics, denial, relationships, work, social skills, and feelings. Sp

## HS208 Alcoholics, Drugs and Sexuality

1 class hr/wk, 1 cr .
Examines the relationship between chemical dependency, sexuality, and co-dependency. Physiological, psychological, and social factors which impact the sexuality of the alcoholic will be examined. Sexual dysfunction in the female and male alcoholic and the general treatment of each will be outlined. Prerequisite: HS101. Offered as needed.

## HS215 Conflict Management

3 class hrs/wk, 3 cr.
Explores the sources and dynamics of conflict in interpersonal, family, and work settings. Participants will develop an awareness of their own style in conflict situations and leam effective strategies for resolving conflict. Offered as needed.

## HS220 Aging and Society

3 class hrs/wk, 3 cr .
Introduces the field of social gerontology and explores the relationship between the aging individual and society. The first course in a three-course sequence emphasizing the social, biological, and psychological aspects of aging. This course may, however, stand alone for those wishing an introduction to the ficld of gerontology. Class fce $\$ 15$. 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 nomal 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 appicable to small group dynamics. Focuses on group fomation, development of noms, conflicts and controversy, and performance and evaluation. Prerequisite: HS150. W, Sp

HS262 Misuse and Abuse of Alcohol and Drugs Among the Eiderly
1 class hr/wk, 1 cr .
Addresses problems of drug and alcohol misuse and abuse among older adults. Focuses on prescription drugs, over-the-counter drugs, and alcohol used either alone or in combination. Prerequisite: HS101. 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 HS284-288 or concurrent enroliment. $\mathbf{F}$

## 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, HS284288 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

## HS284-288A,G,S Practicum-Human Services

 12.24 lab hrs $/ w \mathrm{k}, 48 \mathrm{cr}$.Course change requested to match the number of credit hours for each course. This request affects only the Human Services program. Prerequisite: HSI50 and HS170. Class fee vaties, $\$ 3$ each. F, W, Sp (Su as needed)

## HS298A-E Independent Studies

## variable hrs. and cr.

Provides an opportunity to study content not currently offered at the college. Consists of college-level learning which is individualized through the use of learning confracts. Faculty will maintain quality control through the cooperation of resource persons in the community. Offered as needed.

## HSM and HTM <br> Hospitality and Tourism <br> Management

## 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 makket and sell travek effectively. Covers developing and marketing a travel product, identifying target audiences, using effective advertising techniques,
and converting marketing strategies into sales lechniques. Emphasis placed on customer service training. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## HSM072 Travel Agency Management

3 class hrsiwk, 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 ciass project. Sp

## HSM074 Computer Reservation Systems

## 3 class hrs/wk, 3 cr.

This course uses simulations 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 successfu? 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

## HTM100 Introduction to the Hospitality Industry

3 class hrs/wk, 3 cr.
Defines hospitality industry as a single, interrelated industry comprised of food and beverage service, travel and tourism, lodging, meeting and planning, leisure and recreation, recreational entertainment, and eco and heritage tourism. Emphasizes understanding industry components and their current issues and future trends. Assesses the impact of North America's rapidly changing demographics and lifestyle changes on the hospitality industry, as well as the impact of the hospitality industry on the U.S. economy. Career opportunities and the service ethics are discussed. $\mathbf{F}$

## HTM101 Hospitality and Tourism Management

 3 class hrs/wk, 3 cr .An in-depth study of the methods and techniques employed by the hospitality and tourism industry to accomplish effective and efficient operations. Includes discussions of management theory, systems, decisionmaking and leadership as they relate to the hospitality profession. Covers human resource management, finance, ethics, and marketing within the hospitality environment. Sp

## HTM102 Hotel, Restaurant, and Travel Law

 3 class hrs/wk, 3 cr .Presents the legal aspects of the hospitality and tourism industry. Stresses critical thinking skills to teach students to communicate with their atomeys and recognize the ramifications of the policies and practices of their businesses. Discusses the Americans With Disabilities Act, sexual discrimination, civil rights issues, basic court procedures, contract law negligence, guest relationship obligations, alcohol liability, travel agent relationships, and licensing and regulations. W

## HTM103 Marketing in 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 strategics. Sp

## HTM104 Introduction to the Travel and Tourism Industry

3 class hrs/wk, 3 cr.
Explores the major concepts in tourism, what makes tourism possible, and how tourism can become an important factor in the economics of any nation, state, regional, or local area. Discusses fundamentals of the tourism system and the need for accurate research data. Promotes understanding and knowledge of the efiverse elements that comprise the travel and tourism industry and the factors that influence growth and development. $\mathbf{F}$

## HTM105 Introduction to the Food Beverage Industry

3 class hro/wk, 3 cr.
An overview of the food service industry, its structure, organization, size, economic impact, regulatory industries and peripheral industries; managerial problems and practices; and trade joumals and resources, with a broad review of the various food service segments. Discusses topics of current concern for the industry. Guest speakers representing various segments of the industry will provide an introduction to carcer opportunities and a view of realworld activities. W

## HTM106 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 procetlures and explores career opportunities. Sp

## HTM107 Sanitation and Safety for Managers

## 3 class fras/wk, 3 cr.

Designed for hospitality and tourism industry members. This course is based on the National Restaurant Association's ServSafe training and certification coursework. Informs, strengthens, and updates supervisors and managers on current principles and practices of sanitation and safety. Covers Oregon's recert enactment of statewide food handler training, the Hazard Analysis Critical Control Point (HACCP) system, as well as potable water systems, waste treatment, lodging facilities, recreational facilities, swimming pool and spa regulations, and hazardous materials. Upon successful completion of this course, a certificate of completion will be issued by the National Restaurant Association. Sp

## HTM108 Introduction to the Leisure and <br> Recreation Industry

## 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, and health; and the changing lifestyles in American society. Covers how the leisure industries play a critical role in our economy and how the development of young children, the success of mamiages, the maintenance of intellectual capacity among older people are all critically linked to play, recreation and leisure. $F$

## HTM109 Front Desk Operations

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Designed to cover the functions of the front desk operation at a hotel or motel. Includes reservations, registration, room and rate assignment, guest services, roonn status, maintenance and settlement of guest accounts, and creation of guest history records. Covers the development and maintenance of comprehensive databases of guest information, coordination of guest services, and ensuring guest satisfaction. Local area hotels will be used as resources and field trips will be scheduled. Cursent computerized reservations systems will be featured. $F$

## HTM117 Travel Agency Basics

3 class hri/wk, 3 cr .
Provides a systematic and comprehensive overview of the travel industry with the focus on travel agencies. Covers
the pivotal role of the travel agent and the nature of the relationship between agents and supplier and between agents and thcir client. Presents critical information on travel products and destinations, important business isslues, and the technical and personal skills necessary to begin a successful travel industry carecr. Career opportunities will be discussed, and current issues and future trends identified. W

## HTM119 Introduction to Casino Management

 3 class hrs/wk, 3 cr.Provides an overview of casino management and casino hotel operations. Includes the history and culture of gaming, gaming trends in the United States, casino hotel organizational structure, government regulation, and casino games and Indian casinos. Covers the practices and problems associated with casino management including staffing, controls, credit, security, marketing, and entertainment. Sp

## HTM126 Meeting and Event Planning

3 class hrs/wk, 3 cr .
Covers the management and operations of the convention and meetings market of the hospitality and tourism industry. Includes an introduction to the meetings industry, promotional activities, negotiations for meeting services, convention market salesmanship, customer service, and convention servicing. Facilities, technology and media are discussed. 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. HSTLIO: from ancient times to 1500 A.D.; HSTIII: from 1500 to 1914; HST112: the twentieth century. HST110: F, W; HST111: W; HST112: Sp

## HST157 History of the Middle East and North

## Africa

3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
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 HistoryAfrican American

3 class hrs/wk, 3 cr .
Examincs 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 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. Offered as needed.

## Journalism

## J198 Independent Study: Editorial Writing

1 class hr/wk, 1 cr.
Emphasizes witing to persuade readers to a point of view or an editorial stand. Includes a thorough discussion of writing techniques and an examination of in-depth and investigative reporting techniques that produce stories worthy of commentary. Work produced during this class will be considered for publication in the student newspaper. Prerequisite: J 216 or consent of instructor. Ability to type and a basic understanding of English grammar and syntax are essential. F, W, Sp

## J199 Journalism Ethics

## 3 class hrs/wk, 3 cr.

Provides an introduction to journalism ethics, with emphasis on the First Amendment, the philosophical framework, corporate social responsibibity, the legal system, the changing face of the media, editors and readers in the debate process, and issues of taste vs. responsibility. Examines important dilemmas facing print and broadcast joumalists, with real-life examples that are current in the face of legal challenges to the system by the courts and the changing standards of the public at large. Prerequisite: J224. W

## 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 syly, 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: 5216 or consent of instructor. Knowledge of typing required. W

## J224 Introduction to Journalism

3 class hros $/ \mathrm{wk}, 3 \mathrm{cr}$.
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 jour-
nalists. 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 edising, and headline wriing. Sp

## IPN

Japanese

## JPN101 First Year Japanese, Term I

4 class hro/wk, 4 cr .
Develops skills in reading, writing, speaking, and understanding basic Japanese language. Introduces Japanese culure. 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 deternined 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 Japancse culture through everyday social situations. Prerequisite: JPN102 or equivalent as determined by the instructor. Class fee $\$ 2 . \mathrm{Sp}$

## — . . ..............

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 Infomation Technician or Medical Transcriplionist programs and H110.F

## MED050A Introduction to Medical

## Terminology A

## 1 class hr/wk, 1 cr.

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

## MED050B Introduction to Medical

Terminology B
1 class hr/wk, 1 cr.
Continuation of MEDO50A. Emphasize suffixes and prefixes, as well as general application of medical terms. Abbreviations and symbols are included. Prerequisite: Grade Cor higher in MED050A. Sp

## MED054 Medical Office Procedures

## 3 class and 3 lab hrs $/ \mathrm{wk}, 4 \mathrm{cr}$.

Procedures and principles used in medical offices in administrative duties, marketing, establishment of patient records, employee manuals, office inventory, written communication, insurance processing, banking, telepbone communication, office equipment, and research services. Prerequisite: OA121 and H101. Class fee \$10.W

## 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 seting. Prerequisite: Admission to the Medical Office Assisting program. Class fee $\$ 20 . \mathbf{F}$

## MED057 Medical Assisting, Advanced

## Procedures

4 class and 4 lab hrs/wk, 6 cr .
A survey of advanced clinicallaboratory knowledge and skills required of the medical office assistant. Heavy emphasis is placed on electrocardiography, hematology, urinalysis, microbiology, clinical pharmacology, as well as administration of medications and assisting the physician with minor surgery. Covers diet modification, radiology, principles of heat and cold application, and common emergencies. This course is designed to provide individual and small group assistance to students for skill development. Prerequisite: Second-term standing in the Medical Office Assisting program with a grade C or higher in all required courses. Class fee $\$ 20$. W

## MED064 Introduction to Medical Science

3 class hrsywh, 3 cr .
A survey of disease conditions, types of treatment, and medical surgical speciallics. Prerequisite: H120, H121. F, Sp

## MED073 Medical Transcription Seminar <br> 1 class hr/wh, 1 cr.

Designed to assist the student in relating classroom theory to practical experience and to discuss self-evaluations of work envitonment experiences. Prerequisite: Concurtent enrollment in MED280. Sp

## MED079 Medical Office Practice

16 lab hrs/wk, 5 cr .
Practical applications of medical assisting methods, procedures, and techniques in a healh care setting. Prerequisite: Third-erm standing in the Medical Assisting program with a grade Cor higher in all required courses. Current Standard First Aid card and Health Care Provider CPR card on file with the instructor. Class fee $\$ 27 . \mathrm{Sp}$

## MED088 Medical Assisting Certification Exam

 Review2 class hrs/wk, 2 cr .
Reviews essential components of the Medical Assistant curriculum in preparation for the Medical Assistans Certification examination. Covers knowledge and skills in the clinical and administrative area, law and ethics, terminology, anatomy and physiology, pathology, and humana 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

## 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 manufacuring procedures. Positive interaction skills and indus-try-accepted work ethics will be integrated broughout the course. Class fee $\$ 16$. F

## MFG054 Geometric Tolerancing Lab <br> 3 lab hrs/wk, 1 cr .

Practical application of geometric concepts and practices related to surface plate and coordinates measuring machine technology. Emphasis placed on the correct interpretation of geomerric dimensioned engincering drawings and recognition of the correct setup method and procedure necessary to manufacture and inspect parts according to functional requircments. Prerequisite: $\mathrm{Con}-$ current entrollment 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, berch 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 MFGOS6. Includes intermediate dinlling, tuming, milling, and grinding machine setup and operations. Prerequistie: MGO56 or consent of instructor. Class fee $\$ 20 . \mathrm{W}$

## MFG063 Manufacturing Print Reading and

## Sketching

3 class and 3 lab hrs/wk, 4 cr .
Instruction and skill developmert in blueprint reading, sketching, basic drawing techiniques, and geometric constructions. Class fee $\$ 5 . \mathrm{F}$

## MFG064 Manufacturing Fundamentals

3 class and 6 lab hrs/wk, 5 cr .
Basic manufacturing operations emphasizing benchwork processes. Introduces fundamental principles, sctup, and operation of basic machine tools including power saws, bench and pedestal grinders, drilling machines, tuming machines, miling 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 tuming and vertical milling operations. Emphasizes work and tool hoiding methods. Includes continued knowledge and skill development in material removal areas. Prerequisite: MFG056 and MFG064 or consent of instructor. Class fee $\$ 30$. W

MFG066 Material Cutting/Removal Methods
3 class and 6 lab hrs $/ w \mathrm{k}, 5 \mathrm{cr}$.
Emphasis on the setup and operation of material cutting methods. Includes continued knowledge and skill development in the areas of tuming and milling and an introduction to surface grinding. Prerequisite: MFG056, MFG057, or MFGO65, or consent of instructor. Class fee $\$ 30 . \mathrm{Sp}$

