

Chemeketa Community College
1998-99 Catalog

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, 19
Services to the Community, 20
Student Life, 22
Education for the Community, 24

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:
 Eastern Oregon University, 32
 Oregon Institute of Technology, 33
 Oregon State University, 34
 Portland State University, 35
 Southern Oregon University, 36
 University of Oregon, 37
 Western Oregon University, 38

PROGRAMS OF STUDY, 39

Program Guide, 40-41

- Accounting, 42
- Agriculture, 43
- Anthropology, 43
- Art, 44
- Automotive Technology, 44
- Biology, Botany, Entomology, General Science, and Zoology, 45
- Building Construction Training, 46
- Building Inspection Technology, 46
- Business Administration, 47
- Business Technology, 48
- Chemistry, 53
- Chiropractic, 54
- Civil-Structural Engineering Technology, 54
- Computer Programming, 55
- Computer Science, 57
- Criminal Justice, 57
- Dental Assisting, 59
- Dental Hygiene, 59
- Drafting Technology—CAD, 60
- Early Childhood Education, 62
- Economics, 64
- Education, 64
- Electronics Technologies, 66
- Emergency Medical Technology—Paramedic, 69
- Engineering, 70

- English, 71
- Farm Business Management, 71
- Financial Services, 72
- Fire Protection Technology, 73
- Foreign Languages, 74
- Forest Resources Technology, 75
- Forestry, 76
- General Studies, 76
- Geography, 77
- Geology, 77
- Health, Health Education, 78
- Health Services Management, 78
- History, 81
- Home Economics, 81
- Hospitality and Tourism Management, 82
- Hotel, Restaurant, and Resort Management, 83
- Human Services, 83
- Industrial Technology and Apprenticeship, 85
- Integrated Circuit Mask Design, 86
- Journalism, 87
- Management, 87
- Manufacturing Engineering Technologies, 88
- Manufacturing Engineering Technologies (college transfer), 89
- Mathematics, 90
- Medical Office Assisting, 90
- Nursing, 91
- Nursing (college transfer), 92
- Occupational Skills Training, 93
- Philosophy, 93
- Physical Education and Human Movement Studies, 94
- Physics, 94
- Political Science, 95
- Pre-Engineering, 95
- Pre-Law, 95
- Pre-Professional Study (medicine, dentistry, and veterinary medicine), 96
- Professional-Technical Teacher Preparation, 96
- Psychology, 97
- Real Estate, 97
- Small Business Management, 98
- Sociology, 98
- Speech, 99
- Visual Communications, 99
- Welding, 101

COURSE DESCRIPTIONS, 103

Definition of Electives, 104

BOARD OF EDUCATION, 162

STAFF, 162

STUDENT RIGHTS AND RESPONSIBILITIES, 165

INDEX, 167

SALEM CAMPUS MAP, 169

PROGRAM CHOICES SELECT ONE OF THE FOLLOWING PROGRAMS OF STUDY:

PERSONAL ENRICHMENT (Classes taken for personal or professional development. You are not seeking a degree.)

Non-credit (900) Use this code only if all courses are non-credit.
Credit (180)

PROFESSIONAL-TECHNICAL PROGRAMS

Unless otherwise noted, most of the programs listed below have prerequisites and require assessment before admission. Contact the Advising and Counseling Center at 399-5120 for assessment.

- (42A) Accounting
- (45A) Automotive Technician or Auto Body Repair)
- (45V) Building Construction Training
- ** (63A) Building Inspection - One Year Option
- ** (63B) Building Inspection - Two Year Option)
- (43A) Business Technology - Administrative Assistant Option
- (43Q) Business Technology - Business Assistant Option
- (43C) Business Technology - Information Processing Option
- (43N) Business Technology - Legal Option
- (43E) Business Technology - Medical Option
- (43G) Business Technology - Office Accounting Option
- (43J) Business Technology - One Year Option
- (503) Business Technology - Clerical Basics
- (45R) Civil-Structural Engineering
- (45C) Computer-Aided Design/Computer-Aided Manufacturing
- (44A) Computer Electronics Technology)
- (42J) Computer Programming
- (42S) Computer Programming - Microcomputer Support Specialist
- (44L) Criminal Justice
- (41A) Dental Assisting)
- (45G) Drafting Technology - CAD
- (44N) Early Childhood Education
- (49E) Education Certificate
- (44C) Electronic Engineering
- ** (60U) Emergency Medical Technology-Paramedic
- (42G) Financial Services (one and two year)
- (57P) Fire Prevention
- ** (05F) Fire Suppression
- (45Z) Forest Resources Technology
- (70U) Health Services Management - Claims Analyst/Medical Receptionist/Biller
- (41E) Health Services Management - Health Information Technician
- (41J) Health Services Management - Health Services Management
- (41G) Health Services Management - Medical Transcriptionist
- (06B) High School Completion
- (42N) Hospitality and Tourism Management
- (41L) Human Services - Alcohol/Drugs
- (41L) Human Services - Social Services
- * (160) Industrial Technology
- (44P) Integrated Circuit Mask Design
- (42C) Management
- (45J) Manufacturing Operations
- (45L) Manufacturing Technology
- (45N) Mechanical Design
- (41C) Medical Office Assisting
- (44G) Microelectronics/Industrial Electronics
- ** (08N) Nursing
 - (191) Pre-Nursing
- * (705) Occupational Skills Training
- (16P) Professional-Technical Teacher Preparation
- (42Q) Real Estate
- (49U) Survey Technology
- (49W) Travel Agency Operations
- (45X) Visual Communications
- * (137) Welding
- * (136) Welding Fabrication

One star (*) indicates programs which have no prerequisites and do not require assessment.

Two stars (**) indicate programs which may have special admission requirements or enrollment limits. Please contact the Student Records (Admissions) Office at 399-5006.

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

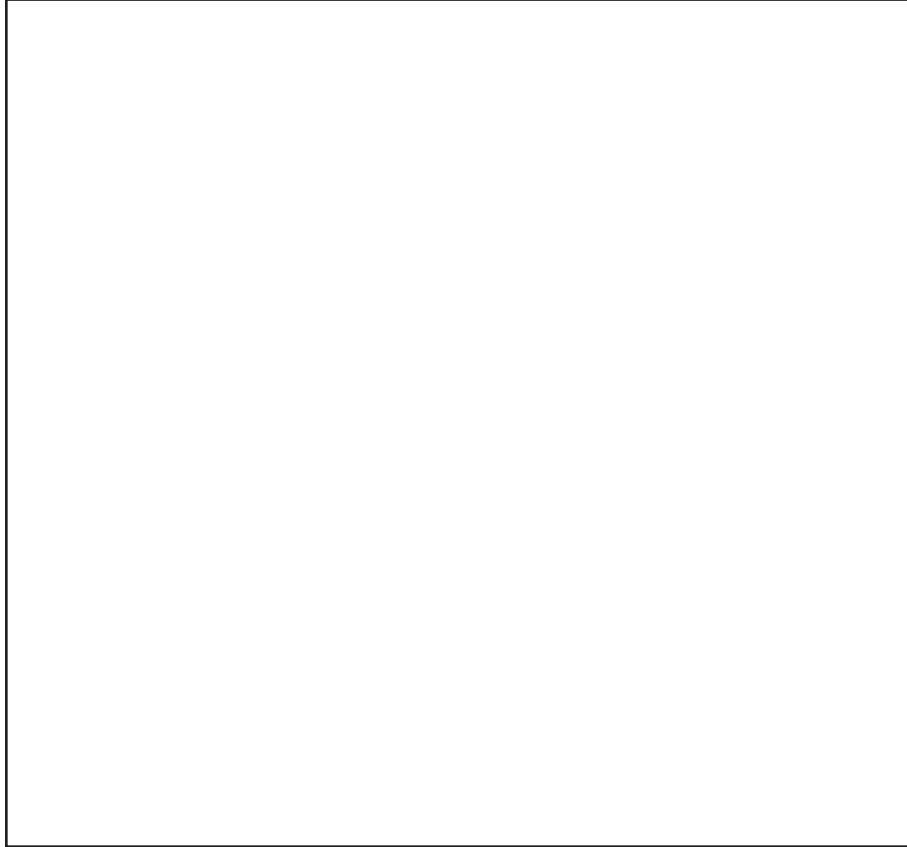
- (210) LDC-Business**
 - Accounting
 - *** Business Administration
- (320) LDC-Computer Sciences**
 - *** Computer Science
- (220) LDC-Education**
 - *** Elementary
 - *** Secondary
- (220) LDC-Engineering (330)**
 - *** Engineering
- (340) LDC-Forestry**
 - *** Forestry
- (280) LDC-General Studies**
 - *** Exploratory
 - General Studies
 - Undecided Majors
- (275) LDC-Health**
 - Community Health
 - *** Health Education
 - *** Nursing
- (240) LDC-Home Economics**
 - Child Development
 - *** Home Economics
- (350) LDC-Hotel, Restaurant, and Resort Management**
 - *** Hotel, Restaurant, and Resort Management
- (230) LDC-Humanities**
 - Architecture
 - *** Art
 - *** English
 - *** Foreign Languages
 - *** Journalism
 - Literature
 - *** Music
 - *** Philosophy
 - *** Speech
 - *** Theater
- (310) LDC-Mathematics**
 - *** Mathematics
- (270) LDC-Physical Education/Human Movement Studies**
 - *** Physical Education
- (300) LDC-Science**
 - *** Agriculture
 - *** Biology
 - *** Chemistry
 - *** Chiropractic
 - *** Dental Hygiene
 - Entomology
 - *** Geology
 - Horticulture
 - *** Oceanography
 - Physical Science
 - *** Physics
 - *** Pre-Professional Study
 - (Medicine, Dentistry, and Veterinary Medicine)
 - *** Zoology
- (260) LDC-Social Sciences**
 - *** Anthropology
 - *** Economics
 - Ethnic Studies
 - *** Geography
 - *** History
 - Law Enforcement-Corrections
 - *** Political Science
 - Pre-Law
 - *** Psychology
 - *** Sociology

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

About Chemeketa

CHEMEKETA COMMUNITY COLLEGE DISTRICT

INTRODUCING CHEMEKETA



WELCOME TO CHEMEKETA COMMUNITY COLLEGE

www.chemeketa.cc.or.us

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 professional-technical training programs. In some of these, you may earn a Certificate of Completion in one year. In most programs, you may earn an Associate of

Applied Science degree. It usually takes two years to meet the requirements; it may take longer if you attend part time or don't have the prerequisite skills.

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

- *College transfer courses* are for students who wish to continue their education at a four-year 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

ACADEMIC CALENDAR

	Fall 1998	Winter 1999	Spring 1999	Summer 1999	Fall 1999 (Tentative)
Registration begins	<i>Please check each term's Schedule of Classes for registration information.</i>				
Day and evening classes begin	September 21	January 4	March 29	June 21	September 20
Last day to withdraw and receive a refund	October 2	January 15	April 9	July 2	October 1
Last day to register or add classes	October 9	January 22	April 16	July 9	October 8
Audit requests due	October 16	January 29	April 23	July 16	October 15
Graduation applications for next term due	October 16	January 29	April 23	July 16	October 15
Holidays	November 11 Nov. 26 & 27	January 18	May 31	July 5	November 11 Nov. 25 & 26
Last day to withdraw from classes without responsibility for grades	November 13	February 26	May 21	July 23	November 12
Review and final exams	December 7-10	March 15-18	June 7-10	August 9-12	December 6-9
End of term	December 11	March 19	June 11	August 13	December 10
Graduation GED and High School Completion One- and two-year programs			June 11 (3 p.m.) June 11 (7 p.m.)		

master's degree; some have doctorates. Faculty in professional-technical programs generally have a rich background which combines education with practical, on-the-job experience. In addition, we hire an average of 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 (503) 399-5144.

WHERE IS CHEMEKETA?

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

We consider the entire college district as our campus. Our 194-acre main campus is located at 4000 Lancaster Drive N.E., Salem. We have campuses in Dallas, McMinnville, 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 is located on the second floor of Building 2, but it will move to its new location in Building 8 in spring term. It includes a Media Center, where you may access videos, audio tapes, laserdiscs and other audio-visual materials, and a Library, where you may access reference books, indexes to journals and magazines and the general book collection. The Learning Resource Center also includes a television studio, teleconferencing capability, and facilities for audio, graphics and multimedia production.

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 manufactur-

ing 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 professional-technical skills; others return to school to increase their knowledge, learn new skills, or to get to know more about themselves and their relationships with other people.

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

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 165 and 166 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

ABOUT CHEMEKETA'S DIVERSITY

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

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

A DMISSION AND REGISTRATION

WHO MAY ENROLL AT CHEMEKETA?

**Student Records (Admissions) Office,
(503) 399-5006; FAX, (503) 399-3918
e-mail: admissions@chemek.cc.or.us**

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.

Students younger than 18 who do not have a high school diploma or GED certificate should contact the Students Records (Admissions) Office in Building 22 on the Salem Campus.

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 five years old are not valid. The purpose of the test is to determine your skill levels in reading, writing, and mathematics. 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.

to teach. In that celebration of teaching and learning it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.

2.0 Code of Behavior

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

Chemeketa students will:

- 2.1 Practice personal and educational integrity.
- 2.2 Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.
- 2.3 Discourage bigotry and respect the diversity and dignity of all persons.

2.4 Respect the rights and property of all persons.

2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.

3.0 Student Rights

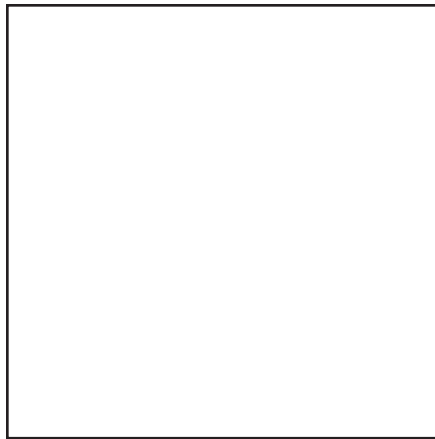
Each student in the college community has certain rights that accompany his/her responsibilities. Those rights are to be protected by both students and staff regardless of an individual’s race, sex, religion, color, creed, disability, sexual orientation, political affiliation, national origin, ancestry,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

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 Student Records (Admissions) Office, Building 22, Salem Campus.	New Students– Register following directions sent by Student Records (Admissions) Office. Re-entering/Continuing Students– Register by touch-tone telephone following directions published in the quarterly <i>Schedule of Classes</i> .
Enrolling for classes held outside of Salem	Call the college’s Dallas, McMinnville, Santiam, or Woodburn 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 Student Records (Admissions) Office, Building 22, Salem Campus.	New Students– Follow procedure above for enrolling on Salem Campus. Re-entering/Continuing Students– Follow procedure above for enrolling on Salem Campus.
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 Student Records (Admissions) Office, Building 22, Salem Campus.	Follow procedure above for enrolling on Salem Campus or Register by touch-tone telephone following directions published in the quarterly <i>Schedule of Classes</i> .
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 Learning Center in Salem. During summer, contact the Developmental Education Office, Building 18.	GED: Contact Developmental Education Office, Building 18, Salem Campus. ESL: Contact ESL Office, Building 16, Salem Campus.	File Student Record Form with Student Records (Admissions) Office, Building 22, Salem Campus. Students 16 to 18 must have a High School Release Form and be referred by the Downtown Learning Center if living in the Salem-Keizer School District.	Consult quarterly <i>Schedule of Classes</i> . 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. File Student Record Form with Student Records (Admissions) Office, Building 22, Salem Campus. Students 16 to 18 must have a High School Release Form and be referred by the Downtown Learning Center if living in the Salem-Keizer School District.	Follow directions sent by Student Records (Admissions) Office before registration.
*These programs have prerequisites and require assessment before admission. Contact the Advising and Counseling Center at (503) 399-5120 for assessment.				
Accounting Automotive Technology Building Construction Training Civil-Structural Engineering Computer Programming Criminal Justice	Dental Assisting Drafting Technology—CAD Early Childhood Education Education Certificate Electronics Technologies Financial Services	Fire Prevention Forest Resources Technology Health Services Management Medical Transcriptionist Hospitality and Tourism Management	Human Services Management Manufacturing Engineering Technologies Medical Office Assisting	Business Technology Real Estate Visual Communications
**These programs have special admission requirements or enrollment limits. Please contact the Student Records (Admissions) Office, (503) 399-5006, for details.				
Building Inspection Emergency Medical Technology Fire Suppression	Nursing (RN, LPN, Nursing Assisting, re-entry courses)	Professional-Technical Teacher Preparation		



REGISTRATION ORIENTATION

(503) 399-5120

Students admitted fall term will be invited to an orientation session before the term begins. The orientation will introduce you to Chemeketa's Salem Campus and registration services, provide an opportunity for you to obtain your parking permit and student identification card, and enable you to buy books and to meet other students.

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.

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 professional-technical programs which limit enrollment or have special admission requirements:

- Accounting
- Automotive Technology
- Building Construction Training
- Building Inspection

- Business Technology
- Civil-Structural Engineering
- Computer Programming
- Criminal Justice
- Dental Assisting
- Drafting Technology—CAD
- Early Childhood Education
- Education Certificate
- Electronics Technologies
- Emergency Medical Technology—Paramedic
- Financial Services
- Fire Protection Technology
- Forest Resources Technology
- Health Services Management
- Hospitality and Tourism Management
- Human Services Management
- Manufacturing Engineering Technologies
- Medical Office Assisting
- Nursing (Nursing Assisting, Practical Nursing, Associate Degree Nursing, and re-entry courses)
- Professional-Technical Teacher Preparation
- Real Estate
- Visual Communications

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

Many of Chemeketa's professional-technical programs have established new entry requirements. If you wish to take six or more credit hours in these 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 Advising and Counseling Center.

AFFIRMATIVE ACTION AND NON-HARASSMENT POLICY

It is the policy of Chemeketa Community College that discrimination on the grounds of race, color, religion, sex, national origin, marital status, age, disability, or family relationships will not exist in any area, activity, or operation of the college as required by Title IX of the Educational

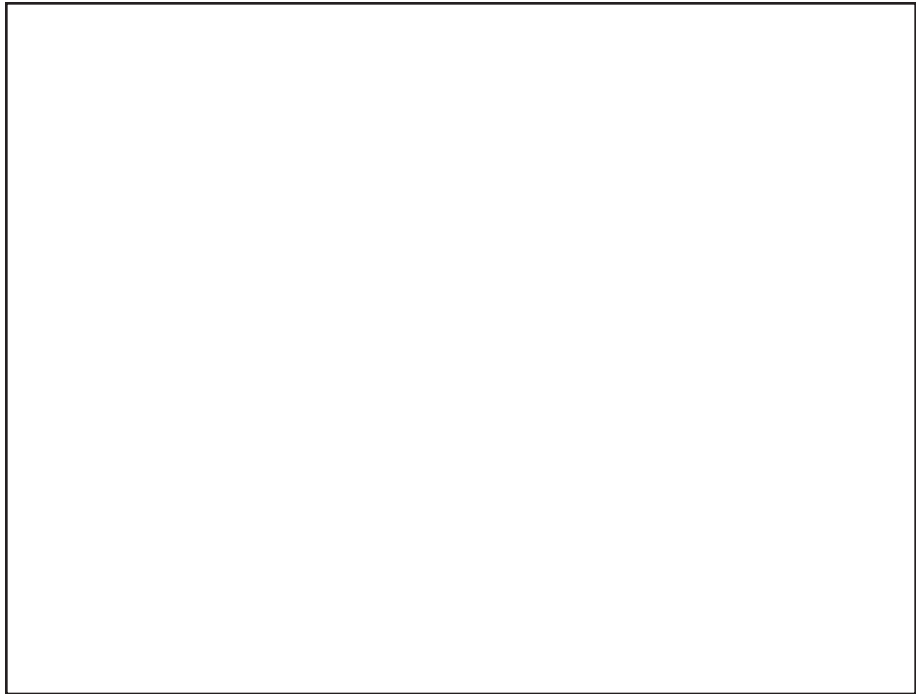
Amendments of 1972, Section 504 of the Rehabilitation Act of 1973; Title VI and VII of the Civil Rights Act of 1964; the Age Discrimination Act; the Americans with Disabilities Act of 1990; Oregon Civil Rights Law (ORS659); and their implementing regulations.

College policy also prohibits harassment on the basis of any of the factors listed above. Harassment is any unwelcome behavior or display either verbal, physical, or visual in nature, which meets any of these criteria: 1) submission to such condition is either an implicit or explicit condition of

employment or academic performance; 2) submission to or rejection of the condition by an employee or student is used as the basis for decisions affecting that person's employment or academic performance; 3) the condition has the purpose or effect of unreasonably interfering with an individual's

work performance or academic performance or of creating an intimidating, hostile, or offensive work environment or academic environment.

Questions or complaints may be directed to Judy Gohring, Affirmative Action Officer, P.O. Box 14007, Salem, Oregon 97309, (503) 399-5009 or 399-5192 (TDD).