## MFG068 Manufacturing Measuring, Inspec-

tion, and Quality Control
2 class and 3 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
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 $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 4 \mathrm{cr}$.
Usc 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 enviromment. 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 quadiiy planning and systems, probiem solving, management systems, data collection, continuous quality improvement, people, and teams. Slatistical Process Control (SPC) concepts and practical applications are applied to give the student a working knowledge of TQM tools. Class fee $\$ 5 . \mathrm{Sp}$

## MFG071 CAD for CAM

2 class and $3 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 3 \mathrm{cr}$.
Incorporates hands-on experience with the AutoCAD PCbased computer-aided drafting program. Includes necessary factors for successful CAD/CAM integration to meet CNC manufacturing requirements. Class fee $\$ 5$. $\mathbf{F}$

## MFG076 Manufacturing Materials and Cutting Tools

3 class and $6 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 5 \mathrm{cr}$.
Provides knowledge and skill development in the selection and application of work materials and cutting tools. Includes manufacturing machine tools and nomraditional methods used in temoving material to produce machined parts. Prerequisite: MFG066 or consent of instuctor. Class fec $\$ 20 . \mathrm{Sp}$

## MFG079 Industrial Systems

2 class and 3 lab herswk, 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

## MFG081 Manufacturing Processing Planning

3 class and 6 lab hrs/wk, 5 cr .
Advanced instuction in the use of machine tools to emphasize manufacturing process planning procedurs. Automated processes included in tracer and CNC operations. Prerequisite: MFG066 or consent of instrictor. Class fee \$30.F

## MFG082 Manufacturing Production/Assembly

 Methods3 class and 6 lab hrs/wk, 5 cr .
Emphasizes production and assembly methods in parts manufacturing. Advanced instruction in the use of material removal machinery. 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 fec $\$ 30 . \mathrm{Sp}$

## MFG088 Fluid Power Systems

3 class and 4 lab hrs/wk, 4 cr .
Fundamental principles of hydraulic and preumatic 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 Manu-

 facturing2 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 Windows operating system structure and commands; the basics of word processing, spreadshect, and database software; shop floor data collection; and graphics databases, as they relate to industry. Class fee $\$ 5$. F

## MFG093 CNC Machine Tool Operations

3 class and 6 lab hrs/wk, 5 cr .
Introduces students to computer numerical control ( CNC ) teminology, 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 .
Introdaces 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 $6 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 5 \mathrm{cr}$.
Introduces Computer Aided Manufacturing (CAM). Prerequisite: DRF073, or MFG071, or consent of instuctor. Class fee $\$ 20 . \mathrm{W}$

## MFG096 CAD-CAM Integrations

3 class and 6 lab hrs/wk, 5 cr.
Practical application of CM , automated manufacturing in a fully computerized manufacturing environment. Prerequisite: MFGO95 or consent of instructor. Class fee $\$ 20 . \mathrm{Sp}$

## MFG280 Cooperative Work Experience see AUM280.

## US

## Military Science

## MS111 Military Science I: Leadership <br> Development

1 class hr/wk, 1 cr.
Introduction to ROTC and is relationstip to the U.S. Army. Covers the role of the army officer, including leadersthip and management fundamentals. Offered as needed.

MS112 Military Science $\mathbf{I}$ : Military Skills
1 class hr/wk, 1 cr.
Covers basic rifle marksmanship, military first aid, customs and traditions of the U.S. Amy, unit organization, and missions. Offered as needed.

## MS113 Military Science I: Land Navigation

 1 class hr/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 <br> 2 class hr/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 hr/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 <br> 2 class hr/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 Summer Camp: Camp Challenge

6 class hr/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 hr/wk, 3 cr.Examines leadership and management fundamentals, and the role of the Ammy ROTC and the Ammy 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 hr/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.

## US

## Multidisciplinary Studies

## MS251 The Art of Discovery

## 3 class hrs $/ w k$, 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. $\mathbf{F}$

## MS252 The Art of Discovery

## 3 class hrs/wk, 3 cr .

An exploration of Renaissance culture in Western Europe-its history, literature, philosophy, and art-with a goal of gaining an understanding of the common, shared experience of people who lived in that era. W

## MS253 The Art of Discovery

## 3 class hrs/wk, 3 cr.

An exploration of early Twentieth Century Europc-its troubled history, literature, philosophy, and ant-with a goal of gaining an understanding of the common, shared experience of people who lived in that cra. Sp

MS259 Death and Dying
3 class hriskk, 3 cr .
An introduction to the study of deatit and dying. Students will compare and contrast historical and modem attitudes toward death and dying found in literature, rituals, religion, philosophy, fitm, medico-legal issues, and in the process clarify their attitudes and values. Offered as needed.

## MT

## MICROELECTRONICS/INDUSTRIAL

## MT100 Electronics Fundamentals for <br> Non-Majors

3 class and 2 lab hrs $/ w k, 4 \mathrm{cr}$.
Introduces the fundamental theories, circuits, and devices used in electronics. Covers direct and altemating 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: MTHO60, MTH070, or high school algebra. Class fee \$8. F, W

## MT110 Microelectronics

3 class hrs/wk, 3 cr .
Surveys the field of microelectronics. Includes an overview of the technology and manufacturing processes, and the impact on the economy and society. Useful for anyone considering a career in the semiconductor industry. Prerequisite: MTH060, MTH070, or high school algcbra. $\mathbf{F}$

## MT223 High Vacuum Technology

3 class hrs/wk, 3 cr .
Addresses high vacuum concepts, theory, and the various types of vactum systems. Includes vacuum pumps, seals, gauges, valves, power supplies, leak detecting equipment, and related hardwase. Examines the set up, operation, troubleshooting and monitoring of vacuum systems. Prerequisite: MTH060, or MTH070, or high school algebra. W

## MT227A Pneumatics

2 class and 3 lab hrs 1 wk, 3 cr.
Covers pneumatic components and systems concepts. Stresses theory and practical troubleshooting. Laboratory experiments are designed to reinforce lecture concepts and teach construction and troubleshooting techniques. Prerequisite: MTH060, MTH070, or high school algebra. Sp

## UTH

## Mathematics

## MTH007 Whole Numbers

3 class hris/ $4 \mathrm{wks}, 1 \mathrm{ce}$.
Fundamental mathematics: addition, subtraction, multiplication, and division of whole numbers. Includes story problems with whole numbers. Prerequisite: College placement test scorc or instructor placement test. F, W, $\mathrm{S}_{\mathrm{p}}$

## MTH008 Fractions

3 class hrs/4 wks, 1 cr .
Fundamental mathernatics: addition, subtraction, mulisplication, and division of fractions. Inciudes story problems with fractions. Prerequisite: College placement test score or instuctor placement test. F, W, Sp
MTH009 Decimals, Proportions and Percents
3 class hrs/4 wks, 1 cr .
Covers addition, subtraction, multiplication, and division of decimais, percentages. and proportions. Includes story problems with decimals, percentages, and proportions. Prerequisite: College placement test score or instuctor placement test. F, W, Sp

MTH051 Basic Mathematics
3 class hrs/wk, 3 cr.
Includes fundamentals of addition, subtraction, multiptication, 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 hirs/wk, 3 cr .

Introduces basic algebraic and geometric techniques and applications. Includes signed numbers, elements of aigebra, simple equations and formulas, measurements and conversions, angles, perimeters, and areas of common geometric figures. Prerequisite: Grade C or higher in MTHOSI 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 Pyybagorean theorem similar triangles, volumes of common geometric figures, and right and oblique triangle trigonometry. Prerequisite: Grade C or higher in MTHOS2 or equivalent as determined by the instuctor. F, W, Sp, Su

## MTH060 Introductory Algebra

4 class hriswh, 4 cr.
Entry-level course for students with no algebra background. Provides a strong, fundamental background in beginning algebra through directed group activities and varied presentation styles. Covers elementary algebraic expression manipulation and equation solving in verbal, numerical, graphical, and symbolic forms. Scientific calculator required. Prerequisite: Grade of C or higher in MTH051 or equivalent as determined by instructor. F, W, $\mathrm{Sp}, \mathrm{Su}$

## MTH062 Business Applications Using <br> Mathematics <br> 4 class hrs/wk, 4 cr .

Presents applications of mathematics to the world of business. Includes applications involving securities, profit distribution, overhead allocations, business statistics, simple interest, notes and bank discounts, compound interest, mustiple payment plans, annuities, depreciation, single discount equivalent, markup, markdown, inventory valuation, and financial staternent analysis with ratios. Prerequisite: Grade C or higher in MTHO60 or equivalent as deternined by instructor. F, W, Sp

## MTH070 Elementary Algebra

4 class hrs/wk, 4 cr .
For students with linear equation solving and elementary graphing background. Students continue algebraic experience through directed group activities and varied presertation styles. Covers writing linear equations, solving systems, inequalities, quadratics, and radical equations in verbal, numerical, graphical, and symbolic forms. Graphing calculator required. Prerequisite: Grade of C or higher in MTH060 or equivalent as determined by instuctor. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## MTH075 Applied Geometry

## 1 class hr/wk, 1 cr.

Individualized course which students may start and complete any time during the tem. Covers basic concepts of points, lines, planes, angles, triangles, conguence, similarity, and polygons, all from an intuitive point of view. Includes applied problems involving these concepts. Prerequisite: MTH060 or equivalent as determined by instructor. F, W, Sp, Su

## MTH076 Applied Geometry

1 class hr/wk, 1 cr:
Individualized course which students may start and compiete any time during the term. Preserts basic concepts of perimeter, circumference, arc length, central and inscribed angles, areas of polygons, areas of circles and sectors, sufface area of solids, and volumes of various solids are studied. Includes applied problems involving these figures. Prerequisite:MTH060 or equivalent as determined by the instructor. F, W, Sp, Su

## MTH077 Applied Geometry

1 class hr/wk, 1 cr.
Individualized course which students may start and complete at any time during a term. Covers use of protractor, straight edge, and compass to construct and copy various figures while Jeaming terms and techniques of constuctions. Introduces basic concepts of analytic geometry using applied problems. Prerequisite: MTH070 or equivalent as determined by the instructor. F, W, Sp, Su

## MTH078 Applied Trigonometry

1 class $\mathrm{hr} / \mathrm{wk}, 1 \mathrm{cr}$.
Individualized course which students may start and complete any time during the tem. Definitions and various applications of the trig ratios sin, cos, tan, sec, csc , and ctn will be taken. Many applications involving the solutions of right triangles arc included. Prerequisite: MTH075, and MTH076 with grade of C or higher. F, W, Sp, Su

## MTH079 Applied Trigonometry

1 class hr/wk, 1 cr .
Individualized course which students may start and complete any time during the term. Many applications involving the solution of oblique triangles will be taken. Includes radian measurement, vectors, and trig ratios of all angles. Prerequisite: MTH078 or equivalent as determined by the instuctor. $\mathbf{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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 enginecring, 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 MTH060 or equivalent as determined by the instractor. 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. meludes 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 hris/wk, 4 cr .
Third term in a sequence. For technicians in civil-stractural 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 detemmined by the instructor. Sp

## MTH095 Intermediate Algebra

4 class hrs/wk, 4 cr.
Students view linear and quadratic relationships as functions in verbal, numerical, graphical, and symbolic forms and expand their algebraic experience to include rational, exponential, and elementary logaithmic concepts. Presentations are varied with directed group activities.

Graphing calculator required. Prerequisite: Grade of C or higher in MTH070 or equivalent as determined by instructor. F, W, Sp, Su

## MTH105 Introduction to Contemporary Mathematics

4 class hrs/wk, 4 er.
Surveys the application of mathematics as a problemsolving 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, witing assignments, and laboratory activities may be required. Graphing calculator required. Prerequisite: Grade C or higher in MTH095 or equivalent as determined by instructor. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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 activitics, weiting 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: $\mathbf{E}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## MTH211 Foundations of Elementary <br> Mathematics <br> 3 class hrs/wk, 3 cr .

First course of a thre-term sequence for liberal arts students, especially prospective elementary teachers. Emphasizes probiem 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. $\mathbf{F}$

## MTH212 Foundations of Elementary <br> 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 MTH11l or equivalent as determined by instructor. W

## MTH232 Discrete Mathematics

4 class hrs/wk, 4 cr .
A second course for computer science and mathematics majors. Applies topics inciuding graphs and trees, matrices, counting, and algebraic structures. Prerequisite: Grade C or higher in MTH231 or equivalent as determined by instructor. Sp

## MTH241 Elementary Calculus

4 class hrs/wk, 4 cr.
A one-term terminal course with an intuitive approach to differential and integral calculus. Emphasizes techniques of calculus in applied problem solving. The course is primarily for non-math majors. Prerequisite: Grade C or higher in MTH1ll or equivalent as determined by the instuctor. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## 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 MTHII 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 as determined by instuctor. $\mathbf{F}, \mathrm{Sp}, \mathrm{Su}$

## MTH252 Integral Calculus

5 class hirs/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 Cor higher in MTH251 or equivalent as determined by instuctor. F, W

## MTH253 Series Calculus and Linear Algebra

 4 class hrs/wk, 4 cr.Combines topics from linear algebra and infinite series. Includes Tayior and Fourier Series with applications and systems applications using matrices and determinants. Graphing calculator required. Prerequisite: Grade C or bigher in MTH252 or equivalent as determined by the instuctor. 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 thre-dimensional space, vectors, rates of change of functions of several variabies, and optimization in multivariable models. Prerequisite: Grade C or higher in MTH252 or equivalent as determined by the instuctor. Sp

## MTH255 Vector Calculus II

## 4 class hrs/wk, 4 cr .

Second course in multivariable calculus. Explotes 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 $/ w k, 4 \mathrm{cr}$.
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 hr/wk, 1 cr .
Individual instruction in fundamentals of music theory incorporated into basic piano playing skills. Open to students of all levels and interests. Course may be repeated for a maximum of nine credits. F, W, Sp

## MUP105 Jazz Ensemble

## 3 lab hrs/wk, 1 cr.

Applied study and performance on musical instuments played in solo or ensemble formats. Prerequisite: Two years' instruction on an instrument and/or audition. Class fee $\$ 12$. F, Su

## MUP174 Voice

## 1 class hr/wk, 1 cr .

Individual instruction in fundamentals of theory, melodic contouring and phrasing, vocal production, and body mechanics incorporated into basic singing skills and music reading. Open to students of ail levels and interests. May be repeated for a maximum of nine credits. F, W, Sp

## MUS105 Music Appreciation: Introduction to Rock Music

3 class hrs/wk, 3 cr.
Examines the relationship between rock music and society, and emphasizes the musical and lyrical significance of rock music as contemporary social commentary. Class fee $\$ 15$. 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 instuctor 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 chythm, and how these relationships and organization of these elements apply to compositional styles and form. Combines a study of musical clements in art forms and ethnic musicology with writing melodic contours. $\mathbf{F}$

## MUS202 Introduction to Music and Its Literature

3 class hrs/wk, 3 cr .
Deals with sociological and historical develooment 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 1990 s . Sp

## NOR

## NORWEGIAN

## NOR101, 102, 103 First Year Norwegian,

 Terms I, II, III4 class hrs/wk, 4 cr .
A grammatical foundation in formal and idiomatic Norwegian. Emphasizes speaking, reading, and writing. Prerequisite: NOR102: NOR101 or consent of instuctor. NOR103: NOR102, onc year high school Norwegian, or consent of instructor. Class fee $\$ 2$ each. Offered as needed.

## NUR

## Nursing

## NUR060 Nursing Success Strategies

3 class hrs/wk, 3 cr.
Intooduces basic skills that are built upon in the nursing curriculum. Includes a survey of the nursing profession, development of study skills, math for nursing, leaming styles, coping strategies, attitude, motivation, and interpersonal process as related to the nursing curriculum. Prerequisite: One year each of high school algebra and chemistry or an acceptable college course in either of these; Bl231. These prerequisites must have been taken within the last four years. Class fee $\$ 5 . \mathrm{W}, \mathrm{Sp}, \mathrm{F}$ as needed.

## NUR106 Nursing

5 class and 12 lab hrs/wk, 9 cr .
Beginning concepts and skills develop the foundation for sociadization into the nursing profession and for providing safe basic nursing care. Nursing process is introduced with an emphasis upon assessing the basic haman needs of patients. Prerequisite: Admission to the Nursing program. Clinical: Registration must be completed, and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. Class fee $\$ 40 . \mathrm{F}$

## NUR108 Nursing

5 class and 12 lab hrs/wk, 9 cr.
Concepts and skills integrate growth and development, psychosocial coping responses to illhess, and alterations in health status in children and adults. Nursing process is applied to meet basic human needs of individual patients. Prerequisite: NUR106. Clinical: Registration must be completed, and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. Class fee \$30.W

## NUR109 Nursing

5 class and 15 lab hrs/wk, 10 cr .
Concepts and skills are related to nursing care of medical/surgical and childbearing patients and families. Nursing process is applied to meet basic human needs of patients and families at the practical nurse level. Prerequisite: NUR108. Clinical: Registration must be completed and TB test results and proof of curent inmmunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. Class fee $\$ 30 . \mathrm{Sp}$

## NUR206 Nursing

5 class and 16 lab hro $/ \mathrm{wk}, 10 \mathrm{cr}$.
Concepts and skills are related to nursing care of med. ical/surgical patients and families, and mentally ill clients. Standards of nursing care are adopted to meet the basic human needs of individual patients. Patient/cient teaching is emphasized. Prerequisite: NUR109. Clinical: Reg. istration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. Class fee $\$ 30 . \mathrm{F}$

## NUR208 Nursing

6 class and 13 lab hrs $/ w \mathrm{k}, 10 \mathrm{cr}$.
Concepts and skills are related to nursing care of medical/surgical patients and families with ambulatory, acute, and critical needs. Discharge planning is emphasized. Muhtiple standards of nursing care are synthesized to mect the basic human needs of individual patients. Prerequisite: NUR206. Clinical: Registration must be completed, and TB test results and proof of current immanizations submited before a student is permitted in the clinical area. Current CPR certification is required. Class fee $\$ 20$. W

## NUR209 Nursing

3 class and 16 lab hrs/wk, 8 cr .
Leadership and management concepts and skills are cmphasized in providing nursing care at the graduate nurse level for groups of patients. Prerequisite: NUR208. Clinical: Registration must be completed, and TB test results and proof of current immunizations submitted before a studert is permitted in the clinical area. Current CPR certification is required. Class fee $\$ 5 . \mathrm{Sp}$

## NUR250 Introduction to the Operating Room I

 3 class hrs/wk, 3 crFundamentals 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 accredted 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 hes 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, matemity, and geriatric patients. Prerequisite: RN, nursing student, LPN. Offered as needed.

NUR280 Cooperative Work Experience see AuM280.

## OA

## Office Administration and Technology

## OA061 Electronic Calculators

## 4 class hrs/wk for 5 weeks, 2 cr .

Use of electronic printing calculators to solve simple business and mathematical problems. Prerequisite: MTH060. Class fee \$12. F, W, Su

## 0A061A 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 $\$ 4 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$, Su

## OA061B Electronic Calculators B

2 lab hrswk, 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

## 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, temm 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.

## OA084 Business English I

3 class hrs/wk, 3 cr:
Emphasizes basic English skills, including spelling, parts of speech, sentence patterns, terminal punctuation, and dictionary use. Uses written and oral exercises to develop skills in class. Prerequisite: OA121. F, W, Sp,Su

## OA085 Business English II

3 class hrs/wk, 3 cr.
Emphasizes effective business writing by focusing on proper grammar, punctuation, and sentence structure. Covers the writing of business-related paragraphs. Prerequisite: OA084 or consent of instructor based on proficiency exam. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA086 Personal and Professional Development

 3 class hrs/wk, 3 cr .A course in personal and professional development designed to make the students aware of their personal strengths and to identify weaknesses. Concentrates on helping students develop salable personal and professional skills. Hustrates what business has come to accept and appreciate in its employees in the 90 s and beyond. W, Su

## OA090 Bookkeeping

3 class hrs/wk, 3 cr.
Basic accounting principles and procedures. Provides familiacity with financial records and accounting terminology. Includes processing teciniques for handing information, special journals, controlling accounts, and work sheets used in preparing financial statements. Prerequisite: MTHO51 or equivalent as determined by the instuctor. 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, incorne statements, and balance shects. Additional materials introduced on reccivables, 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 computcrized systems to computer and record gross wages, withholding amounts, and net wages, create and maintain employee eamings 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 joumal 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; BA051 or BA211. Class fee $\$ 12$. W, Sp

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

1 class hr/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 payroil registers. OA092B: Compute employers' taxes and other payrollrated costs, make payroll tax deposits, complete payroll reports and $\mathrm{W}-2 \mathrm{~s}$, and make general journal entries for all paysil transactions. OA092C: Compute deductions for both credit and child support wage gamishments. Also studies payroll systems and control procedures, reports to management, and methods of controlling cosis. Prerequisite: OA090; BA051 or BA211. Class fec \$4 each. Sp

## OA099 Proofreading/Editing

3 class hrs/wk, 3 cr.
Effective proofreading techniques emphasizing punctuation, word division, spelling, grammat, and abbreviations. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. Prerequisite: OA085. F, W, Sp

## OA099A Proofreading/Editing A

1 class hr/wk, I cr.
Effective proofreading techniques emphasizing punctuation, word division, speliling, grammar, and abbreviations. Includes practical applications and use of an office reference ramual while developing editing and pre-transcription skills. Prerequisite: OA121, touch typing ability or equivalent as determined by the instuctor. F, W, $\mathrm{Sp}, \mathrm{Su}$

## OA099B Proofreading/Editing B

## 1 class hr/wk, 1 cr.

Effective proofreading techniques emphasizing punctuation, word division, speling, grammar, and abbreviations. Includes practical application and use of an office reference manual while developing editing and pre-transcription skills. Prerequisite: OA099A, OA121, or equivalent as determined by the instructor. F, W, Sp, Su

## OA099C Proofreading/Editing C

## 1 class hr/wk, 1 cr.

Effective proofreading tectniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-ranscription skills. Prerequisite: OA099A, OA099B, OA121, or equivalent as determined by the instuctor. F, W, Sp, Su

## OAl01 Office Careers Survey

## 1 class hr/wk, 1 cr.

An overvicw of the organization and climatc of business and professional offices and an investigation of various job oppotunitics for persons with secretariallcicrical training. F, W, Sp, Su

## OAll6 Office Procedures

3 class hrs/wk, 3 cr.
An introduction to administrative support activities. Includes curcent office technology, professional development, office documents, letter composition, telephone procedures, communication techniques, time and stress management, office mail, meeting and conference planning, travel arrangements, career planning, office ethics, and leadership. Prerequisite: OA085 or concurrent enrollment. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA118A,B,C Current Office Software

## 1 class hr/wk, 1 cr e 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 SystemsUtilities-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). Touch keyboarding ability of 25 words per minute. Class fee $\$ 4$. each. A: $\mathbf{F}$, W, Su; B: W, Su; C: W, Su

## OA119 Exploring Office Desktop Publishing

 3 class hrs/wk, 3 cr .An introduction to publication planning, typography, design principles, and desktop publishing for preparation of office publications. Includes an overview of duplication methods and how to work with print shops. Prerequisite: Touch keyboarding ability. Class fee $\$ 12$. W, Sp

## OA120 Professional Communication Skills

Introduces principles of witten, oral, and nonverbal communication. Includes composition of business documents related to meetings (letters, memorandums, agendas, minutes); use of reference manuals and procedures manuals; participation in small groups and business meetings (group dynamics, team building, shont oral reports); and preparation of written report with documentation. Prerequisite: OA085 or placement through the proficiency exam. F, W, Sp

## OA121 Keyboarding

2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Basic touch keyboarding skitls for standard microcomputer or typewnter keyboards. Emphasizes speed and accuracy, understanding the basic vocabulary of entering or retrieving information, and formating 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 $\$ 4 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA121B Keyboarding B

2 lab hrswk, 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 instuctor. Class fee $\$ 4 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$, Su

## OA121C Keyboarding C

2 lab hrswk, 1 cr.
Third of a three-course sequence. Continues development of speed and accuracy in touch keyboarding on microcomputers or typewiters. Also covers formatting business letters and envelopes and short reports with endnotes. Prerequisite: $O \mathrm{~A} 121 \mathrm{~A}$ and OA 121 B , or consent of instructor. Class fee $\$ 4 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$.

## 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: Touch keyboarding ability of 25 words per minute; 30 wpm recommended. Course may be repeated for a maximum of six credits. Class fee $\$ 12 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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.
Formatting business and personal letters, memos, and reports. Prerequisite: OA122A, OA201P1 and touch keyboarding skill is essential. Class fee $\$ 4$. , $\mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA123B Formating B

2 lab hrswk, 1 cr.
Additional formatting for business letters, envelopes, tables, and reports. Prerequisite: OA201X, OA202P, OA123A, and touch typing ability is essential. Class fee \$4. F, W, Sp, Su

## OA123C Formatting $C$

$2 \mathrm{lab} \mathrm{hr} / \mathrm{wk}, 1 \mathrm{cr}$.
Presents additional formatting styles for tables, ketters, memos, and reports including minutes and itineraries. Prerequisite: OA201P1, OA201P2, OA201P3, OA123B, and touch keyboarding ability is essential. Class fee $\$ 4 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA128 Introduction to Records Management

 3 class hrs/wk, 3 cr .Covers principles and procedures for efficient organization and control of business records. Includes management of the creation, mainterance, storage, and disposition of records. Includes practice in alphabetic, numeric, subject, and geographic filing systems of correspondence and other papers. F, W

## OA128A Introduction to Records Management

 1 class $\mathrm{hr} / \mathrm{wk}, 1 \mathrm{cr}$.Basic principles used in the systematic planning of the classification, arrangement, and filing of alphabetic correspondence and the requisition, charge, and follow-up contols. F, W, Sp

## OA128B Introduction to Records Management

 1 class hr/wk, 1 cr.Presentation of various types of filing systems: colorcoded, alphabetic, subject, numeric, and geographic. Emphasis on records control, transfer, storage, and retrieval; disposition of paper recorded; and special records filing. F, W, Sp

## OA199D Introduction to PageMaker

## 1 class hr/wk, 1 cr .

Hands-on instruction with Aldus PageMaker desktop publishing software using the microcomputer. Students practice publications in class. Prerequisite: Touch keyboarding skill and experience with microcomputers. Class fee $\$ 8$. Offered as needed.

## OA 200 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 keyboarding 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 keyboarding ability of 35 words per minute. Class fee $\$ 12$. Offered as needed.

## OA201P Word Processing Procedures 1 WordPerfect

## 3 class hro/wk, 3 cr .

Training in the operation of WordPerfect software on IBM-compatible computers. Prerequisite: Touch keyboarding ability of 35 words per minute. Class fee $\$ 12$. Offered as needed.

## OA201X Word Processing Procedures 1-

## WordPerfect

## 3 class hrs $/ \mathrm{kk}, 3 \mathrm{cr}$

Training in the operation of WordPerfect for Windows software on IBM-compatible computers. Prerequisite: Touch keytoarding ability of 35 words per minute. Class fee $\$ 12 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## OA202P Word Processing Procedures 2 - <br> 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 as determined by the instructor and touch keyboarding ability of 35 words per minutc. Ciass fee $\$ 12$. Offered as needed.

## OA202X Word Processing Procedures 2 - <br> 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: OA201X or equivalent as determined by the instuctor and touch keyboarding ability of 35 words per minute. Class fee $\$ 12$. W, Sp

## OA203 Advanced Formatting

1 class hriwk, 1 cr.
Students will demonstrate knowledge of correct formats for formating business documents including letters, envelopes, tables, memorandums, reports, and forms. Prerequisite: OA202P and touch keyboarding ability of 35 words per minute. Class fee $\$ 4 . \mathrm{W}, \mathrm{Sp}$

## OA204P Advanced WordPerfect

3 class hrowk, 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 keyboarding ability of 40 words per minute. Class fee $\$ 12$. Offered as needed.