IMMUNIZATIONS

The Oregon Department of Health requires community college students born on or after January 1, 1957 to have two doses of measles vaccine before participating in clinical experiences in allied health and nursing programs, practicum experiences in education and child care programs, and intercollegiate sports. Students in nursing programs and in some allied health programs may also be required to be vaccinated for hepatitis B prior to entering any clinical experiences. For details about these requirements, contact the office of the department director who oversees the program in which you plan to participate.

TRANSFER CREDITS FROM OTHER COLLEGES, CLEP, ADVANCED PLACEMENT, AND THE MILITARY

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

If you have taken the College Level Examination Program (CLEP) or the Advanced Placement (AP) Test, request that your scores be forwarded to the Student Records (Admissions) Office. Then contact the Student Records Office and request, in writing, an evaluation of your transcripts and scores. For more CLEP and Advanced Placement information, see Page 16.

Chemeketa also accepts some credits from the military and the Community College of the Air Force. Submit an official copy of your CCAF transcript to the Student Records (Admissions) Office from CCAF or submit a certified copy of your DD214 to the Student Records Office 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 Student Records (Admissions) Office has special application materials and deadlines for international students.

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

MONEY MATTERS

TUITION

(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 one-third of the amount due plus a non-refundable \$20 contract fee to be paid at registration.

CREDIT COURSES

Use the chart on the next 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 103.

NON-CREDIT COURSES

The cost of most non-credit courses is \$2.25 per class hour with a \$10 minimum charge, or as stated in the term *Schedule of Classes*.

CREDIT CLASS TUITION

No. of Credit Hours	Oregon Students	Out-of-State Students	International Students
1	\$36	\$125	\$145
2	\$72	\$250	\$290
3	\$108	\$375	\$435
4	\$144	\$500	\$580
5	\$180	\$625	\$725
6	\$216	\$750	\$870
7	\$252	\$875	\$1015
8	\$288	\$1000	\$1160
9	\$324	\$1125	\$1305
10	\$360	\$1250	\$1450
11	\$396	\$1375	\$1595
12	\$432	\$1500	\$1740
13	\$468	\$1625	\$1885
14	\$504	\$1750	\$2030
15	\$540	\$1875	\$2175
16	\$576	\$2000	\$2320
17	\$612	\$2125	\$2465
18	\$648	\$2250	\$2610

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

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 \$55 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 ADULT 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.

TUITION REFUND POLICY

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

If you decide to withdraw from Chemeketa during the first two weeks of a term, you may receive a tuition refund. See detailed information under **Withdrawal from College**, Page 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 full-time students is about \$200 per term. However, in some of our programs you will also have to provide your own tools, equipment, and uniforms. These costs are included in the descriptions of professional-technical programs on Pages 42 to 103.

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 ACCIDENT 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 Student Records (Admissions) Office at (503) 399-5006 for further information.

VETERANS' SERVICES

(503) 399-5004

e-mail: veterans@chemek.cc.or.us

The Veteran Services Office in Building 22 provides information and assistance to veteran students and eligible dependents on applying for and using all types of veteran educational benefits.

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. You must submit a Student Record Form to the Student Records (Admissions) Office in Building 22.

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

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

- Receive no more than 44 deficiency course units over a two-year period.
- Accumulate a minimum grade point average (GPA) of 2.0 in your program. GPA is based on A=4, B=3, C=2, D=1, F=0.

- Make any changes which affect your certification status by the end of the fourth week of a term.

- Complete all certified credit hours in which you are enrolled.

Any term your GPA falls below 2.0 or you do not satisfactorily complete the required hours listed above, the veterans' specialist will advise you that you are on probation. If you do not maintain the GPA and/or credit hour requirements for two consecutive terms, a notice of unsatisfactory progress will be forwarded to the VA regional office.

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

FINANCIAL AID

(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 ELIGIBLE?

To qualify for financial aid, you must:

- Be at least 18 years of age or have a high school diploma or a General Educational Development (GED) high school equivalency certificate, or have the ability to benefit from a college education.

- Be a United States citizen or able to provide I-94 or other documents showing you are an eligible non-citizen.

- Be registered with Selective Service if you are a male born after December 31, 1960. (If you are now on active duty in the United States Armed Forces—not the reserves—you do not have to be registered.)

- Show need for financial help.

- Enroll in a degree program or a certificate program at Chemeketa.

- Enroll in six or more credit hours at Chemeketa with these restrictions:

- 1) If you wish to receive aid as a full-time student, you must register for 12 or more credit hours.

- 2) You may not include audited and non-credit courses in these totals.

- 3) 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.

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

- If you do not have a high school diploma or GED, you must score at or above 34 in the reading and writing sections and at or above 33 in the numerical skills section of the college's placement test. If you score below 34 or 33, you may not be eligible for financial aid. However, you may be eligible to retake the placement test. Contact the Advising and Counseling Center.

THE MEANING OF CHEMEKETA

The name Chemeketa is a Native American word meaning "place of peace." Long before settlers came to this area, Willamette Valley Native Americans would gather at a place they called Chemeketa, today known as Salem. There they conducted their councils, renewed friendships, and shared old

ideas and cultivated new ones. It is hoped that many who come to Chemeketa today will do just that.

The meaning of Chemeketa is illustrated on the sculptured wall panels (pictured here) which appear on Building 3 on our Salem Campus. Designed by graphic artist

Arvid Orbeck, the panels symbolize the territorial divisions of the tribes and the movement of the tribes toward the established meeting place.

As the tribes move through the territorial divisions, the carved designs become less aggressive and less linear. Softer curves start

to enter into the forms, showing more peaceful attitudes. The final points of the arrow shapes become completely calm upon reaching the center, where the individual chiefs, each indicated with his own form of dress, decoration, and behavior, sit down in a formal circle for peaceful work.



KINDS OF FINANCIAL AID AVAILABLE AT CHEMEKETA

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

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

Program and source of funding	Eligibility requirements	Available amounts	Special information
Grants and scholarships			
Federal Pell Grant	<ul style="list-style-type: none"> • You must not have a bachelor's degree. 	<ul style="list-style-type: none"> • Amounts are based on federal funding. • The estimated highest award at Chemeketa for 1998-99 will be \$3,000. 	<ul style="list-style-type: none"> • Pell Grant will send you a Student Aid Report (SAR) indicating your eligibility. • Eligibility may be transferred to any post-secondary school participating in federal programs.
Federal Supplemental Educational Opportunity Grant (SEOG)	<ul style="list-style-type: none"> • You must prove an exceptional financial need. • You must not have a bachelor's degree. 	<ul style="list-style-type: none"> • Amounts range from \$600 to \$2,000 a year. • The estimated highest award at Chemeketa for 1998-99 will be \$450. 	<ul style="list-style-type: none"> • The Financial Aid Office will determine and then notify you of your eligibility.
Oregon State Need Grant (funded by the state of Oregon and the federal government)	<ul style="list-style-type: none"> • You must enroll full-time (12 credit hours or more). • You must be an Oregon resident. • You must also apply for a Pell Grant. • You must not have a bachelor's degree. • You must attend a college in Oregon. 	<ul style="list-style-type: none"> • Amounts are based on state funding. • The estimated highest award at Chemeketa for 1998-99 will be \$936. 	<ul style="list-style-type: none"> • Your grant may be transferred to other Oregon colleges and universities. • Your grant may be awarded for up to 12 quarters (terms) or for eight semesters. • You must not be enrolled in a program leading to a degree in theology, divinity, or religious education.
Talent Grants (funded by Chemeketa Community College)	<ul style="list-style-type: none"> • You must show outstanding ability and achievement in selected fields. • You must enroll full time (12 credit hours or more). 	<ul style="list-style-type: none"> • Amounts vary up to the cost of tuition. 	<ul style="list-style-type: none"> • No FAFSA is required. • Contact an instructor or coach directly associated with your skills or ask at the Financial Aid Office.
Scholarships (funded by private donors)	<ul style="list-style-type: none"> • Determined by donor. 	<ul style="list-style-type: none"> • Determined by donor. 	<ul style="list-style-type: none"> • Scholarship information is posted in the Financial Aid Office throughout the year. Many postings are made in winter and spring terms for the next academic year.
Loans			
Federal Perkins Student Loan Program (FPSL)		<ul style="list-style-type: none"> • You may borrow up to \$3,000 in an academic year. • The highest award at Chemeketa for 1998-99 will be \$3,000. • Priority will be given to second year students 	<ul style="list-style-type: none"> • You do not have to pay any interest or principal while in school. • You must begin payment six to nine months after you drop your enrollment to less than six credit hours. • The current interest rate is 5 percent. • You must repay Chemeketa. • You must view an orientation video before funds are disbursed. • Interest is paid by the federal government while you are enrolled in an approved program. • You must attend an entrance and exit interview. • Contact the Financial Aid Office for information on repayment and deferments. • Priority will be given to second-year students. • First time borrowers must attend class for 30 before the first check is issued.

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)	<ul style="list-style-type: none"> School has the right to deny loan certification and/or limit amount borrowed. 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Pick up the separate Stafford information packet at the Financial Aid Office. Required fees will be deducted from your check. You must begin payment six months after you drop your enrollment to less than six credit hours. You may defer payment if you continue half-time or full-time study. Contact the Financial Aid Office for other possible deferments. You must attend an entrance and an exit interview. The variable interest rate is capped at 8.25 percent. The federal government pays the interest while you are enrolled in an approved program. First-time borrowers must attend class for 30 days before the first check is issued.
Federal Unsubsidized Stafford Loan (provides for insured loans for borrowers who do not qualify for federally subsidized Stafford Loans. Terms and conditions for subsidized Stafford Loans apply to unsubsidized Stafford Loans.	<ul style="list-style-type: none"> School has the right to deny loan certification and/or limit amount borrowed. 	<ul style="list-style-type: none"> You may borrow the cost of attendance minus the amount of estimated financial assistance, up to annual loan limits. Students who show need for only part of the annual subsidized Stafford Loan limit may borrow the remainder through unsubsidized loans. 	<ul style="list-style-type: none"> Repayment of principal begins six months after the month in which you cease to be enrolled at least half time. Interest during in-school, grace, and deferment periods may be paid monthly or quarterly, or may be added to the principal amount of the loan not more frequently than quarterly by the lender.
Federal "PLUS" program (funded by commercial lenders with state or other agency guarantee)	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Parents may borrow up to the cost of attendance minus the amount of estimated financial assistance. 	<ul style="list-style-type: none"> Only mothers, fathers, adoptive parents, or legal guardians may borrow for dependents. Pick up the PLUS information packet at the Financial Aid Office. Take the completed loan application to a lending agency such as a bank or savings and loan association. 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		<ul style="list-style-type: none"> Amounts vary according to your financial need. Funds usually are not more than \$750 a term or \$2,250 a year. Jobs pay minimum wage or higher. 	<ul style="list-style-type: none"> Jobs are available both on and off campus. You must view a college work-study orientation video before job placement. Contact the Financial Aid Office for a placement appointment.
Chemeketa part-time employment (funded by Chemeketa Community College)	<ul style="list-style-type: none"> You must enroll in six credit hours or more. 	<ul style="list-style-type: none"> Pay varies according to the job. Jobs pay minimum wage or higher. 	<ul style="list-style-type: none"> No FAFSA is required. Contact the Financial Aid Office.
Part-time jobs (funded by private businesses)	<ul style="list-style-type: none"> You must be willing to work. You must meet the qualifications of the employer. 	<ul style="list-style-type: none"> Pay varies according to the job. The average wage for 1997-98 was \$6.06 an hour. 	<ul style="list-style-type: none"> No FAFSA is required. Apply at the Placement Resource Center in Building 17 on the Salem Campus.