## OA204X Advanced WordPerfect

3 class hrs/wk, 3 cr.
Advanced WordPerfect training covcring graphics, styies, math, columns, merge, advanced macros, and advanced sort fcatures. Prerequisite: OA202X or proficiency in intermediate WordPerfect skills and touch keyboarding ability of 40 words per minute. Class fee $\$ 12 . \mathrm{Sp}$

## OA205 Desktop Publishing I- PageMaker

3 class hrs/wk, 3 cr .
A kand-on microcomputer deskiop 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, 25 wpm minimum. Previous computer experience required. Class fee $\$ 12$. F Sp

OA206 Desktop Publishing II- PageMaker 3 class hrs/wk, 3 cr .
Hands-on microcomputer desktop pubilshing course using Aldus PageNaker 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.W

OA208 Computer Presentations for the Work-place-MS PowerPoint

## 3 class hrs/wk, 3 cr .

Introduces the production of computer presentations for the workplace using presentation software. Includes software techniques, design and typography basics, and production techniques for slides, overheads, and/or screen shows. Prerequisite: OA200 or equivalent as determined by the instuctor. Su

## OA210 Office Microcomputer Applications

 3 class hrs $/ w k, 3 \mathrm{ct}$.Integrated software training using MicroSoff 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, Sp

## OA225A Machine Transcription IA

## $2 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 1 \mathrm{cr}$.

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 atts skills. Students progress at their own rate. Prerequisite: OA121ABC or equivalent as determined by the instructor. English skills at minimum level of OA084 recommended. Class fee $\$ 4 . \mathrm{F}, \mathrm{Sp}$

OA225B Machine Transcription IB
2 lab hrswk, 1 cr.
Continuation of OA225A. Covers techniques of efficient transcription on a transcribing machine. Language ants skiliss and the development of accuracy are stressed. Students progress at their own rate of speed. Prerequisite: OA225A. Class fee $\$ 4 . \mathrm{F}, \mathrm{Sp}$
OA225C Machine Transcription IC
2 lab hrswk, 1 cr.
Continuation of OA225B. Prerequisite: OA225A. Class fee \$4.E, Sp

## OA230 Executive Office Simulation

2 class and 2 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Presents participants with opportunities to use decisionmaking, prioritizing, and time management skills. Prerequisite: OA116, BA214, and OA210. Class fee $\$ 12$. W, Sp
OA232 Integrating Office Software Applications 3 class hrs/wk, 3 cr .
Emphasizes critical thinking skills to apply previous computer and business knowledge in the creation of individual and group projects. Studerts study and apply procedures for importing, exporting, linking, embedding, and merging. Students will also use clectronic mail, peripheral equipment, and presentation software in the production of business documentation and oral reports. Prerequisite: OA202P, OA118ABC, OA210, and CS125SS. $\mathrm{Sp}_{\mathrm{p}}$

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 tectionics, ocean circulation, physical properties of scawater, chemical cycles, marine ecosystems, sedimentation, land and sea cycles, and climate effects. Offered as needed.

## Photography

see Art, Visual Communications

## $P E$

## Physical Education

## PE131 Introduction to Physical Education

 3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.Human movement as a scienlific and humanistic field of study, including historical development, professional opportunities and qualifications, and leaders and major organizations in physical cducation and athetics. W

## PE180BN Basketball-Women's Varsity

3 lab hrs/wk, 1 cr.
Varsity basketball for women. F, W
PE180CL Cross Country/Varsity Women
3 lab hrs/wk, 1 cr.
Intercollcgiate varsity cross-country competition for women. $\mathbf{F}$

## PE180TQ Track and Field Women's Varsity

3 lab hrs/wk, 1 cr .
Intercollegiate varsity track and field competition for women. Sp

## PE180VN Volleyball-Women's Varsity

3 lab hrs/wk, 1 cr.
Interscholastic compctition with tryouts for player selec. tion. Involves advanced methods of team play, game strategy, training and conditioning, and officiating. F

PE185AA,AB,AC Sports Conditioning. Beginning, Intermediate, Advanced 3 lab hrs/wk, 1 cr. each
Students will develop and execule conditioning programs for specific athletic aclivities. Class fee $\$ 5$. F, W, Sp
PE185AD,AE,AF Back Care and Conditioning. Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Uses physical execcises, education, and encouragement from a support group to improve unhealithy backs and maintain healthy backs. Special care will be given to begin execcise program slowly and make personal adjussments to prevent injury. Class fee $\$ 5$. F, W, Sp

PE185BE,BF,BG Bascball-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr.each
Designed to introduce the student to the fundamentals of bascball. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## PE185BJ,BK,BL Basketball- Beginning,

Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Emphasis of fundamental skills, team play, and a knowledge of the sport. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

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. Class fee $\$ 5$. F, W, Sp

## PE185BY,BW,BX Bowling- Beginning,

Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Designed to familiarize students with the fundamentals, rules, and etiquette of bowling. Develops specific skills necessary for successful recreation or life-time sports activity. F, W, Sp
PE185CD,CE,CF Correctives-Beginning, Intermediate, Advanced

## 3 lab hrs/wk, 1 cr, each

Designed to provide the setting, assistance, and instraction for improving the fitness level of students with a physical injury or disability. Prerequisite: Completion of Health Information form by physician, registered therapist, or self. Class fee \$5. F, W, Sp

## PE185CM,CN,CP Cross Country Skiing.

Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
An activity course designed to give the student the opportunity to learn to cross country ski on tracked and untracked terrain. W

## PE185DA, DB,DC Aerobics, Low Impact-

Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
$A_{B}$ activity course designed to obtain cardiovascular and health benefits. Uses low-impact techniques in which there is no bouncing, and one foot remains in contact with the floor. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## 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 Schotische and Poika. Class fee $\$ 5$. Offered as needed.
PE185DJ,DK,DL Dance Modern- Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Presents a variety of modern dance styles. Introduces the concepts of space, time, and force and explores how each of these elements plays a part in movement and dance technique. Focuses on correct alignment as well as efficient and proper use of the body. Class fee $\$ 5$. F, W, Sp
PE185DM,DN,DO Aerobics- Beginning,
Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Designed to increase cardiovascular and muscular endurance through dance routines or step movements and 10 develop muscular strengh and flexibility through stretching, isometric, and isotonic routines. Includes information on proper nutition. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$, Su

## 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, Waliz, and Cha Cha. Beginning class covers basics. Intermediate and advanced classes cover progressively more difficult variations. Class fee $\$ 5$. Offered as needed.

## PE185DV Square Dance Basic I

PE185DW Square Dance Mainstream II
PE185DX Square Dance Plus
3 lab hrswk, 1 cr.
Contemporary dances. Includes history, ctiquette, and dances by Intemational Association of Square Dance Callers. Prerequisite: PE185DW: PE185DV; PE185DX: PE185DV and PE185DW. Class fee $\$ 5$. Offered as needed.

## PE185DY Dance/Tap, Beginning

3 lab hrs/wk, 1 cr.
Presents tap dance techniques. Introduces basic tap steps and rhythmical combinations of tap steps in varying degrees of difficulty. Class fee $\$ 5$. Offered as needed.

## PE185FD,FE,FF Soccer-Beginning, Intermedi-

 ate, Advanced3 lab hrs/wk, 1 cr. each
Covers the fundamentals of soccer and basic conditioning. Class fee $\$ 5$. Offered as needed.
PE185GJ,GK,GL Golf-Beginning, Intermediate, Advanced
3 lab hrskk, I 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. Class fee $\$ 5$. $\mathrm{F}, \mathrm{Sp}, \mathrm{Su}$
PE185JA, JB,JC Dance, Jazz. Beginning, Intermediate, Advanced

## 3 lab hrs/wk, 1 cr. each

Development of basic warm-ups at the barre, stretching, isolations, and floor movement with emphasis on technique, alignment, and contemporary jazz style. Class fee \$5. F, W, Sp
PE185JJ,JK, JL Jogging-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Jogging to gain and maintain cardiovascular filness. Class fee \$5.F, Sp
PE185KA,KB,KC Karate-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Development of the basic language and movements of martial arts. Class fee $\$ 5$. F, W, $\mathrm{Sp}, \mathrm{Su}$
PE185LA,LB,LC Ballet-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Addresses correct alignment, basic stretching, and warmups at the barte. Includes body and arm positions. Emphasizes techniques and technical terms. Class fee $\$ 5$. Offered as needed.

## PE185PA,PB,PC Personal Defense-Beginning,

 Intermediate, Advanced3 lab hrs/wk, 1 creach
An activity course designed to introduce preventive measures relating to personal defense. Class fee $\$ 5$. Offered as needed.

## PE185RA,RB,RC Racquetball-Beginning,

## Intermediate, Advanced

3 lab hrswk, 1 cr, each
An activity course to familiarize students with racquetball fundamentals, including grip, swing mechanics, rules, strategy and etiquette. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

PE185RG,RH,RJ Roller Skating- Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers fundamentals, including stroking, tums, figures, dance steps, and entry-level free-style moves. Promotes and encourages techniques of safety while practicing various skating activities. Offered as needed.

PE185SA,SB,SC Scuba Diving- Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
An activity course designed to promote and encourage the safe enjoyment of underwater activities, as well as increase awareness of environmental sensitivity, while developing social, emotional, physical, and nutritional wellness skills. Prerequisite: PE185SB, SC: PE185SA. F, W, Sp, Su

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. Class fee \$5.F, W, Sp
PE185SH,SJ,SK Skiing-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Presents fundamental downhill skiing techniques through instruction and skill application. W

## PE185SL,SM,SN Fitness: Get in Shape

3 lab lrs/wk, 1 cr. each
Designed to increase cardiovascular and muscular endurance through aerobic activity, as well as to develop muscular strength and flexibility through stretching, and isometric and isotonic routines. Includes fitness assessment and nutritional evaluation. Class fee $\$ 5$. Offered as needed.

PE185SP,SQ,SR Softball-Beginning, Intermediate, Advanced

## 3 lab hrs/wk, 1 cr. each

Fundamentals, rules, and strategy of softball. Presents specific skills necessary for successful recreational and/or competitive experience in softball. Incorporates wellness in the areas of physical, social, emotional, and nutritional health; stress management; and stedent support systeris. Class fee $\$ 5 . \mathrm{F}$

PE185SS,ST,SU Swimming- Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Designed to develop and improve swimming skills and fitness levels through a pool workout. Covers stroke improvement and swim conditioning. Class fee \$5. F, W, Sp

PE185TF,TG,TH Tennis-Beginning, Intermediate, Advanced
3 lab hrs/wk, I cr. each
Deals with tennis fundamentals, including stroke production, rules, scoring, strategy, and court etiquette. Class fee $\$ 5 . \mathrm{F}, \mathrm{Sp}, \mathrm{Su}$

PE185TI,TJ,TK Tai Ji-Beginning, Intermediate, Advanced
3 lab hrsiwk, 1 cr each
A classic Chinese form of exercise comprised of slow, fluid movements which are imitations of animals in nature. Benefits various parts of the body, including the nervous system and the heart and circulation, and disciplines both the body and mind on a meditative level. Class fce $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$

PE185TL,TM,TN Track and Field- Beginning, Intermediate, Advanced
3 lab hrs 1 wk, 1 cr. each
Incorporates the fundamentals, rules, and training techniques in track and field events. Class fee $\$ 5$.W

## PE185VJ,VK,VL Volleyball- Beginning,

Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Fundamentals, rules, and strategy of volleybail. Develops specific skills necessary for successful recreational andor competitive experience in volleybal. Incorporates wellness in the areas of physical, social, emotional and nutritional health; stress management; and student support systems. Class fee \$5.F, W, Sp

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 daily exercise management. Class fee \$5.F, W, Sp, Su

PE185WD,WE,WF Weight Training-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Develop and execute a strength-improvement program to meet individual goals. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## PE185WK,WL,WM Walking Fitness

3 lab hrs/wk, 1 cr. each
Helps students develop a lifelong plan for waiking fithess. Includes goal setting, group and individualized recommendations for waiking intensity, and pee- and post-cardiovascular assessment. Class fee $\$ 5 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}$
PE185WN, WO, WP Water Exercise-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 creach
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 filtress. Emphasizes safe exercise for each individual. Class fee $\$ 5$. Offered as needed.

## PE185YA,YB,YC Yoga-Beginning,

## Intermediate, Advanced

## 3 lab hrs/wk, 1 cr . each

An introduction to Hatha "physical" yoga. Includes the background, safety precautions, and value of yoga. Stretching poscurcs, proper breathing techniques, and stress reduction will be emphasized. Class fee $\$ 5$. F, W, Sp

## Professional Physical Education

## PE190BI Baseball-Varsity

3 lab hrswk, 1 cr .
Varsity baseball for men. Sp
PE190BN Basketball-Men's Varsity
3 lab hrs/wk, 1 cr.
Vassity basketball for men. F, W
PE190CL Cross Country/Varsity Men
3 lab hrswk, 1 cr.
Intercollegiate varsity cross-country competition for men. F
PE190TQ Track and Field-Men's Varsity
3 lab hrswk, 1 cr.
Intercollegiate varsity track and field competition for men. Sp

## PE199B Basketball Coaching Theory

## 2 class hrs/wk, 2 cr.

Introduces students to the coaching profession. Provides information, techniques, and strategies necessary to make one a better coach. Covers fundamentals of organizing and building a basketball program using available resources, leaderstip, and strategies. Offered as needed.

## 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. Offered as needed.

## PE194RA Racquetball-Professional

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

Covers skill progression, knowledge, strasegy, practice, conditioning, nule interpretation, and teaching and coaching techniques. Class fee $\$ 5$. Offered as needed.

## PE194TT Tennis-Professional

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

Designed to teach students how to teach tennis. For physical education majors. Class fee $\$ 5$. Offered as needed.