WHAT KINDS OF FINANCIAL AID ARE AVAILABLE?

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

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

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

HOW TO APPLY

Follow these steps to apply for financial aid:

- Pick up (or ask us to mail you) a Free Application for Federal Student Aid (FAFSA) at the Financial Aid Office on the Salem Campus or at 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. Chemeketa's college code is 003218.
- 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.

After your Financial Aid Form has been processed, 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. File your Financial Aid Form by April 3 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 are posted in the Financial Aid Office and included with your FAFSA. If you apply after these dates, you may be eligible only for a Pell Grant and a Stafford Student Loan for the following term.

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

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

HOW STUDENTS ARE SELECTED

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

The Oregon State Need Grant is awarded to qualifying full-time students on an application-date basis determined by the

state. Students eligible for the Federal Perkins Student Loan, Federal Supplemental Educational Opportunity Grant, and Federal Work-Study are awarded these funds on the basis of the date of completion of the student's file. Since these funds are limited, the earliest dates are given the highest priority. Not all eligible students will receive these funds.

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

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

HOW TO STAY ELIGIBLE

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

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

These requirements apply to each term you are on financial aid as well as all terms in attendance at Chemeketa.

ACADEMIC PROGRESS

If you do not meet the minimum term and cumulative credit-hour and 2.0 GPA requirements, 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,

ABOUT THIS CATALOG

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

We make every effort to be sure that this information is accurate at the time of publication. However, sometimes the college finds it necessary to make

changes before the next catalog is printed. These changes may affect the costs, college policies and procedures, the calendar, and some curricula and courses.

Therefore, we do not consider the catalog as a hard and fast contract between you and the college;

rather, we are trying to give as much relevant information as possible to all of you who may use our services.

your aid stops. To regain aid eligibility all students who are terminated must file an appeal. If reinstated, you will be placed on probation.

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

HOW LONG ARE YOU ELIGIBLE?

In general, you may receive financial aid at Chemeketa for 108 credit hours applied to an associate's degree or 54 credits applied to a certificate. All credits taken at Chemeketa are included in this limit.

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 this refund 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, 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 policy. 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. Appeal forms are available in the Financial Aid Office.

HELP IS HERE

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

ACADEMIC INFORMATION

STUDENT RECORDS AND TRANSCRIPTS

(503) 399-5001

e-mail: regist@chemek.cc.or.us

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 or the college may provide your Social Security number to the following agencies or match it with records from the following systems:

- State and private universities, colleges, and vocational schools, to find out how many community college students go on with their education and to find out whether community college courses are a good basis for further education.
- The Shared Information System, which gathers information to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available.
- The Office of Professional-Technical Education Management Information System, to provide reports to the state and federal governments. The information is used to learn about education, training, and job market trends for planning, research, and program improvement. Funding for community colleges is based on this information.
- The Oregon Department of Revenue and collection agencies only for purposes of processing debts, and only if credit is extended to you by the college.
- 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 state or federal, legal, or audit requirements. However, you may request no

information be released by completing a Non-Disclosure Form at the Student Records (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	4
B	Above average	3
C	Average	2
D	Below average	1
F	Failed	0
I	Incomplete	0
P	Pass	0
N	No grade assigned	0
R	Course repeated	0
T	Transfer	0
X	Audit	0
Z	Course in progress	0

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 earned.

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

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

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

Office will officially notify you of the change.

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

(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

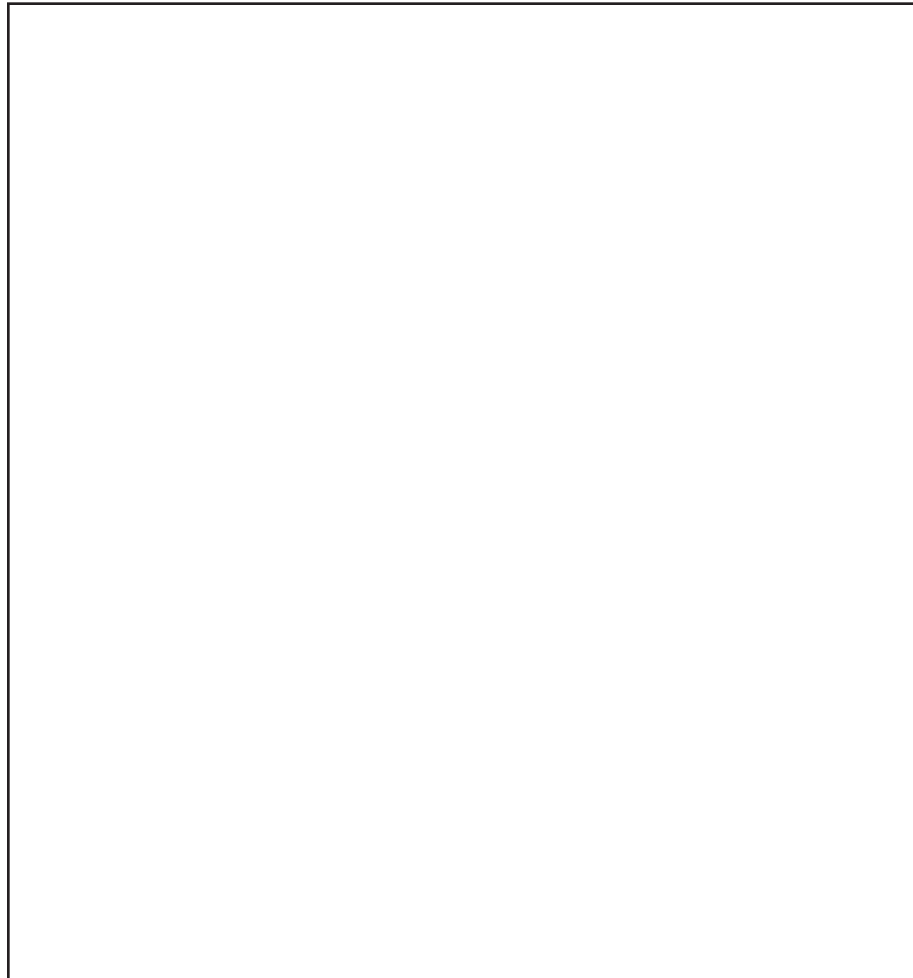
- A first term student taking six or more credit hours who falls below a 2.0 GPA, or
- A continuing student who falls below a 2.0 cumulative GPA with more than 36 credit hours of coursework.

Academic Probation Status

- A student who is 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. The student may appeal the suspension through the Dean of Student Development and Learning Resources.

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 original 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 grade-point average and does not count courses with an R grade in determining the total number of credit hours you have earned.

If you are receiving veterans' educational benefits, you should be aware that this could create an overpayment for the term for which you requested an R. Contact the Veterans' Clerk in Building 22 before making such a request.

COURSE PREREQUISITES

Prerequisites are specified in the course descriptions. These are conditions you must meet before enrolling in a course. It

is your responsibility as a student to fulfill the prerequisite.

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

AUDITING COURSES

(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, you may do so using the touch-tone registration system or you may 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 following the withdrawal procedures mentioned above, you are responsible for the final grades you receive; they will appear on your transcript of Chemeketa credits.

If you withdraw using the touch-tone registration system or a Student Change 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-starting classes.) Amounts

owed to any departments of the college will be deducted from your refund. There may also be a nominal deduction from the refund for processing the withdrawal. No refunds less than \$5 are made. The college cannot refund the cost of student insurance.

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

ADVANCED PLACEMENT COURSES

(503) 399-5120

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 determine which examinations and scores Chemeketa accepts. If you wish to take a CLEP examination, schedule a testing time through the Advising and Counseling Center.

CREDIT BY EXAMINATION

(503) 399-5120

Another way to earn credit for some courses is to demonstrate your college-level ability by successfully passing chal-

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 your questions about room locations, activities, workshops, meetings, academic

advisor assignments, and instructional staff office locations. The Information Center also distributes class schedules and catalogs.

Other Locations:

•Dallas Campus

(503) 623-5567 or
(503) 399-5206

•McMinnville Campus

(503) 472-9482 or
(503) 399-5219

•Santiam Campus

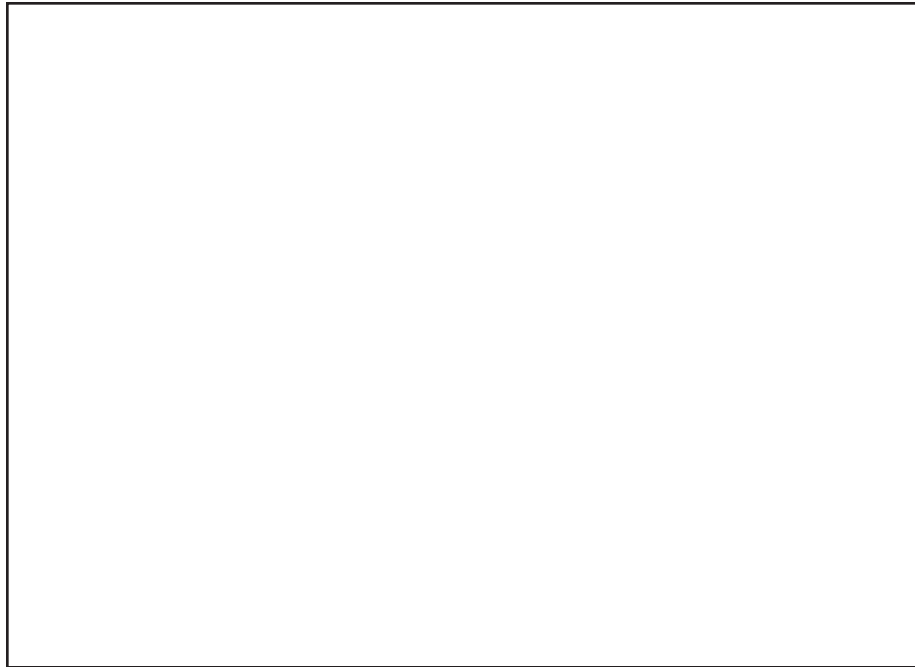
(503) 769-7738 or
(503) 399-5215

•Woodburn Campus

(503) 981-8820 or
(503) 399-5207

•Training and Economic Development Center

(503) 399-5181



challenge examinations, which are available for a limited number of courses. These examinations are prepared by the college department directly responsible for the instruction of the courses. There is a non-refundable fee of \$25 for each exam. Grades are recorded on the student's transcript for successfully-completed exams once the student registers and pays for the course.

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

CREDIT FOR PRIOR LEARNING

(503) 399-5120

In 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. (There is a fee for each course assessed.)

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 and fulfill the requirements for an Oregon Associate of Arts Transfer degree or an Associate of General Studies degree 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 on local cable stations or watch videotapes of these classes at the Salem Public Library, the Salem Campus Media Center, the Grand Ronde Education Center, Oregon Coast Community College in Newport, or at Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. Chemeketa charges a fee of \$15 per telecourse in addition to tuition.

Chemeketa television (CTV) broadcasts live Salem Campus classes to local Chemeketa campuses. Two-way audio 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.

Online courses allow you to take classes at your convenience from your home or workplace. You'll need access to a computer with Internet Browser and ISP account to access course material, to send your coursework to campus and to communicate with your instructor and classmates.

Listings, registration procedures, and information about distance education courses are available on the college web site (<http://bbs.chemek.cc.or.us>) and are published each term in the *Schedule of Classes*.

S TUDENT D EVELOPMENT S ERVICES

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 tutoring is available to all students. You may visit the Tutoring Center in Building 2 on the Salem Campus or ask questions by subject area via e-mail;

addresses can be found on our web site (www.chemek.cc.or.us/resources/tutoring). A current student ID card is required to use these services. Tutoring is not available the first week of the term or during finals week.

LITERACY VOLUNTEER PROGRAM

(503) 399-2557

Volunteers offer basic-skills tutoring on a one-to-one basis in Salem and throughout the Chemeketa district. Contact the literacy volunteer program coordinator in Building 16.

LEARNING ASSISTANCE AND SKILLS DEVELOPMENT CLASSES

(503) 399-5162

Learning assistance services and skill-building classes are available to help you improve the academic skills you'll need to succeed in college. We offer individual and lecture classes in reading, study skills, vocabulary building and spelling. For more information on these classes, contact the Learning Center 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.

Literacy Volunteer Program—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.

ADULT BASIC EDUCATION, GENERAL EDUCATIONAL DEVELOPMENT (GED), HIGH SCHOOL COMPLETION

For students who have not completed high school, Chemeketa offers Adult Basic

Education, General Educational Development (GED), and High School Completion classes. See Page 31.

SERVICES FOR STUDENTS WITH DISABILITIES

(503) 399-5192 voice/TDD and

SERVICES FOR STUDENTS WHO ARE DEAF AND 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.

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 DMV placards for people with disabilities.

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

If you have a disability, including learning, psychiatric, sensory, orthopedic or otherwise, 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.

Chemeketa offers additional services if you are deaf or hard of hearing. These include counseling, interpreting, and tutoring.

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).

TRIO PROJECT

(503) 399-5295

Free services to assist first generation and/or low-income college students, or students with disabilities are available through the Trio Project. These services include classes to help you develop your career, educational, and personal skills and goals; development of individual college success plans; peer mentoring and tutor-

ing; assistance with financial aid and scholarship applications; and help with transferring to four-year colleges.

Students are selected for this project through an application and interview process. Applications are available in the Advising and Counseling Center, and the Financial Aid, Student Life, and New Workforce Offices.

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.

S STUDENT SERVICES

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 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. You must have the sales receipt for the books and personal identification to receive a refund.

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 computer software at special prices. Some restrictions may apply. Contact the Salem Campus Bookstore for details.

BOOK EXCHANGE

(503) 399-5117

The Book Exchange is a non-profit service, run by student government, which provides an opportunity for Chemeketa students to buy or sell books at a reduced cost. The books sold in the exchange must be books currently in use at the college.

Books are sold from the Student Government Office in Building 3, Room 101, during the first week of fall, winter, and spring terms.

STUDENT IDENTIFICATION CARDS

(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

(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. (Parking permits are not required during summer term.) Visitors may pick up parking permits at the Information and Public Safety Booth.

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

The college suggests that you lock your car at all times when on campus. 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, veggie burritos, soups, and salads.

Avenue 34, Building 34, (503) 399-2542—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

STUDENT'S CHECK LIST

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

taken mathematics, reading, and writing placement tests? Contact the Advising and Counseling Center, Salem Campus, Building 2, (503) 399-5120.

filed a Student Record Form? Contact the Stu-

dent Records (Admissions) Office, Salem Campus, Building 22, (503) 399-5006. A Student Record Form is on Page iii.

checked to find out if there are special requirements for the program you want to enter? Contact the Student Records Office, Salem Campus, Building

22, (503) 399-5006.

2. Do you know the costs of:

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

These costs are listed in this catalog in the description of your professional-technical program.

3. Have you arranged for:

transportation?
 child care?

4. Have you asked about financial aid? Contact the Financial Aid Office, Salem Campus, Building 22, (503) 399-5018, or Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses.

5. Have you checked on your eligibility for Veterans Administration educational benefits? Contact the Registrar's Office, Salem Campus, 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.

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. Both programs are accredited by the National Academy of Early Childhood Programs.

Child Development Center, Building 39, (503) 399-5107—As a training center for students enrolled in the Early Childhood Education program, the center offers full- or part-time care for approximately 35 children ages two-and-a-half to six years old. Applications are accepted at any time, but we advise you to apply early. Contact the center for applications and fee information.

Chemeketa Community Child Care Center, Building 50, (503) 399-5174—This facility provides year-round care for approximately 90 children, ages six weeks to six years old. Full-time care is available for infants and toddlers (ages six weeks to 30 months), and full- and part-time care for pre-schoolers (ages 31 months to six years). A discount is given to parents who volunteer at the center. Applications are accepted at any time for the current year; early application is encouraged. 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.

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.

CAREER AND EMPLOYMENT ADVISING

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 ASSISTANCE

Counselors offer individual help for academic course and program planning, including transfer to four-year colleges and universities; career decision making; and personal issues. For assistance, 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 or change 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 choosing 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 computerized Career Information System (CIS) is available for current and prospective students to use in career decision making. In using this statewide database, you respond to questions concerning your interests, abilities, and preferences. The computer analyzes your responses and prints a list of occupations which may suit you.

In addition, you may:

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

For more information, 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 computerized career information resource is DISCOVER. This nationwide

database 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 professional-technical program of study, you are assigned a faculty advisor in your program. If you are a full-time "undecided" 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. 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 changing 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) 399-7789

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

INDIVIDUAL JOB SEARCH ASSISTANCE

For individual assistance, make an appointment with the Placement Resource Center. If you are nearing graduation, we encourage you to visit the center at least one term before you will graduate. The Placement Resource Center helps students and graduates write resumes and cover letters, prepare for interviews, and develop techniques for contacting employers.

JOB REFERRAL SERVICE

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

ON-CAMPUS RECRUITING

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

JOB SEARCH INFORMATION AND RESOURCES

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

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

JOB SEARCH TECHNIQUES 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

(503) 399-5026

As a full-time or part-time Chemeketa student, you may participate in work-based learning in your career field through our Cooperative Work Experience (CWE) program. This program allows you to combine your classroom studies with work-related experiences.

In this program, you work with a CWE coordinator to find a qualified training site, or your current job may qualify if it relates to your studies. The college must approve your training site and the learning objectives you and your supervisor develop. You may enroll for a variable number of credits depending on the num-

ber 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.

SERVICES TO THE COMMUNITY

TRAINING AND ECONOMIC DEVELOPMENT CENTER

(503) 399-5181

[www.chemek.cc.or.us/programs/
tedcenter/](http://www.chemek.cc.or.us/programs/tedcenter/)

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 in regional economic development by providing business assistance counseling as well as management and workforce development workshops. You can choose from regularly scheduled workshops or arrange for customized, on- or off-site training. Resources at the center include videotapes, books, periodicals, and computers for small business management use.

The following services are available through the TED Center:

Small Business Development—Workshops and free counseling are offered for current or prospective business owners. Workshops cover a variety of topics ranging from start-up information to advanced business management. One-on-one business counseling is available to assist those interested in starting a business, develop-

ing growth strategies, pursuing international trade, and increasing profitability and productivity.

Customized Training—Contracted training is customized for business, industry, and government. Services include organizational needs assessment, employee skills assessment, management consultation, on- or off-site customized training, and on-site tutoring.

Small Business Management—This 10-month 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. Courses meet evenings, once a week, for up to six weeks.

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. The program is customized to meet your worksite needs.

Computer Training—This program presents workshops open to the public, as well as classes customized for businesses and organizations. In addition to offering current business application software training, the program now features training in computer-aided design (CAD), computer-aided manufacturing (CAM), and geographical information systems (GIS) programs.

Core Workplace Skills—This service provides employee and organizational assessment and customized skill development classes in math, reading, writing, communications, problem solving, Eng-

lish as a second language, and Spanish for the workplace.

OCCUPATIONAL SKILLS TRAINING

(503) 399-5026

The Occupational Skills Training program offers agency-sponsored students the opportunity to earn college credit for work-site-based training at an approved community training site. A suitable training site and curriculum are determined jointly by your sponsoring agency and Chemeketa's skills training coordinator. For more information on this program, see Page 93.

The following services are also available through the Occupational Skills Training program:

On-the-Job Evaluation—The OJE process provides evaluation service and workers' compensation coverage for clients who need a work-based site evaluation to clarify vocational goals and assess capabilities and potential for a designated job or training area.

Vocational Courses—Chemeketa contracts with private rehabilitation counselors to provide vocational courses, including occupational readiness and research, employment strategies, and work assessment to agency-sponsored clients.

Contact the skills training coordinator for rate information on the above services and courses.

OREGON ADVANCED TECHNOLOGY CONSORTIUM (OATC)

(503) 399-5210

Fourteen 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. The services of a manufacturing program field engineer are available to assist local businesses in adopting state-of-the-art technologies.

SHORT-TERM TRAINING

(503) 316-3230

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 business 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.

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

DEFINITIONS

Class - See course.

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

Credit Hour - The number of credit hours granted for each course varies. In general, a student earns one credit for a lecture

class that meets one hour per week per term, or three credits for a lecture class that meets three hours per week.

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

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

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

Elective - A required, non-specific course.