## PE294BP Professional Activities- Basketball

 1 class and 2 lab hrs $/ \mathrm{wk}, 2 \mathrm{cr}$.Includes skill progression, knowledge, strategy, teaching and coaching techniques, practice, nules interpretation, and conditioning for safety. Class fee $\$ 5 . \mathrm{F}$

## PE294TR Track and Field- Professional

1 class and 2 lab hrstwk, 2 cr .
For physical education majors. Class fee $\$ 5$. Offered as needed.

## 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 suppont systems; and stress management. Class fee $\$ 5 . F$

## PE294WP Professional Activities. Weight

Training
1 class and 2 lab hrs/wk, 2 cr .
Course designed to prepare students how to teach or coach weight training. Emphasizes safe lifing techniques. Prerequisite: PE185WD or consent of instructor. Class fee $\$ 5$. Offered as needed.

## ph

## PHysics

## PH081 Applied Physics

3 class and 2 lab has/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 $\$ w, 4 \mathrm{cr}$.

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 .
A general science course covering matter, laws of motion and force, and machines and mechanics of liquids. Laboratory time is provided to help clarify the principles and procedures covered in class. 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 to the motion of molecules. Prerequisite: MTH111 and MTH112. Class fee $\$ 12$.F

## PH202 General Physics

3 class and 3 lab hrsiwk, 4 cr.
Describes wave motion, electrical forces, magnetic forces, induction, and light waves. Prerequisite: PH201. Class fee \$12.W

## PH203 General Physics

3 class and 3 lab hrs/wk, 4 cr.
Describes reflection and refraction of light, optical instruments, sound, thermodynamics, and fluid dynamics. Prerequisite: PH202. Class fee $\$ 12 . \mathrm{Sp}$

## 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 $\$ 8 . \mathbf{F}$

## PH208 Astronomy

3 class and 2 lab hrs $/ w k$, 4 cr.
A descriptive treatment of stellar coordinates and sidereal time, the nature of light and the spectroscope, and the bith 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 $\$ 8 . \$ p$

## PH211 General Physics for Engineers

 and Scientists4 class and 3 lab hrsiwk, 5 cr .
Covers motion, force, work, energy, and field interactions in one-, two-, and three-dimensional space. Prerequisite: MTH251. Cjass fee $\$ 12$. F

## PH212 General Physics for Engineers

and Scientists
4 class and 3 lab hrsiwk, 5 cr .
Describes electricity, magnetism, induction, and light wave theory. Prerequisite: MTH252 and PH211. Class fee $\$ 12 . \mathrm{W}$

## PH213 General Physics for Engineers

and Scientists

## 4 class and 3 lab hrs/wk, 5 cr .

Geometric optics, physical optics and image formation, sound, thermodynamics, and fluid dynamics. Prerequisite: PH 212 . Class fee $\$ 12 . \mathrm{Sp}$

## PHL

## Philosophy

PHL201 Philosophical Problems: Metaphysics
3 class hrs/wk, 3 cr .
Presents a general survey of metaphysics (study of the nature of reality). Introduces terminology associated with philosophy, the major thinkers associated with the various problems in philosophy, and the stucture of a philosophical argument, and some of the major theories of metaphysics. Prepares the student for more specialized classes in philosophy such as logic, theory of knowiedge, and ethics. $F$

## PHL202 Philosophical Problems:

Theory of Knowledge
3 class hrs/wk, 3 cr.
Introduces major problems in theory of knowledge. Focuses on knowledge, tnuth, justification, and skepticism with considerable discussions of metaphysical issues. Additionally, primary readings in major ethical theories will also be included. Focuses on the analysis of primary essays in philosophy that are concerned with major issues in theory of knowledge. W

## PHL203 Elementary Ethics

3 class hrs/wk, 3 cr .
Introduces traditional and modem theories of ethics. Includes explanations of the theories, evaluations of their relative weaknesses and strengths, analyses of their appication to various personal and social dilemmas, and an explanation of the effects of determinism on ethics. Sp

## PHL204 Introduction to Logic

3 class hrs/wk, 3 cr.
Introduces the terminology of the field of logic, informal logic, forms of reasoning and argument, deduction and propositional logic, induction, fallacies, proofs, and probabilities. Focuses on the principles goveming careful, systematic thought and applies those principles to philosophical writings, newspaper/magazine editorials and arguments, and to political and commercial advertisements. Offered as needed.

## PHL 205 Biomedical Ethics <br> 3 class hrs/wk, 3 cr .

Focuses on ethics in medical and health care fields. Studles 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 <br> Political Science

PS151 Introduction to State of Oregon Legislative Process
1 class hr/wk, I cr.
An overview of the Oregon legislative process. Examines organization, legislative participation, legislative enactment, lobbying, and the electoral process. In addition, constituent, instifutional, and organizational influences in legislative decision making will be discussed, and the influence of poisitical parties and lobbyisls will be analyzed. Offered as needed.

## PS201 American Government <br> 3 class hrswk, 3 cr .

An introduction to American govemment and its attendant political culture. Focuses on the inner dynamics of American political ideologies, the nature of political socialization, and the political philosophy imbedded in
the United States Constitution. Entails a study of the relationship between the American political system and its capitalist economic system. Provides an analysis of democratic theory and process, and the role of education and the mass media in shaping American politics. F

## PS202 American Government

## 3 class hrs/wk, 3 cr.

Continuation of PS201. Examines the three branches of government, Executive, Legislative and Judicial. Encludes the study of the relationship of corporate America and government, and the making and execution of domestic and forcign policy. PS201 recommended but not required. W

## PS203 State and Local Government

## 3 class hrs/wk, 3 cr.

Introduction to American state and local government with emphasis on comparative political behavior in states and communtics. Examines the political and institutional processes by which state and local goverrments make policy as well as the policy outputs themselves. Although the politics and government of Oregon will serve as the primary source of examples, comparison will be made with other states. Offered alternate spring terms and 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, end of Cold War pollitics, North-South relations, and the mechanisms of conffict resolutions. Examines current global issues facing nation-states. Offered alternate spring terrus and 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, leaning, emotion, and motivation; personality theory; abnormal behavior; and therapeutic interventions. F, W, Sp

PSY101 Psychology of Human Relations

## 3 class hrs $/ w k, 3 \mathrm{cr}$.

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 extemal blocks to assertion as a method for lcaming self-management skills. Offered as needed.

## PSY119 Processes in Living

3 class hrs/wk, 3 cr .
How to achieve self-underslanding through exploring values, attitudes, interests, beliefs, and abilities. How these personal factors influence learning, educationat and vocational decision-making, and interpersonal relationships. Offered as needed.

## PSY201 General Psychology

## 3 class hrs $/ w k, 3 \mathrm{cr}$.

Focuses on psychology as a science stressing history, methodology, the biological foundations of behavior, human development, sensation, and perception. F, W, Sp

PSY202 General Psychology
3 class hros/wh, 3 cr.
Second of three introductory courses in psychology. Inculdes learning, memory, cognition, motivation, emotion, and stress. Recommended that students take PSY201 prior to this course. W, Sp

## PSY203 General Psychology

3 class hrs/wk, 3 cr .
Third of three introductory courses in psychology. Includes personality, mental disorder, social, statistical, and psychological assessment; and stress. Recommended that students take PSY201 prior to this course. Sp

## PSY206 Introduction to Social Psychology

## 3 class hrs $/ w k$, 3 cr .

Problems, theories, and meihods of social psychology. Emphasizes diverse ways scxial influences alter an individual's thoughts, fecings, and actions. Examines prejudice, confomity, leadership, and aggression and how they affect such events as war, sexuality, discrimination, violence, and interpersonal attraction. Recormmended that students take PSY201 prior to this course. 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 coursc. Offered as needed.
PSY246 Introduction to Industrial Psychology 3 class hros $/ \mathrm{wk}, 3 \mathrm{cr}$.
Applied psychological concepts stressing interpersonal communication skills, work values, habits, and attitudes. Offered as needed.

## R

## Relugion

## R201 Primitive and Far Eastern Religions

 3 class hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.Introduces to the major religions which originated in Asia, focusing special attention on the history, beliefs, and practices of Hinduism, Buddhism, and Taoism. F

## R202 Near Eastern Religions

3 class hrswk, 3 cr .
Introduces Judaism, Christianity and Islam, examining theis origins in the Middle East, their historical development and geographic expansion, and exploring their principal betiefs and practices. W

## R203 American Religions

3 class hrs $/ w k, 3$ cr.
Explores American religious life throughout the nation's history examining both the distinctiveness of individual faith traditions and the dynamic interplay among religions which characterize American religious pluralism. Sp

## RD

## Reading

see also Commumication Skills, Skills Development
RD006 Success Strategies For Deaf and Hearing Impaired Students (Critical Reading)

## 1 class hr/wk, 1 cr.

An individualized course designed for deaf and hearing impaired students wanting to improve their reading skills. Emphasizes the comprehersion of idiomatic phrases, sentences, and paragraphs in technical as well as leisure reading material. Focuses on both comprehension and speed. F, W, Sp

## RD008A,B,C 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 paticular 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. $\mathbf{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## RDO09 Reading Fundamentals

3 class hrs/wk, 3 cr.
Improve basic reading skijls through use of phonetic rules (if needed) and development of paragraph comprehension. Increase vocabulary skills using the dictionary, identifying word parts, and finding the meaning of a word based on clues in the sentence. Prerequisite: Concurrent enrollment in RD009LL, a college reading placement score for RD009, or consent of instructor. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## RD000LL Reading Fundamentals Lab

3 lab hrs/wk, 1 cr.
A required companion course to RDOOQ. 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 RDOOS 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 RDOOO and consent of instructor. F, W, $\mathrm{Sp}, \mathrm{Su}$

## RD115 Accelerated Reading Tactics I

3 class hris/w, 3 cr .
Designed to improve reading skills of the student who has average and above-average reading skills. Strategies for comprchending and retaising nonfiction materials, especially textbooks, are studied. Presents skills to vary reading specd 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 pattems of articles. Prerequisite: Collige placement test score of 45 or grade Cor higher in RDII5. Offered as needed.

## RD117A,B,C Reading for Professionals, <br> Managers and Technicians <br> 1 class hriwk, 1 cr. each

Focuses on reading lechniques using personal job-related materials. The enthancement of reading skills and speed will help participants to read more efficiently with increased understanding as well as help to better manage the information flow. 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 learm how to examine and evaluate thinking processes. Critical reading skillis 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 instuctor. F, W, Sp

## $R E$

## Real Estate

## RE056 Escrow Procedures I

3 class hrs/wk, 3 cr.
The use of work shects 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 arc completed. Prerequisite: BA262. 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/mk, 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 apprasers meet educational requirements for state registration. Covers how mass appraisals are planned, organized, executed, and cvaluated and presents the responsibilities of the county assessor. Prerequisite: REO6! or qualified appraisal experience. Sp

## RE065 Appraisal Report Writing

3 class hrs/wk, 3 cr .
How to write appraisal reports that can be casily 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 laber requirements, building codes, and approximate cost estimating for real estate students. Sp

## RE070 Zoning, Subdividing, and Community <br> 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, iss counties and cities. W

## 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. $\mathrm{E}, \mathrm{Sp}$

## RE280 Cooperative Work Experience

 see AUM280.
## RUS

## Russian

RUS101, 102, 103 First Year Russian, Terms I, II, III
4 class hrs/wk, 4 cr .
Covers speaking, reading, writing, and aural comprehension. Prerequisite: RUS102: RUS101 or consent of instructor. RUS103: RUS101, RUS102, or consent of instuctor. 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 hr/wk, 1 cr.
Offers a survey of services available to deaf students at Chemeketa. Also helps deaf students develop basic study and decision-making skills. Offered as needed.

## SKD005ABC Success Strategies for Deaf

and Hearing Impaired Students
1 class hr/wk, 1 cr , each
A: (Language Enrichment Through the Media) An indjvidualized course designed to help deaf and hearing impaired students develop comprehersion strategics 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 skilis. Emphasizes application of grammatical stuctures through practice with sentences, notes, memos, and letters. Explores the function of idioms in English. F, W, Sp

SKD006 Success Strategies for Deaf and Hearing Impaired Students
(Organization For Success)
1 class hr/wk, 1 cr.
An individualized course designed to equip deaf and hearing impaired students with study habits necessary for college success. F, W, Sp

SKD007 Success Strategies For Deaf and Hearing Impaired Students
(Special Projects for Success)

## 1 class hr/ $/ \mathrm{k}$, 1 cr .

This individualized course allows deaf and hearing impaired students to pursue special interests while enhancing language skills. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## SKD009 Introduction to

College Language Skills
6 class and 2 lab hrs/wk, 7 cr.
Designed to improve the student's basic language skills in writing, spelling, and vocabulary. Prepares students for college coursework through integrated work in all three areas. 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 prioritties, setting goals, using resources, communicating effectively, solving problems, reducing stress, and implementing academic strategies for futurc success. F, W, Sp

## SKD013ABC Phonics for Spelling

## 3 class hrrs $4 \mathrm{wks}, 1 \mathrm{cr}$ each

Cousse provides instuction 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 includes patterns of speling and exceptions to the rules, as well as practice in pronunciation and development of a personal spelling list. Prerequisite: Score 27 or above on the 36 word placement test or instructor's approval. F, W, Sp, Su
SKD015A,B,C Vocabulary Building

## 3 class hrs/4 wks, 1 cr.each

Improve vocabulary by learning strategies for remembering new words by using clues such as prefix, suffix, context, and word history. These techniques are then applied to college textbook terminology. Prerequisite: ASSET reading score of 34 or above. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## SKD030A,B,C Advanced Vocabulary Building

3 class hrs $/ 4 \mathrm{mks}, 1 \mathrm{cr}$ each
Provides instruction in vocabulary analysis. Students will apply this analysis to increase their general and/or technical vocabulary. A one-credit option applies vocabulary strategies in medical terminology. Prerequisite: SKD015A, B, C or consent of instructor. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

## SKD031A Academic Skills Preview

## 12 class hrs/l wk, 1 cr .

Focuses on the personal side of academic success: organization and motivation, listering and note taking, analysis of learning styles, and time management. SKD031ABC cannot be taken if SKD051LMN has alceady been taken. Su

## SKD031B Academic Skills Preview

1 class $\mathrm{hr} / \mathrm{kk}$, 1 cr .
Focuses on specific study strategies: concentrating, reading college textbooks, and developing a more retentive memory, as well as tips on researching and writing a term paper. Su

## SKD031C Academic Skills Preview

1 class hr/wk, 1 cr.
Focuses on dealing with testing situations: coping with test anxiety, predicting exam questions, and taking objective and essay exams. Su

## SKD045A,B,C Problem-Solving <br> and Thinking Skills

1 class hr/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 (metacogni(ion). 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 secing 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.