Sequence - Closely related courses extending through three terms.

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

Studies, and the Oregon Associate of Arts transfer degrees. Check with the Advising and Counseling Center to determine if your coursework will apply.

Financial aid may be available to students who enroll in program which offer 24 or more credits over approximately six months (or more). For more information, call the Financial Aid Office at (503) 399-5018.

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

(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) 399-5119

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

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

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

PLANETARIUM

(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 usually presents two different sky shows each fall, winter, and spring term. Showings are scheduled weekly during the term. There is an admission fee with a special rate for families. Call (503) 399-5161 to arrange group showings for schools, clubs, and organizations.

S TUDENT LIFE

SPECIAL PROGRAMS AND ACTIVITIES

(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 advice 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 OF CHEMEKETA COMMUNITY COLLEGE

(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 Exec-

utive 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 event-planning skills while promoting a variety of activities for the enjoyment of students, staff, and the community. Students are selected through an application and interview process and are paid a stipend at the end of each term.

THE CHEMEKETA COURIER (STUDENT NEWSPAPER)

(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*.

CULTURAL FORUM
(503) 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 earning Cooperative Work Experience credit.

STUDENT CLUBS AND ORGANIZATIONS
(503) 399-5117

The 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)
- Asian-American Club
- Campus Crusade
- Chess Club
- Christian Fellowship Club
- Collectors Club
- Dance Club
- Data Processing Management Association (DPMA)
- Deaf and Hearing Impaired Club
- Fire Protection Club
- Forestry Club
- Gay and Lesbian Alliance
- 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
- Pacific Islanders Club
- Phi Theta Kappa
- Ski Club
- 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 campus-wide committees with Chemeketa staff. The ASCCC executive for college representation appoints student representatives to the following committees:

- Academic Standards
- Alcohol and Other Drugs
- Curriculum
- Multicultural

Risk Management
Student Success

COMMUNITY COLLEGES OF OREGON
STUDENT ASSOCIATION AND COMMISSIONS
(CCOSAC)
(503) 399-5117

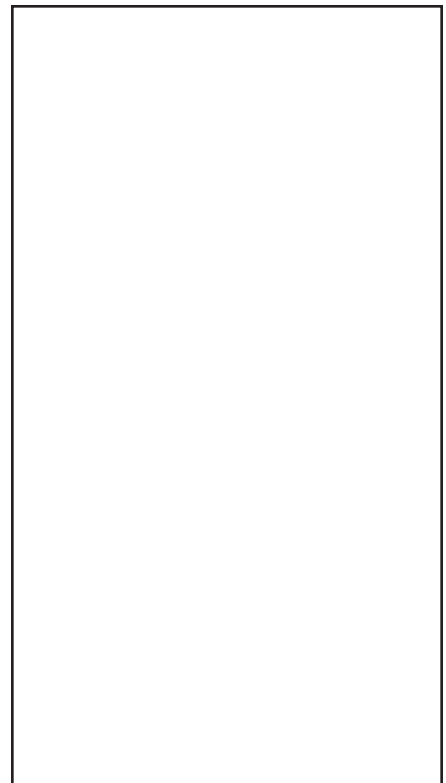
ASCCC has a representative on the board of the Community Colleges of Oregon Student Association and Commissions (CCOSAC), a state-wide, student-run organization representing more than 300,000 community college students in Oregon.

INTERCOLLEGIATE 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.

EDUCATION FOR THE COMMUNITY

OFF-CAMPUS CLASSES

We hold classes not only on the Salem Campus but also at a number of off-campus Salem locations; at our Dallas, McMinnville, 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; professional-technical and job skill-upgrading classes; and personal enrichment classes in languages, art, first aid, health, and other areas. In response to your requests, we are willing to develop and schedule other classes.

Chemeketa's campuses also provide Adult Basic Education, General Educational Development (GED) test preparation, and High School Completion programs. Each campus has a mathematics lab for individualized, self-paced instruction and 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.
- GED, placement, and interest testing.

COLLEGE FOR OLDER ADULTS

(503) 399-5140

Chemeketa 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 self-improvement 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
- Viticulture

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 72.

FAMILY RESOURCE CENTER AND PROGRAM

(503) 399-3915

The Family Resource Center is located in Building 50, Room 125 on the Salem Campus. The center's programs and services include:

- Information and referral to family support services

- Childbirth education
- Chemeketa Community Child Care Center
- Parenting and relationship classes and workshops

NEW WORKFORCE PROGRAM

(503) 399-3920

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

NEW WORKFORCE/LIFE SKILLS RESOURCE CENTER

(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.

Degrees, Diplomas, Certificates, and Transfer Information

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 an Oregon Associate of Arts transfer degree, an Associate of Applied Science degree, or an Associate of General Studies 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 EGREES

Graduates of Chemeketa's two-year programs are awarded an Oregon Associate

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

OREGON ASSOCIATE OF ARTS TRANSFER DEGREE

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

You may wish to pursue the Associate of Arts degree while earning college transfer credits. It is easy to earn the A.A. degree while at the same time preparing to transfer to a four-year school or university. If

you enroll full time, it usually takes two years to meet the A.A. degree requirements.

See the Program Guide on Pages 40 and 41 for a complete list of our transfer programs. 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 University System.

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 professional-technical education, offers training in more than 40 occupations.

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

GRADUATION

e-mail: graduation@chemek.cc.or.us

As a student, you are responsible for fulfilling the requirements for graduation. You should work with your advisor in completing these requirements.

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

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

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

HIGH SCHOOL COMPLETION, 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 DIPLOMA 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.

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. All Chemeketa courses must be completed with a grade of C or higher for high school credit to be awarded.
- 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, ASSET scores of 33 for reading, 32 for writing, and 37 for math, 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.

ASSOCIATE OF ARTS OREGON TRANSFER DEGREE REQUIREMENTS

Requirements	Credit hours	Courses which satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		
General Education Requirements		
<i>Writing</i> (with grade "C" or better)	9	WR121, WR122, and WR123, or WR227
<i>Math</i> (with grade "C" or better)	4	MTH105 or above
<i>Oral Communication/Rhetoric</i> (with grade "C" or better)	3	SP111, SP112, SP113, SP114, SP115, SP118, SP130, or SP230
<i>Physical Education or Health</i>	3	Any PE180, PE185, or PE190 classes (one credit each); HE250 (three credits); or HPE295 (three credits). A maximum of 12 credits of PE185 may be applied toward an A.A. degree.
<i>Computer Studies</i>	3	CIS120, CS101, CS131, CS161, or other computer information science or computer science course.
Distribution Requirements (Courses used to meet the Distribution Requirements should be at least three credits each.)		
<i>Arts and Letters</i> A minimum of 12 credits, chosen from at least two disciplines, with no more than nine credits from one discipline. (All foreign languages are considered one discipline.) Each course must be worth at least three credits. Note: The course taken to meet the oral communication/rhetoric requirement above may not be used to meet this requirement.	12	ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 230, 231, 233, 234, 235, 236, 238, 239, 244, 245, 246, 254, 256, 261, 262, 263, 264, 270, 271, 272, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 222, 250, 253, 254, 255, 256, 260, 261, 262, 263; FA255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM251, 252, 253, 259; JPN201, 202, 203; J216, 217, 224, 225, 226, 227; MUS105, 201, 202, 203; PHL201, 202, 203, 204, 205; R201, 202, 203; RUS201, 202, 203; SP105, 111, 112, 113, 114, 115, 118, 130, 230; SPAN201, 202, 203, 211, 212, 213; TA110, 121, 122, 123, 285C; WR241, 242, 243, 248C
<i>Social Sciences</i> 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, 206; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY100, 101, 102, 104, 119, 201, 202, 203, 206, 237, 239; SOC204, 205, 206, 210, 221, 227, 235, 291; SSC150, 151, 206; WS101, 102, 103
<i>Sciences, Math, Computer Science</i> 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	Choose 12 credits from: BI101, 102, 103, 131, 132, 133, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 150, 201, 202, 203, 221, 222, 223, 241, 242, 243; G142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH106, 111, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203. Additional credits to bring total to 15 credits may be chosen from the list above or from the following: BI251; CIS120, 121, 122; CS101, 103, 125E, 125P, 125Q, 125SS, 131, 133C, 133E, 133F, 133R, 133U, 133VB, 135AC, 135SS, 140A, 140B, 140U, 145, 160, 161, 162, 171, 178I, 179, 233B, 233C, 233U, 234C, 234L, 237, 240, 244, 246, 260, 275, 278, 279, 285; G160; GS120, MTH105, 111, 112, 116, 211, 212, 213, 231, 232, 241, 243, 244, 251, 252, 253, 254, 255, 256; OC133.
Electives Additional courses to bring the total number of credits to 90.		All lower division collegiate courses numbered 100 and above. Courses numbered 198/298 and 199/299 will only apply toward this degree as electives. A maximum of nine credit hours in professional-technical courses may be included, with the exception of the following: BT084, 085; COM051, 052, 053; MTH052 through 095; RD090; SKD050A,B,C; SKD051; WR090, 095. A maximum of 12 credit hours of cooperative work experience 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.		
Notes:		Two terms of college-level foreign language, with a grade of C or higher, are required for admission to Oregon University System universities. This requirement applies only to students graduating from high school in 1997 or later. This is not a requirement for earning the Associate of Arts degree. This requirement may also be met by completing two years of foreign language at the high school level.

ASSOCIATE OF APPLIED SCIENCE DEGREE REQUIREMENTS

Requirements	Courses which satisfy requirements
Satisfactorily complete the required courses and credit hours listed for each professional-technical program in the Programs of Study section of this catalog.	
General Education Requirements You will meet the general education requirements if you follow the curriculum outline listed for your program. In some cases the program specifies exactly which of the courses you should take. The courses listed below meet the college's general education requirements.	
<i>Writing</i>	One class of WR115 , WR121 , BA214 , BT084 , or COM051 or any higher numbered writing class.
<i>Math</i>	One class of MTH052 or any higher numbered math course.
<i>Computer Literacy</i>	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: <i>Social Science</i>	Anthropology, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies
<i>Humanities/Fine Arts</i>	American Sign Language, Art, English, Film Arts, Foreign Language, Humanities, Music, Music Performance, Philosophy, Religion, Theater Arts
<i>Science/Applied Science</i>	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
<i>Communications*</i>	Communication Skills, English as a Non-Native Language, Journalism, Speech, Writing, Reading, plus these specific classes: BA214 , BT120 , HD112 , RD115 , and RD116 .
Three additional credits from any of these areas: <i>Communications</i> <i>Health Education</i> <i>Humanities/Fine Arts</i> <i>Math</i> <i>Physical Education</i> <i>Science</i>	
Complete a minimum of 30 credit hours at Chemeketa.	
Earn a cumulative grade point average (GPA) of 2.0 or above for all course credits which apply toward the degree. Only courses numbered 050 or higher, unless otherwise indicated, apply toward the degree.	
Notes: <ol style="list-style-type: none"> We recommend that you see an advisor for guidance before you enroll. At the end of a program or course of study, any student receiving a three-term Certificate of Completion or two-year Associate of Applied Science degree will meet exit proficiencies/competencies in communication, computation, and human relations. See your advisor. 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. <p>* Courses taken to meet the writing requirement may not also be used to meet the communications requirement.</p>	

ASSOCIATE OF GENERAL STUDIES DEGREE REQUIREMENTS

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 may be applied toward the 90 credit hours required for the degree. All collegiate courses must be numbered 100 or above.
<i>Writing</i> (with a grade "C" or better)	6	WR121 and one additional course from WR122, 123, 227, 241, 242, 243, or BA214
<i>Math</i> (with a grade "C" or better)	4	MTH095 or above
<i>Speech</i>	3	SP111 or above
<i>Computer Studies</i>	3	CIS120, CS101 , or other computer science courses or CA201; DRF072; ELT121; GE102; VC121, 122, 221, 222
<i>*Physical Education or Health</i>	3	Any three-credit health course with an HE prefix; HPE295 (three credits); or three terms of PE180, PE185, or PE190 classes (one credit each).
<i>Arts and Letters/Humanities</i>	9	Choose courses from Art, American Sign Language, English, Film Arts, French, German, Humanities, Journalism, Japanese, Music Performance, Music, Philosophy, Religion, Speech, Spanish, Theater Arts, Writing.
<i>Social Science</i> (Courses must be chosen from at least two disciplines.)	12	Choose courses from Anthropology, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, Women's Studies.
<i>Science</i> (Courses must include a laboratory.)	8	Choose courses from Biology, Botany, Chemistry, Geology, General Science, Physics, Zoology.
<i>Electives:</i> 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.		

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 \$55.

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.

COLLEGE 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:

Linfield College (503) 399-5121

Management, Accounting, Business Infor-

mation 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 advisors 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 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 32-38. The Advising and Counseling Center also has advising sheets specific to these institutions, which include Eastern Oregon University, Oregon Institute of Technology, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Additionally, the center has advising sheets for programs offered at Bassist College, Concordia College, George Fox University, Lewis and Clark College, Linfield College, Marylhurst College, Oregon Health Sciences University, Pacific Northwest College of Art, Pacific University, University of Portland, 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	ART 101, 204, 205, 206; ENG 104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 250, 253, 254, 255, 261, 260, 262, 263; FA 255, 256, 257; HUM 251, 252, 253; MUS 105, 201, 202, 203; PHL 201, 202, 203; SP 115; TA 110
Natural Science (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ANTH 101; BI 101, 102, 103, 131, 132, 133, 200, 251; BOT 201, 202, 203; CH 104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; G 201, 202, 203; GEOG 105; GS 104, 105, 106, 107, 120, 141, 142, 143; OC 133; PH 111, 201, 202, 203, 207, 208, 209, 211, 212, 213; Z00 201, 202, 203
Social Science (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ANTH 102, 103, 207, 208, 209; EC 200, 201, 202, 203; GEOG 106, 107, 201, 202, 206; HST 110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS 201, 202, 203, 205; PSY 201, 202, 203, 237; SOC 204, 205, 206
Arts, Languages, and Logic (Choose courses outside of your major.)	Minimum 15 hours	
Artistic Creation (Sub-Area 1)	3 to 12 hours	ART 115, 116, 117, 131, 132, 133, 154, 155, 156, 221, 222, 223, 234, 235, 236, 238, 239, 244, 254, 261, 270, 271, 281, 284, 291, 292, 293; MUP 100, 174; MUS 197, 199; TA 121, 122, 123; WR 241, 242, 243
Languages and Logic (Sub-Area 2)	3 to 12 hours	CS 140B; FR 101, 102, 103, 150, 151, 201, 202, 203; GER 101, 102, 103; JPN 101, 102, 103; MTH 105, 211, 212, 213, 243; PHL 204; RUS 101, 102, 103, 201, 202, 203; SP 111, 112, 113, 114, 115, 118, 130; SPAN 101, 102, 103, 150, 151, 201, 202, 203

Notes:

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

Requirements	Credit hours	Chemeketa courses which satisfy requirements
<p>Communication</p> <p>Speech</p> <p>English Composition</p> <p>Nine additional credits from speech/writing courses having WR122 or SPE111 as a prerequisite; specified by the major department from the following: WR123, 214, 227, 231, 322, 323, 327 328, 410; SPE321.</p>	<p>3</p> <p>6</p> <p>9</p>	<p>SP111</p> <p>WR121 and 122</p> <p>WR123, 227; BA214; SP113; no equivalent courses for WR231, 322, 323, 327, 328</p>
<p>Business</p> <p>Nine credits selected from upper-division business and industrial management courses.</p>	9	No equivalent course.
<p>Humanities</p> <p>Nine credits selected by student or specified by a major department.</p>	9	<p>ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 198, 199, 204, 205, 206, 210, 221, 222, 223, 230, 231, 233, 234, 235, 236, 239, 244, 245, 246, 254, 256, 261, 262, 263, 264, 270, 271, 272, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255, 260, 261, 262, 263; FA255, 256, 257; FR202, 203; GER201, 202, 203; HUM251, 252, 253; JPN201, 202, 203; MUP100, 105, 174; MUS197, 199, 201, 202, 203; PHL201, 202, 203, 204, 205; R201, 202, 203; RUS201, 202, 203; SPAN201, 202, 203; TA110, 121, 122, 123, 285</p>
<p>Social Sciences</p> <p>Twelve credits selected by student or specified by a major department.</p>	12	<p>ANTH101, 102, 103, 207, 208, 209; CJ101, 110, 131, 200, 206, 220, 226; EC200, 201, 202, 203; GEOG105, 106, 107, 201, 202, 206; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS151, 201, 202, 203, 205; PSY100, 201, 202, 203, 206, 237, 239, 246; SOC204, 205, 206, 210, 221, 227, 235; SSC150, 151, 206; WS101, 102, 103</p>
<p>Technology</p> <p>Twelve credits selected by student or specified by a major department. At least one computer course is required.</p>	12	<p>ENGR211, 212, 213. Select computer course from CIS120, 121, 122; CS101, 105, 125A1, 125A2, 125A3, 125FX, 125P, 125Q, 131, 133A, 133C, 133E, 133F, 133U, 133VB, 140A, 140B, 140C, 140M, 140U, 171, 233U, 234C, 234L, 240, 244, 246, 260, 285</p>
<p>Science/Mathematics</p> <p>College Algebra</p> <p>Twelve additional credits selected by student or specified by a major department from biological sciences, mathematics, or physical science.</p>	<p>4</p> <p>12</p>	<p>MTH111</p> <p>BI101, 102, 103, 131, 132, 133, 200, 231, 232, 233, 234; BOT201, 202, 203; CH110, 104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; CS135B, 160; G142, 143, 144, 160A, 201, 202, 203; GS104, 105, 106, 107; MTH105, 112, 231, 243, 251, 252, 253, 254, 255, 256; OC133; PH 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203</p>
<p>Notes:</p> <ol style="list-style-type: none"> 1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree. 2. Courses in which “D” grades have been earned will transfer to OIT. Some sequence courses require a “C” grade or better in a prerequisite course in order to continue in the sequence. 3. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the lower division General Education Requirements at OIT. 4. This guide is subject to change without notice and should not be regarded as a contract between OIT and students attending Chemeketa Community College. 		

Requirements	Credit hours	Chemeketa courses which satisfy requirements
Writing I	3	WR121 (must be completed with a "C" grade or better before transferring)
Writing II	3	BA214; J216; WR122, 123, 227, 241, 242, 243 (pass with a "C" grade or better)
Writing III/Speech	3	Any courses listed to meet Writing II requirements not taken to meet the Writing II requirements or SP111, 112, 114
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, 241, 242, 243; G142, 143, 201, 202, 203; GS104, 105, 106, 107; PH201, 202, 203, 207, 208, 209, 211, 212, 213
Biological Science Including Lab	4	BI101, 102, 103, 200, 234; BOT201, 202, 203; ZOO201, 202, 203
One additional Physical Science or Biological Science course	4 to 5	Any courses listed for Physical or Biological Science above.
Western Culture	3	ART101, 204, 205, 206; ENG107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255; FA255; GEOG106; HST110, 111, 112, 201, 202, 203; PHL201, 202, 203; R201, 202
Cultural Diversity	3	GEOG202; HST157, 158, 159, 257, 258, 259; R201, 202; SSC206
Literature and the Arts	3	ART101, 204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 250, 253, 254, 255, 260; MUS201, 202, 203; TA110
Social Processes and Institutions	3	ANTH103, 207, 208, 209; EC201, 202, 203; H101; PS201, 202; PSY201, 202, 203; SOC204, 205, 206, 235
Difference, Power and Discrimination	3	HST201, 202, 203; SSC206
Global Issues	3	(Upper division course; must be taken at OSU.)
Science, Technology and Society	3	(Upper division course; must be taken at OSU.)

Notes:

1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
2. No more than two courses from the same department may be used to fulfill the Baccalaureate Core Curriculum requirements.
3. In general, only courses with letter prefixes and numbers above 100 are accepted at OSU. (Courses with OA and BT prefixes are not accepted.)
4. Students with vocational/technical credits (courses numbered 50-99) should contact the assistant registrar at OSU for assistance in determining transferability of these courses to an OSU major.
5. OSU will accept "D" grads. Some departments, schools or colleges may not accept "D's" in required courses.
6. Students with an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met OSU's lower division Baccalaureate Core Curriculum requirements.
7. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.