## SKD050A,B,C Technical Learning Skills

1 class hr/1 cr. each
Designed to link with a content-area course. All skills in this course will be practiced with or applied to the materials, expectations, and assignments of the content course. Emphasizes improvement in reading and learning skills necessary for success in the content-area programs. F, Offered as needed.

## SKD051L,M,N Studying for College

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

Designed for students who feel challenged in getting organized and studying effectively. After an initial assessment of study strategies the student and the instuctor will select sudy strategy modules ( 3 per credit) based on the initial assessment and student needs. Study strategy activities are similar to HD112 content, but are designed for students at an RD009-RD090 level. SKD015L,M,N cannot be taken if SKD031A,B,C has aiready been taken. F, W, Sp, Su

## $50 C$

## SOCIOLOGY

## SOC204 General Sociology- Introduction

3 class hrsh/wh, 3 cr .
Basic issues and findings regarding the biological, symbolic, and social nature of humankind. Discusses foundations for social interaction including pattems 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 $/ w k, 3 \mathrm{cr}$.
An analysis of social institutions with special emphasis on family, religion, cducation, cconomy, and poilitics. Identifies factors contributing to institutional stability and change. It is recommended that students take SOC204 prior to this course. W, Sp

## SOC206 General Sociology-Social Problems

3 class hro/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 selcction, adjustment to mariage, 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 hrsiwk, 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 intemersona! attraction. Recommended that students take PSY201 and SOC204 prior to this course. 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.

## SP

## Speech

## SP111 Fundamentals of Speech

3 class hrs/wk, 3 cr .
A survey of communication styles, including interpersonal, group, and public. F, W, Sp, Su

## SP112 Fundamentals of Persuasion

3 class hros/wk, 3 cr.
Introduces public speaking on a persuasive level. Includes discussion of the verbal and nonverbal levels of persuasion and concentrates on effective delivery, theories of persuasion, and use of support in effective persuasive speeches. Activities allow students to use cheories in public speaking situations. F, W, Sp, Su

## SP113 Fundamentals of Small Group

## Communication

## 3 class hrs/wk, 3 cr .

Designed to prepare people to participate effectively in our committee-oriented sociely. Includes discussion and activities designed for developing leadership abilities and improved communication techniques in small group situations. W, Sp

## SP114 Interpersonal Communication

3 class hrs/wk, 3 cr.
For students who would like to be able to communicate more effectively with friends and business associates in one-on-one settings. Covers concepts of self-awareness, nonverbal communication, emotional listening, and assertiveness. F, W, Sp, Su

## SP115 Introduction to Intercultural

## Communication

## 3 class hrs/wk, 3 cr .

Explores impact of culture on communication. Investigates the areas of language, 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 hr/wk, 3 cr.
Designed to familiarize students with the communication skills that are essential to the health care provider. Emphasizes the provider/client relationship, concepts of senderfreceiver perceptual differences, the need for mes-
sage clarity and increased feedback and active listening to create more effective communication. Covers characteristic and ideal patterns of organizational structure and communication and how to analyze and apply such small group dynamics as leadership, cohesiveness, task and social roles, and strategies of power, Prerequisite: Interest in or involvement in health professions. $\mathbf{F}$

## 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

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 foccuses 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, SPANI02, 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 13 class hrs/wk, 3 cr.
Builds speaking and comprehension skills in basic Spanish. In-class time is devoted to vocabulary building, reinforcement of spoken pattems through oral practice, and explanation of structure. Students are assigned writen exercises and oral preparation to do outside class. A cultural perspective is introduced through guest speakers, films, music, communicative activities with conversation partners, and field trips. Class fee $\$ 2 . \mathrm{F}$

## SPAN112, 113 Spanish Conversation-

Beginning, Terms 2,3
3 class hrs/wk, 3 cr. each
Students continue to build speaking and comprehension skills in basic Spanish. In-class time is devoted to vocabulary building, reinforcement of spoken pattems through oral practice, and explanation of structure. Students are assigned written exercises and oral preparation to do outside class. A cultural perspective is introduced through guest speakers, films, music, communicative activities with conversation partners, and field trips. Prerequisite: SPAN112: SPAN111; SPAN113: SPAN112. Class fee \$2 each. SPAN12:W; SPAN13:Sp

## SPAN150 First Year Spanish, Accelerated Term 1

6 class hrs/wk, 6 cr .
Develops skills in reading, witing, speaking, and understanding basic Spanish. Introduces cullure of Hispanic countries. This course covers the same content as SPAN101 and the first half of SPAN102. Class fec \$3.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 SPANI02 and SPAN103. Prerequisite: SPANi 50 or equivaient as determined by the instructor. Class fee $\$ 3 . \mathrm{Sp}$

SPAN199 Special Studies: Spanish Conversation Workshop

## 11 class hrs for 1 day/1 cr.

Presents selected topics in Spanish. Emphasizes development of oral communication skills and concepts through participation in a variety of large and small group situations. Prerequisite: SPAN10: 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 selfexpression in
Spanish. Includes study of Hispanic literature and culture. Prerequisite: SPAN103 or equivalent as deternined by the instructor. Class fee $\$ 2$ each. $F$

## SPAN202 Second Year Spanish, Term II

4 class hro/wk, 4 cr.
Continues study and application of Spanish vocabulary, grammar, and sybtax. Emphasizes self-expression in Spanish. Includes stedy of Hispanic literature and culture. Prerequisite: SPAN201 or equivalent as determined by the instuctor: Class fee $\$ 2$ each. W

## SPAN203 Second Year Spanish, Term III

4 class hrs/wk, 4 cr .
Focuses on Hispanic cullure, 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

## SPAN211, 212, 213 Spanish Conversational Intermediate, Terms 1, 2,3

## 3 class hrs/wk, 3 cr. each

Students continue to build speaking and comprehension skills in basic Spanish. In-class time is devoted to vocabulary building and reinforcement of spoken paterns through oral practice and explanation of structure. Students are assigned written exerciscs and oral preparation to do outside class. A cultural perspective is introduced through guest speakers, films, music, communicative activities with conversation parthers, and field trips. Prerequisite: SPAN211: SPAN113, or equivalent as determined by the instructor; SPAN212: SPAN211; SPAN213: SPAN212. Class fee $\$ 2$ each. F, W, Sp

## SSC

## SOCIAL SCIENCE

## SSC150 Ethnic Cultures of the Northwest <br> United States

3 class hrs/wk, 3 cr.
Provides an introductory study of the major ethnic groups currently residing in the northwest United States. Class lectures, audio-visual resources, discussions, group assignments, and field studies will be used to provide a variety of experiences. Members of the cultural groups being studied will be asked to serve as resource persons to the class, and independent study will be encouraged. Offered as needed.

## SSC151 HispaniclLatino and Indigenous Cultures of the Northwest United States

## 3 class hrs/wk, 3 cr.

Provides an introductory study of minority ethic groups in the northwest United States, focusing on Hispanic/Latino and indigenous cultures and represents an interdisciplimary overview of historical, culural, economic, social, psyctological, and political factors. Offered as needed.

## SSC206 Dealing with Diversity

3 class hrs $/ \mathrm{wk}$, 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 Skils Training

## ST050A-P Occupational Skills Training

$40-480$ lab hrsterm, variable $1-15 \mathrm{cr}$. per term
This course is the primary component of a site-based shor-term training program. Sudents receive instruction at the job site based on individualized curricula which are developed to meet the needs of both the student and the chosen occupation. In addition, a campus-based job search component is included in the last $30-60$ days of training. Prerequisite: HD 220 and HD 221 for JOBS participants only. Students mast meet other screening criteria for admission to program. Variable class fee. F, W, $\mathrm{Sp}, \mathrm{Su}$

## TA <br> Theater Arts

## TA110 Introduction to the Theater Arts

3 class hrs $/ w \mathrm{w}, 3 \mathrm{cr}$.
An overview of the theater: past, present, and future. Emphasis on historical development and general theater appreciation. Focuses on directing, acting, design, playwriting, lighting, and costuming. Offered as needed.

## TA121 Fundamentals of Acting

3 class hrs/wk, 3 cr .
Introduction to principles of acting, development of body control, investigation of body skills, and use of improvisation in dramatic expression. $\mathrm{F}, \mathrm{W}, \mathrm{Sp}$

## 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

## 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 ats, 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 $\$ 10$. W, offered as needed.

## VC051B Layout and Design 2

2 class and 3 lab hrs/wk, 3 cr.
Continuation of VCOS1A. Prerequisite: Enrollment in the Visual Communications program; successful completion of VC081, VC082, and VC051A; and good verbal and written communication skills. Class fee $\$ 10 . \mathrm{Sp}$, 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, prooting, and platemaking. Prerequisite: Enrollment in the Visual

Communications program and successful completion of VC081 and VC082. Class fee $\$ 10$. W, offered as needed.

## VC052B Electronic Imaging 1

2 class and 3 lab hrs/wk, 3 cr.
Introduces digital pholography, 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 fec $\$ 10 . \mathrm{Sp}$, offered as needed.

## VC053A Small Press Operations

2 class and $3 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Introduces the basic skills recquired in small offset press and duplicator and bindery operations while working on real production jobs. Prerequisite: Enroilment in the Visual Communications program and completion of VC081 and VC082. Class fee $\$ 10$. W, offered as needed.

VC053B Large Press Operations
2 class and 3 lab hrs/wk, 3 cr.
Contirues the basics of press and bindery operations with multiple-color work on large presscs. Multiple-page brochures and publications are included in real production jobs. Prerequisite: Enrollment in the Vissual Communications program and completion of VC08, VC082, VC052A, and VC053A. Class fee $\$ 10$. Sp, offered as needed.

## VC061A Layout and Design 3

2 class and 3 lab hrr/wk, 3 cr .
Develops the concepts and skills required in the design and layout process. Includes digital page layout and production with an emphasis on the use of multiple colors. Projects include work on live jobs in a production environment. Class fec $\$ 10$. F , offered as needed.

## VC061B Layout and Design 4

## 2 class and 3 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.

Further develops the concepts and skills required in the design and layout process. Project work is done by teams on live jobs in a production environment. Class fee $\$ 10$. W, offered as needed.

## VC062A Prepress Production 2

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

Continues with advanced prepress production methods including color registration, multiple page image assembly, and color proofing, and platemaking. Prerequisite: Enrollment into the Visual Communications program and completion of VC081, VC082, VCO52A, and VCOS2B. Class fee $\$ 10$. Offered as needed.

## VC062B Electronic Imaging 2

2 class and 3 lab hrs/wk, 3 cr.
Continues work in digital photography, color scanning, and photo manipulation on the Macintosh. Work includes electronic imagesetting and film processor operation. Prerequisite: Enrollment into the Visual Communications program and completion of VC081, VC082, and VC052A and completion of a course in basic black and white photography or concurent enrollment in such a coursc. Class fee $\$ 10$. Offered as needed.

## VC063A Advanced Press Production 1

2 class and 3 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Refines the basic skills required in offset press and bindery operations. A study of paper and inks is included in the work which will include live production jobs. Prerequisite: Enrollment in the Visual Communications program and successful completion of VC091, VCO82, VC052A, and VC053A.B. Class fee $\$ 10$. Offered as needed.

## VC063B Advanced Press Production 2

2 class and 3 lab hrs $/ \mathrm{wk}, 3 \mathrm{cr}$.
Continues with more complex press and bindery operations with work on large presses in maltiple colors. Multiple page brochures and publications will be produced in live production jobs. Prerequisite: Enrollment in the Visual Communications program and completion of VC091, VC082, VC052A, VC053A,B, and VC063A. Class fee $\$ 10$. Offered as needed.

## 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 identifics objectives, procedures, and eg̣uipment needed, together with key checkpoints for student-instuctor conferences. This is intended as a "final" course for students in both graphic arts and photography. Potential areas of study include graphic design, 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: VC05IA, VC051B, VC052A, VC052B, VC053A, VC053B or consent of instuctor. $\mathbf{F}, \mathrm{W}, \mathrm{Sp}$

## VC073P Portfolio Preparation

2 class and 2 lab hrs/wk, 3 cr .
Covers building a portfolio of work, evaluating job markets, designing resumes and business stationery, developing interviewing skills, and gaining work experience. Prerequisite: Second-year standing in the Visual Communications program or consent of instructor. Class fee $\$ 10 . \mathrm{Sp}$

## VC081 Introduction to Graphic Arts

2 class and 2 lab hrs $/ w k, 3 \mathrm{cr}$.
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 oppotunities. Class fee $\$ 10$. F, offered as needed.

## VC082 Basic Macintosh for Visual Arts

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

An introduction to Macintosh computers with an emphasis on graphics applications. Includes file formats, inked and exported files, scanned images, memory, hardware and software, and high resolution imagesetting. Basic computer knowledge and keyboarding skills are benef1cial. Class fee $\$ 10$. F,Offered as needed.

## VC083 Business of Graphic Arts

2 class and 2 lab hr/wk, 3 cr .
Covers industry trade practices, production schedules, job estimation, cost centers, working with clients, markups, establishing hourly rates, record keeping and billing procedures. Prerequisite: Second-year standing in the Visual Communications program. Class fee $\$ 10$. Offered as needed.

## 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 $/ \mathrm{wk}, 3 \mathrm{cr}$.
Emphasizes structural fabrication using steel and aluminum. Prerequisite: Enroliment in Welding Fabrication program or consent of program chair. Class fee $\$ 15$. W

WFB088 Fabrication Practices IV
1 class and $6 \mathrm{lab} \mathrm{hrs} / \mathrm{wk}, 3 \mathrm{cr}$.
Instruction and experience in production-type welding with use of jigs, fixtures, and positioners. Prerequisite: WFB087 or consent of program chair. Class fee $\$ 15 . \mathrm{Sp}$

## WFB096 Shop Projects

1 class and 3 lab hrs/wk, 2 cr.
Practical experience in maintenance and repair of weld shop machines, accessories, and fixiures. Uses selected fabrication and repair projects to develop resourcefulness and confidence in the application of skilils and knowledge developed in concurrent courses. Prerequisite: Enroll. ment as a full-time student in the Welding Fabrication 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 .
Contination of WLD051 covering ferrous and non-ferrous alloys and welding procedures. Demonstration and supervised practice of techniques on various metals, applicd in fabrication and repair concumently with related information conceming 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 hrsiwk, 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 WLDOS1 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 detaif and welding drawings. F

## WLD057 Layout Practices

3 lab hrs/wk, I cr.
A study of layout tools and their use in fabricating structural members, bins, hoppers, pipe futings, chutes, etc.

Includes principles and practices of pattem development for typical forms and fitting. Class fee \$5. W

## WLD058 Weld Shop Problems

2 class and 15 lab hrs $1 \mathrm{wk}, 7 \mathrm{cr}$.
A review and appication 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 fulltime student in the Welding or Welding Fabrication Programs, or consent of program chair. Class fce $\$ 25 . \mathrm{Sp}$

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 cquipment, material, and procedures combined with demonstrations and supervised practical experience using standard industrial equipment. Use of solid and flux-cored wire in typical industial applications. Class fee $\$ 25 . \mathrm{F}$

## WLD062 Intermediate Gas Metal Arc Welding (MIG)

1 class and 6 lab hrs/wk, 3 cr .
A continuation of WLDO61. Includes study of and practice in weiding of carbon stecl. Emphasizes production welding situations using large diameter electrodes (solid and flux-cored) with mixed shielding gases in flat or horizontal positions. Prerequisite: WLDO61 or consent of program chair. Class fee $\$ 35 . \mathrm{W}$

## WLD063 Advanced Gas Metal Arc Welding (MIG)

1 class and 6 lab hrs/wk, 3 cr.
Continuation of WLDO62. 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 Engincers (ASME) Section IX code or the American Welding Socicty (AWS) unlimited plate test in accordance with AWS D1. 1 structural code. Prerequisite: WLDOK1 or consent of program chair. Class fee $\$ 35 . \mathrm{Sp}$

## WLD070 Oxyacetylene Processes

1 class and 6 labl lis/wk, 3 cr .
Designed to familiarize the student with the safe use, care, and operation of oxyacetylene welding, brazing and cutting equipment. Class fee $\$ 35$. F

## WLD071 Basic Oxyacetylene Welding

1 class and 3 lab hrs/wk, 2 cr.
Fundamentals of oxyacetylene welding, including brazing and cutting processes. Class fce $\$ 20$. 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 9 lab hrs/4 cr.
Fundamentals of tungsten inert gas (TIG) welding processes, machine setting and application, and development of inert gas welding skills. Includes welding of mild steel, aluminum, aluminum alloys, stainless steel. and magnesium. Class fee $\$ 35$. W

## WLD077 Welding Processes

2 class and 6 lab hrs $/ \mathrm{wk}, 4 \mathrm{cr}$.
A beginning course in fundamentals of shielded metal arc weiding, oxyacetylene welding and culting, 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 $\$ 20 . \mathrm{Sp}$

## 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. $\mathbf{F}, \mathbf{W}, \mathrm{Sp}, \mathrm{Su}$

## WR090 Fundamentals of Writing

3 class hrs/wk, 3 cr.
Focuses on writing essentials that will build confidence for professional-technical students and anyone who writes in the workplace. includes discussion, reading, lectures, and constant writing practice. All sentence concepts are presented and reinforced by working with pasagraphs and longer pieces of writing, and are directly applied to both academic and workplace writing and are also connected to outside reading. Class fee $\$ 2$. W, Sp

## WR095 Fundamentals of Composition

## 3 class hrs/wk, 3 cr.

Focuses on composition essentials that will build confidence for professional-technical students and anyone who writes in the workplace. This course is taught in the context of a specific program area. Explores a variety of "getting started" and revision techniques, and emphasizes audience analysis and the importance of sensitivity to audience in achieving accuracy in writing and reporting. Covers organization of writing for different purposes and selection of supporting details consistent with those purposes. Students' writing will be a product of real life experiences such as interviews, workplace visitations, and therefore, blends observations with research and the writer's own opinions. Prerequisite: WR090 or equivalent as determined by the instructor. Class fee $\$ 2 . \mathrm{W}, \mathrm{Sp}$
WR115 Introduction to Composition
3 class hre/wk, 3 cr.
Introduces the wriling 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 witing, 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 $\$ 2 . \mathrm{F}, \mathrm{W}, \mathrm{Sp}, \mathrm{Su}$

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 or consent of instructor. Class fee $\$ 2 . \mathrm{F}, \mathrm{W}$, $\mathrm{Sp}, \mathrm{Su}$
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, $\mathrm{Sp}, \mathrm{Su}$

## 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 we? as technical writing as a career. Prerequisite: WR121 or consent of instructor. Class fee $\$ 2$. F, W, $\mathrm{Sp}, \mathrm{Su}$

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, $1-3 \mathrm{cr}$.
Scrics 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's 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 schol-
arship concening women in westem civilization, their bistory, and alterative futures. $\mathbf{F}$

## 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 overvicw 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 hrsiwk, 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 socialism and capitalism. Explores women's productivity, access to resources and political power, and gender relations in different societies. Dcbates the politics of ecofominism, environmental consciousness, and ecological awareness. Sp

## $Z 00$

## Zoology

## ZOO201 General Zoology

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

An introductory study of the major unifying principles and concepts of biology as applied to the study of animals. Inciudes the chemical basis of life, cell biology, theories about the origin of life, evolution, and genetics. Class fee $\$ 12$. F

## Z00202 General Zoology

3 class and 3 lab hrs/wk, 4 cr .
An introductory study of the major invertebrate phyla emphasizing the diversity of living organisms and adaptations to their environment. Principles and concepts studied in ZOO201 will be applied to study of the invertebrates. Prerequisite: $\mathrm{ZOO201}$ or consent of instuctor. Class fee \$12.W

## Z00203 General Zoology

3 class and 3 lab hrs/wk, 4 cr .
An introductory study of the vertebrate animals emphasizing the diversity of living organisms and adaptations to their environment. Includes comparative anatomy and physiology of selected body systems. Prerequisite: ZOO201 and ZOO202, or consent of instructor. Class fee \$12. Sp

## 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 Beilke
Zone Four-Larry French
Zone Five-Philip Frey
Zone Six-Gerald Watson
Zone Seven-Gwen VanDenBosch

## Staff as of June, 1996

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
Alfaqeeh, Nuri-Instructor, Mathematics
Alvarez, Maria (Cleo)-Counselor
Anderson, D. Craig-Coordinator, Agriculture Program
Anderson, GwenElyn-Counselor
Anderson, Holly-Instuctor, Human Services
Anderson, Kenneth-Instructor, Mathematics
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-Instructor, Computer Science
Bay, Brian-Director, Health, PE, and Emergency Services
Beaufait, Dorothy-Instructor, Mathematics
Beck, Sally-Instructor, Adult Basic Education and GED
Beebe, Janell-Instuctor, Office Administration and Technology Beigh, Marybelle-Instructor, Electronics
Bennett, Suzanne-Coordinator, Cooperative Work Experience Benson, June-Instructor, Adult Basic Education and GED
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-Program Chair, Medical Office Assisting
Bodtker, Diana-Program Chair, Life Science
Bodtker, Egon--Director, Social Science and Human Resources
Bohlander, Susan-Instructor, Office Administration and Technology
Bolen, Gene-Counselor/Instructor, Corrections Education
Bone, Andrew-Instuctor, 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
Brummond, Candis-Counselor
Buchanan, Mary Ann-Instuctor, High School Completion

Buttles, George-Instructor, Human Services
Byers, E. Maxine--Program Chair, 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
Chesley, Bob-Instructor, Mathematics
Christensen, Janet-Instructor, Corrections Education
Clark, Lori--Instructor, Health and Physical Education
Cochrane, Edward-Instructor, History
Cochrane, Linda-Director, Leaming Resource Center
Cockrell, James - Program Chair, Real Estate
Colton, Lois-Instructor, Developmental Education
Concepcion, Paul--Instructor, Psychology
Connor, Marilyn-Instructor, Communication Skills
Cornutt, Delvin-Instuctor, Sociology
Crandall, Sondra-Instructor, Public Speaking and Composition
Craven, Linda-Instructor, Early Childhood Education
Crossler-Laird, Janice- Program Chair, English as a Second Language
Cudmore, Wynn-Instructor, Life Science
Cullison, Joanne--Instuctor, Leaming Assistance/Skills Development
Culveyhouse, James-Instructor, Training and Economic Development

## D

Darnall, Nathan--Instructor, Computer Science
Davenport, Susan-Coordinator, Older Adult Programs
Davidson, Mollie--Program Chair, Human Services
Davis, Anne-Counselor
Decker-Yenne, Michele--Instructor, Nursing
DePue, Thomas-Director, Information Technology
Desel, Theodore--Instructor, Speech
Dinsdale, Sara-Instructor, Adult Basic Education and GED
Dobay, Deborah-Instructor, Psychology
Doeneka, Molly--Program Chair, Social Science; Instructor, Anthropology and Political Science
Dunn, Tim-Program Chair, Forest Resources Technology
Dutch, Donald-Instructor, Corrections Education

## E

Edge, Barbara-Coordinator, Grants Development
Ehlers, Deborah-Instructor and Counselor, Life Skills
Eichsteadt, Wendy-Instructor, Emergency Medical Technology
Elegant, Ann-Instuctor and Counselor, Life Skills
Elias, Marilyn-Team Coordinator, Nursing
Entwit, Peggy-Instactor, Emergency Medical Techology
Eppler, Carol-Instructor, Office Administration and Technology
Eubank, Christine Instructor, Mathematics
Eustrom, James--Coordinator, Student Life and Tutoring

## F

Faircloth, Kathleen-Instructor, Psychology
Felton, Maureen-Director, Curriculum Resource Center
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 ChildhoodEducation
Fitzgerald, George--Instructor, Life Science
Florence, William-Instuctor, Journalism; adviser, student newspaper
Flores, Yolanda-Instructor, Adult Basic Education and GED
Ford, Edward-Program Chair, Health and Physical Education
Ford, Lowell-Dean, Student Development and Learning Resources

Forest, Jacques-Instructor, Economics
Forslund, Larry-Instructor, Life Science
Furr, William-Program Chair, Alternative High School

## G

Galligan, Patricia-Director, Financial Aid
Garaventa, James-Specialist, Executive/Employee Development
Gerard, Kay-Program Chair, English as a Second Language
Gilbert, Jeremy-Instructor, Psychology
Gillette, David-Instructor, Mathematics
Gohaidan, Carol Ann-Program Chair, 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

## 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
Hartline, Ron-Instructor, Manufacturing Engineering
Harvey, Jean-Instructor, Alternative High School
Hassoun, Judith-Counselor, Life Skills
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
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, Extended Learning Programs
Hunter, Jeri-Registrar
Hunter, Robert-Manager, Computer Services

## I

Irving, Jan--Team Coordinator, Nursing
Ivey, Marion-Instructor, Custodia/Building Maintenance

## J

Jacobson, Lee-Program Chair, Art
Jantzi, Ron--Director, Trades and Technologies
Johanson, Terri-Director, Woodburn/Santiam Campuses
Johnson, Donaid-Instructor, Drafting Technology
Johnson, Robert-Instructor, Computer Science
Jones, Anetta-Instructor, Office Administration and Technology Jones, Lee-Instructor, Mathematics
Jordan, Carol--Instructor, Office Administration and Technology
Judd, Comnie-Instructor, Learning Assistance/Skills Development
K
Kaczmarczyk, Lisa-Instructor, Computer Science
Kalb, David-Instructor, Automotive Technology
Kimmel, Fred-Instructor, Drafting Technology
King, James-Instructor, Human Services
King, Janet-Director, On-line Programs
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-Counselor
Lang, William-Counselor
Larson, Lillis--Instructor, Early Childhood Education
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-Program Chair, 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
Mack, Johnny-Instructor, Fire Protection
Malone, Patricia-Instructor, Office Administration and Technology
Marckx, Elaine-Instructor, 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
McLaughlin, Suzanne--Instructor, Spanish
McLaughlin, Terrence--Instructor, Physical Education
McNicholas, Michael-Program Chair, Physical Science
Mendenhall, Mike-Instructor, Building Inspection
Merola, Joseph-Instructor, Visual Communications
Meyers, Dianne-Instructor, Nursing
Michels, John-Instructor, Mathematics
Miler, 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-Exccutive Assistant
Murphy, Lori--Director, Corrections Education
Murray, Susan-Instructor, High School Completion

## N

Nagle, Priscilla-Program Chair, Adult Basic Education and GED
Nava, Andy--Manager, Public Safety
Nelson, Sandra-Coordinator, New Workforce
Nelson, William--Specialist, Small Business
Neuendorf, Mary-Coordinator, Public Relations and Publications
Newton, Kristi- -Program Chair, Banking and Finance
Nichols, Van-Program Chair, College Transfer Engineering and Drafting Technology
Nieubuurt, Kathleen-Tcam Coordinator, Nursing
Nubile, Barbara-Team Coordinator, Nursing Skills Lab

## 0

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
Ottaway, Carol-Program Chair, Business Education, Dallas Center
Owens, Chris-Instructor, Health Education
P
Panasuk, Eugene-Instructor, Farm Business Management

Parmeter, Stanton-Instuctor, Life Science
Patterson, Darrell-Instructor, Emergency Medical Technology Paul, Sheri--Instructor, Custodia/Building Maintenance Perkins, Ruth-Instructor, Inmate Education
Phipps, Raymond-Director, Cooperative Work Experience and Placement Services
Pillette-Stephens, Debra-Program Chair, 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 Marilyn Hart-Specialist, Evening On-Campus and Apprenticeship Programs
Reid, Donna-Instructor, Art and Writing
Rhodes, Sandra--Instructor, Adult Basic Education and GED
Rice, Leonard-Instructor, Drafting Technology
Richardson, Steve--Program Chair, Modem Curiculum
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-Instuctor, English as a Second Language

## S

Sansone, Steve-Instructor, Health and Physical Education
Sawser, Judith-Coordinator, JOBS/Placement Resource Center
Scheer, Sara-Instuctor, Nursing
Scherf, Joan--Director, Dallas Campus
Schmidt, Steve--Manager, Computer Services
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
Steimle, August-Instructor, Construction Skills Training
Steiner, Ann-Instructor, Adult Basic Education and GED
Steiner, Jerry--Executive Dean
Stevens, Malia-Program Chair, Education
Stewart, Joamne-Instructor, Adult Basic Education and GED
Stubbs, Dina--Instructor, Nursing
Suter, Marcia-Program Chair, English, Writing, and Literature
Suter, Paul-lnstructor, Communication Skills

Swearingen, Dell-Director, Science, Mathematics, and Electronics

## T

Tabor, Patrick-Instructor, History
Tardaewether, Virginia--Instructor, Even Start
Terhes, John-Instructor, Communication Skills
Terpin, Mark-Director, Developmental Education
Thorp, Anne--Instructor, Adult Basic Education and GED,
Downtown Leaming Center
Troupe, Count--Instructor, Developmental Education/Cognitive Skills
Trumbo, Mark-Director, McMinnville Center
U
Ure, Douglas-Instructor, Life Science

## V

Vaughn, Joyce—Program Chair, Dental Assisting
Veldhuisen, Kathleen--Reference Librarian
Vessello, Jerry-Director, Facilities and Operations
Vollmar, Lorene-Instructor, Dental Assisting

## W

Wachal, Ken-Instructor, Business Management
Wahner, Royal-Instructor, Manufacturing and Drafting Technology
Wall, James-Coordinator, Cooperative Work Experience
Ward, H. Jill-Coordinator, ABEGED 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
Wheeler, Claire-Instructor, Developmental Education
White, Roger--Instructor, Electronics
Whitton, Louanne-Instructor, Adult Basic Education and GED
Whyte, Catherine-Instructor, Instructional Assistant
Wigginton, Barbara--Instuctor, Composition and Literature
Williams, Doris-Director, Dental Assisting, Medical Office Assisting, and Nursing
Willis, Vicki-Assistant to the President, Organizational Development
Wilson, Peggy-Instructor, Dental Assisting
Wiltgen, Christine-Instructor, Mathematics
Wintermeyer, Larry- -Program Chair, Computer Science
Woods, Rae-Counselor
Wright, Larry-Instructor, Accounting and Business Management

## Z

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## Student Rights and Responsibilities

### 1.0 Preamble

Chemeketa Community College provides an environment that ceicbrates 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 dedjcated to improving personally and academically. Choosing to join the colloge conmunity 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, plagianzing, or mistepresenting 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 envitonment throughout the coliege.
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 hisherself 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 aicohol 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 hisher 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 coliege will:
3.1 Provide access to education and campus facilities.
3.1. 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 innibited 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 reiated 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 availabie 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 confidentially.
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 learing 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 seck resolution directly with the individual with whom the conflict exists or hisher 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 Development and Leaming Resources should be contacted. The Dean of Student Development and Learning Resources 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 Referal 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 Refertal 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 Development and Leaming Resources 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 Development and Leaming Resources.

### 5.0 Student Discipline

5.1 If a college slaff 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 Studen Rights and Responsibilities document. The Dean of Sudent Development and Learning Resources 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, oher persons, college property or a threat of disrupting the educational process. (See College Policy 4220.) A writen repor 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 excecd 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 Development and Leaming Resources may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.
5.2 The Dean of Student Development and Learning Resources 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 Development and Lcaming Resources specifying the nature of the alleged violation.
5.3.1 At the earliest possibie 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:
5. The nature of the charge(s).
6. Possible sanctions or sanctions imposed based on evidence.
7. The student's right to counsel, who may assist the student for advising purposes only.
8. The student's rights under college policy.
5.3.2 The student charged may:
9. Accept sanctions imposed by the college staff person. If the student does not submit a writen appeal within five working days, it will be concluded that the sanctions have been accepted.
10. Request alternate resolution by notifying the college ombudsperson in writing within five working days.
11. Appeal the action within five working days by contacting the Dean of Student Development and Learning Resources who may use multipie 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 Committec 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 Committec. The appeals committee must have a quorum of four to conduct a bearing. The hearing is not considered a formal legal trial.
6.3 The general rules goveming a hearing are listed below. The specific rules for a hearing are contained in the guidelines of the College Appeals Committec. A copy of these guidelines is on file in the office of the Dean of Student Development and Learning Resources 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 Development and Learning Resources. 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 Development and Learning Resources. 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 directiy 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 revicw 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 shail 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 cmployec 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 enrolied in a college class.
7.5 Community member shall mean any person not enroiled in a Chemeketa class. A commonity 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 clab 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 fommal, legal trials.

## INDEX

## A

Academic Information, 13
Academic Progress/Review Program, 14
Accounting, 42, 103
Accreditation, 3
Admission, 4
Application form, iii
Adult Basic Education, 31
Advanced placement courses, 15
Aerospace Science, 103
Advising, Academic, 19
Affirmative action policy, 3
Agricuiture, 43
Farm Business Management, 68
Allied Health, 103
Anthropology, 43, 103
Apprenticeship, 81
Art, 44, 103
Att gallery, 21
Astronomy, 105
Athletics, Intercollegiate, 23
Auditing courses, 8
Automotive Technology, 45, 105

## B

Banking and Finance, 45109
Biology, 46, 110
Board of Education, 147
Bookstore, 17
Botany, 46, 111
Building Inspection Technology, 47, 110
Bus passes, 19
Business Administration, 48, 106
Business Management, Small, 97

## C

Calendar, academic, 2
Campuses, Chemeketa, vi, 15
Career preparation, 19
Certificates of Completion, 27
Chemeketa Courier, 22
Chemeketa Creed, 3
Chemistry, 49, 111
Child care, 18
Chiropractic, 49
Civil-Structural Technology, 115
Civil-Structural Engineering Technology, 50
Class changes, 6
Class loads, 6
College for Older Adults, 23
College Level Examination Program, 6, 15
College transfer, 1, 31
from other colleges, 6
to other colleges, 31
Communication Skills, 113
Communications, Visual, 98, 144
Community, education for, 23

Community, services to, 20
Computer Electronics Technology, 51
Computer Information Science, 113
Computer Programming, 51
Computer Science, 53, 113
Construction Skills Training, 53,115
Continuing education course, 14
Cooperative Work Experience, 20
Counseling, 19
Course descriptions, 101
Credentials, 3
Credit by examination, 16
Credit for Prior Learming, 16, 113
Criminal Justice, 54,112

## D

Dallas Chemeketa Campus, vi, 15
Dance, 116
Deafhard of hearing and visually impaired, services for, 17
Definitions of Electives, 102
Definitions of Terms, 21
Degrees, 26
Associate of Applied Science, 26
Associate of Applied Science Degree Requirements, 29
Associate of General Studies, 26
Associate of General Studies Degree Requirements, 30
Collaborative bachelor's, 31
Oregon Associate of Arts Transfer, 26
Oregon Associate of Arts
Transfer Degree Requirements, 28
Second, 27
Dental Assisting, 54, 116
Dental Hygiene, 55
Dentistry, 95
Developmental Education, 17
Disabled, services for, 17
Distance education, 16
Diversity statement, 6
Drafting Technology, 56, 116
CAD, 56
Computer-Aided Design/ Computer-Aided Mfg., (CAD-CAM), 57
Mechanical Design, 57

## E

Eating establishments, Salem campus, 18
Economics, 59, 118
Education, 118
Cerificate, 61
Early Childhood, 58, 118
Elementary, 60
Professional-Technical Teacher Preparation, 94
Secondary, 60
Electronics, 120
Electronics Technologies, 61

Advanced Technology Endorsement, 65
Computer Electronics, 62
Electronic Engineering Technician, 63
Microelectronics/Industrial Electronics, 64, 133
Emergency Medical Technology, 65, 121
Emergency Services, 123
Engineering, 66, 122
English, 67, 121
English as a Non-native Language, 122
English as a Second Language, 16
Enrollment, 6
How to Enroll at Chemeketa, 5
Enrollment limitations, 6

## F

Fabrication, Welding, 99
Facilities, 3
Farm Business Management, 67
Fees, 8
Field Experiences, 123
Film Arts, 123
Financial Aid, 9
Kinds of Financial Aid Available at Chemeketa, 10-11
Fire Protection Technology, 68, 123
Fire Prevention, 69
Fire Suppression, 68
First Aid, 17
Food Service, 125
Foods/Nutrition, 123
Foreign Languages, 69
Forest Resources Technology, 70, 125
Forestry, 71
French, 123

## G

GED, 31
General Education Requirements:
EOSC, 32
OIT, 33
OSU, 34
PSU, 35
SOSC, 36
U0, 37
WOSC, 38
General Engineering, 125
General information, 1
General Sciences, 46, 126
General Studies, 71
Geography, 72, 126
Geology, 72, 125
German, 126
Grading system, 14
Graduation requirements, 27

## H

Health, Allied, 103
Health Services Management, 73, 126

Claims AnalystMedical Biller, 74
Health Information Technician, 74
Health Services Management, 75
Medical Receptionist/Clerk, 74
Medical Transcriptionist, 75
Health, Health Education, 73, 128
Health services, student, 17
High School Completion, 27
History, 76, 131
Home Economics, 76
Hospitality Systems Management, 77, 130 Travel Agency Operations, 78
Hotel, Restaurant, and Resort Management, 78
Hotel, Restaurant, and Tourism Management, 130
Human Development and Family Studies, 127
Human Services, 79, 128
Alcohol and Drugs, 79
Gerontology, 80
Social Services, 80

## I

Immunizations, 6
Incompletes, 14
Independent study, 16
Industrial Technology and Apprenticeship, 81

## J

Japanese, 131
Job placement, 19
Job search, 20
Journalism, 81, 131

## L

Law (Pre-), 94
Learning Resource Center, 3
Library, 3
Chemeketa Cooperative Regional Library Service, 21
Literature, 131

## M

Management, 82
Manufacturing Engineering Technologies, 83
Manufacturing Operations, 83
Manufacturing Technologies, 83,132
College Transfer, 84
Maps,
District, vi
Salem Campus, 154
Mathematics, 84, 133
McMinnville Chemeketa Campus, vi, 15
Mechanical Design, 57, 131
Medical Office Assisting, 85, 131
Medicine, 94
Military Science, 133
Mission, college, 24
Multidisciplinary Studies, 133
Music, 135

## N

Newspaper, student, 22
Norwegian, 135
Nursing, 86, 135
College transfer, 87

## 0

Oceanography, 138

Occupational Skills Training, 87, 144
Office Administration and Technology, 88, 136
Clerical Basics Program, 88
One-Year Program, 88 Bookkeeping, 88 General Clerical, 88 Word Processing, 88
Two-Year Programs, 89 Administrative Assistant, 89 Information Processing, 90 Medical, 90 Office Accounting, 91
Older Adult Tuition, 8

## P

Parking, 17
Philosophy, 92, 140
Physical Education/
Human Movement Studies, 92, 138
Physics, 93, 140
Placement tests, 4
Placement, job, 19
Planetarium, 22
Political Science, 93,140
Professional-Technical Programs, 1, 40-41
Professional-Technical Teacher Preparation, 94
Program Guide, 40-41
Programs of Study, 39
Programs
Professional-Technical and
College Transfer, 40-41
Psychology, 95, 141

## R

Reading, 141
Readmission, 7
Real Estate, 96, 142
Records, student, 13
Refund, tuition, 8
Registration, 6
Religion, 141
Repeating a course, 15
Residence requirements, 8
Ride Sharing, 18
Russian, 142

## S

Santiam (Stayton) Chemeketa Campus, vi, 15
Scholarships, 10
Secretarial, 142
Senior citizens, 8,23
Short-Term Training, 21
Skill building classes, 1
Skills Development, 142
Small Business Management, 97
Social Science, 144
Sociology, 97, 143
Spanish, 143
Speech, 97,143
Staff, 1, 147
Student(s), 3
Athletics, 23
Clubs and organizations, 23
Cultural forum, 22
Disabled, 17
Government, 22.
Health services, 17
Insurance, 8
International, 7

Internships, 22
Living accommodations, 18
Mentor program, 22
Newspaper, 22
Peer Assistants, 23
Programming Board, 22
Records, 13
Services, 17

## T

Technical and professional programs, 1, 40-41
Theater Arts, 144
Training and Economic Development Center, 20
Transcripts, 13
Transfer
from other colleges, 6
to other colleges, 31
Tuition, 7
Tutoring, 16

## V

Veterans' services, 9
Veterinary Medicine, 94
Vision, college, 24
Visual Communications, 98, 144

## W

Welding, 99, 145
Welding Fabrication, 99.145
Welding Technology, 99, 145
Withdrawal from college, 15
Women's Studies, 146
Woodburn Chemeketa Campus, vi, 15
Work study, 11
Writing, 146

## Z

Zoology, 46, 146




[^0]:    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 environnent.
    Each has dignity: To
    diminish the dignity of one is to diminish the dignit) of us all.