Requirements	Credit hours	Chemeketa courses which satisfy requirements
<p>Freshman Inquiry (Three five-credit courses) This sequence is required of all transfer students who have earned less than 30 quarter hours at the time of transfer. Electives or Major Requirements</p>	<p>15 30</p>	<p>Complete 45 credit hours from courses listed for Oregon Associate of Arts transfer degree. Courses should include writing, speech, and computer science. It is also important to learn appropriate information technology resources of the library.</p>
<p>Sophomore Level (Three four-credit courses selected from different interdisciplinary programs or general education clusters) Students who have earned 30 to 89 quarter hours at the time of transfer must complete sophomore inquiry at PSU. Electives or Major Requirements</p>	<p>12 33</p>	<p>Complete 45 credit hours from courses listed for the Oregon Associate of Arts transfer degree and courses required for major. Students planning to attend Chemeketa for two years should complete the Oregon Associate of Arts transfer degree.</p>
<p>Notes:</p> <ol style="list-style-type: none"> 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 transfer student; non-residents must have a 2.25 cumulative GPA. 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; CA121, 122, 123 (and some other business technology classes), as well as Drafting, Electronic Technology and Visual Communications courses. 6. Students who have earned an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met PSU's lower division general education requirements. 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 hours	Chemeketa courses which satisfy requirements
1. To be able to express ideas written in clear, logical, and grammatically correct English. To be fluent and confident in writing ability, including formal and technical writing styles, and in the preparation of a research paper.	9	WR121, 122, 123, 227 (Pass with a "C" grade or better)
2. To be able to communicate clearly and effectively in oral English.	3	SP111, 112, 113, 114, 130 (Pass with a "C" grade or better.)
3. To be able to appreciate and use mathematics as a language that expresses, defines, and answers questions about the world.	3 to 4	MTH105, 112, 212, 213, 241, 243, 251, 252, 253, 254, 255
4. To understand the role of the natural sciences in the world. <i>(Students must take courses in at least two departments. At least two courses must include a laboratory component.)</i>	12	Choose 6 to 12 credits from these laboratory courses: BI 101, 102, 103; BOT 201, 202, 203; CH 110, 121, 122, 123, 201, 202, 203, 221, 222, 223; G 142, 201, 202, 203; GS 104, 105, 106, 107; PH 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO 201, 202, 203. Choose 0-6 credits from the following non-laboratory courses: GEOG 105; GS 120.
5. To appreciate the creative processes, the aesthetic principles, and the historical traditions of one or more of the fine and performing arts. <i>(A maximum of three credits may be from studio courses.)</i>	9	Choose six to nine credits from these non-studio courses: ART 101, 204, 205, 206, 275; MUS 201, 202, 203. Choose up to three credits from the following studio courses: ART 115, 116, 117, 131, 132, 133, 154, 155, 156, 210, 221, 222, 223, 230, 231, 233, 234, 244, 245, 246, 254, 261, 262, 263, 264, 270, 271, 272, 273, 274, 281, 284, 285, 286, 291, 292, 293; MUP 100, 105, 174; MUS 197; TA 121, 122, 123, 285A, 285B, 285C; WR 241, 242, 243.
6. To recognize the way that perspectives on the human condition and human values are expressed in works of literature and philosophy and/or transmitted in the media.	9	Choose six to nine credits from the following literature and philosophy courses: ENG 104, 105, 106, 107, 108, 109, 201, 202, 203, 260; PHL 203 (No more than three credits from ENG 201, 202, 203 may be applied toward this goal.) Choose up to three credits from the following media courses: FA 255, 256, 257; J 224.
7. To be able to understand world history, geography, and culture as forces that shape human experience. <i>(A maximum of three credits may be from U.S. history, U.S. geography, or U.S. culture courses.)</i>	9	Choose six to nine credits from the following world history, geography, and culture courses: ANTH 103, 207, 208, 209; FR 101, 102, 103, 150, 151, 201, 202, 203; GEOG 107, 201, 202; GER 101, 102, 103, 150, 151, 201, 202, 203; HST 110, 111, 112; SPAN 101, 102, 103, 111, 112, 113, 150, 151, 201, 202, 203, 211, 212, 213. Choose 0-4 credits from the following U.S. history, U.S. geography, and U.S. culture courses: HST 201, 202, 203, 257, 258, 259.
8. To understand the function and influence of national or international political, economic, and/or legal systems in human affairs.	6	CJ 100; EC 201, 202, 203; PS 201, 202, 205; SOC 205
9. To understand how humans function in society.	3	CJ 101; HE 250; PSY 100, 101, 201, 202, 203, 206; SOC 204, 227
<p>Notes:</p> <ol style="list-style-type: none"> 1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree. 2. Courses in the major, including course work from supportive areas that is required of the major, and courses toward a minor may also be used to meet general education requirements. 3. In satisfying the total set of requirements of Goals 2 through 9, a student may use at most nine credits from one department. 4. A single course may not be used to satisfy more than one general education goal. 5. Only courses with a letter prefix and a number of 100 or higher are considered transferable. 6. A maximum of 24 credit hours of vocational/technical courses are accepted as free electives. 7. Courses in which "D" grades have been earned are accepted by Southern. 8. Students who have earned an Oregon Associate of Arts (A.A.) transfer degree from Chemeketa Community College will be considered as having met the Core Curriculum requirements at Southern. 9. This guide is subject to change without notice and should not be regarded as a contract between Southern and students attending Chemeketa Community College. 10. Southern will not grant credit for the following courses: RD115 and RD116. 		

Requirements	Units	Chemeketa courses which satisfy requirements
Written English	6 credit hours	WR121 (must be completed before transferring) and WR122 or WR123 (with grade "C" or better)
Arts and Letters* 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: ART 204, 205, 206; ENG 104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 250, 253, 254, 255, 260, 262; FA 255, 256, 257; FR 201, 202, 203; MUS 201, 202, 203; PHL 201, 202, 203, 204, SPAN 201, 202, 203; TA 110
Social Science* 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: ANTH 102, 103, 207, 208, 209; BA 101; EC 201, 202, 203; GEOG 106, 107, 201, 202, 206; HST 110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; J 224; PS 201, 202, 203, 205; PSY 202, 203, 206, 237, 239, 246; R 201, 202, 203; SOC 204, 205, 206, 210, 221, 227; SSC 150, 151, 206; WS 101, 102, 103
Science* These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject. (MTH105 or MTH111 must be completed before transferring.)	16 credit hours	ANTH 101; BI 101, 102, 103, 131, 132, 133, 200, 231, 232, 233, 234; BOT 201, 202, 203; CH 104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; CIS 120, 121, 122; CS 133F, 161, 162, 244, 246; G 142, 143, 144, 201, 202, 203; GEOG 105; GS 104, 105, 106, 120, 141, 142, 143; MTH 105, 211, 212, 213, 231, 232, 241, 243, 251, 252, 253; OC 133; PH 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY 201; ZOO 201, 202, 203
Multicultural Studies You must complete two courses chosen from two of the following three areas: Area 1 -American Culture Area 2 -Identity, Pluralism, and Tolerance Area 3 -International Cultures (Some courses may be chosen to meet this requirement and one of the requirements listed above.)	2 courses	HST 257, 258, 259; MUS 150; SSC 150 ENG 260; SP 115; SSC 206; WS 101, 102, 103 ANTH 103, 207, 208, 209; GEOG 202; HST 110, 111, 112, 157, 158, 159; R 201, 202
Notes: <ol style="list-style-type: none"> A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree. Courses with letter prefixes and numbers above 100 are accepted at the University of Oregon (with the exception of the following: CPL120; ENL110, 111, 112; WR115). A maximum of 12 credit hours of vocational/technical courses are accepted. B.A. degree requires equivalent of two years of college foreign language. 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. All courses must be completed with a "C" grade or better. Courses in which "D" grades have been earned will transfer to UO, but will not satisfy degree requirements in writing, mathematics, or foreign language and may not be acceptable for major requirements. Students not meeting freshman admissions criteria must complete WR121 and MTH105 or 111 before transferring. 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. This guide is subject to change without notice and should not be regarded as a contract between UO and students attending Chemeketa Community College. <p>* 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.</p>		

Requirements	Credit hours	Chemeketa courses which satisfy requirements
English Composition	3	WR121 or 122 or 123
Speech	3	SP111, 112, 113, 114, 126 or 130. SP111 preferred.
Physical Education	4	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 course with prefix of ART, MUP*, MUS, TA, and numbered 100 or above. In addition, dance courses at WOU meet requirement. Nine hours in combination of three different areas preferred. *A maximum of three hours of music performance courses is allowed.
Humanities (Literature, Philosophy, and Religion)	12	A sequence of at least nine hours in 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 BI, BOT, CH, G, GS, PH, ZOO. (Elementary education majors should take BI101, GS104, and GS106.)
Social Science	12	A sequence of at least nine hours in the same discipline is required. All courses numbered 100 or higher with a prefix of ANTH, EC, GEOG, HST, PS, SOC. 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 earned at a community college may be applied toward a baccalaureate degree.
2. In general, only courses with letter prefixes and numbers above 100 are accepted at Western.
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 Western.
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 Western.
6. Courses numbered 199 and 299 and Cooperative Work Experience (CWE) credits transfer to Western 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 Western.
8. For the Bachelor of Science (B.S.) degree: In addition to completing the LACC requirements, students are required to earn 12 credits in mathematics, computer science, and statistics, including a minimum of one mathematics course and one computer course. (MTH105 and CS101 do not meet these requirements.)
9. For the Bachelor of Arts (B.A.) degree: In addition to completing the LACC requirements, students are required to take two years of a college-level foreign language. The language must be French, German, Japanese, or Spanish.
10. Courses required in the major may not be used to fulfill the LACC requirements.
11. This guide is subject to change without notice and should not be regarded as a contract between Western 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 about any of the programs listed in this guide, call the Advising and Counseling Center at (503) 399-5120. For short-term or customized training, call the Training and Economic Development Center at (503) 399-5181.

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

Program Name	C	A	T	O	Program Name	C	A	T	O
Accounting		✓			Drafting Technology—CAD				
Adult Basic Education				✓	• CAD		✓		
Adult High School Diploma				✓	• CAD/CAM		✓		
Agriculture			✓		• Mechanical Design		✓		
Anthropology			✓		Early Childhood Education				
Art			✓		• Child Development Certificate	✓			
Automotive Technology		✓			• One-Year Program	✓			
• Automotive Body Repair	✓				• Two-Year Program		✓		
Biology			✓		Economics			✓	
Botany			✓		Education				
Building Construction Training	✓				• Education Certificate	✓			
Building Inspection Technology	✓				• Elementary			✓	
Business Administration			✓		• Secondary			✓	
Business Technology					Electronics Technologies				
• Administrative Assistant		✓			• Advanced Technology Endorsement	✓			
• Business Assistant		✓			• Computer Electronics		✓		
• Clerical Basics	✓				• Electronic Engineering Technician		✓		
• Information Processing		✓			• Microelectronics/Industrial Electronics		✓		
• Legal		✓			Emergency Medical Technology—Paramedic		✓		
• Medical		✓			English as a Second Language				✓
• Office Accounting		✓			Engineering			✓	
• One-Year Program	✓				English			✓	
Chemistry			✓		Entomology			✓	
Chiropractic			✓		Farm Business Management				✓
Civil-Structural Engineering Technology			✓		Financial Services	✓	✓		
• Survey Technology	✓				Fire Protection Technology				
Computer Programming					• Fire Prevention		✓		
• Computer Programming		✓			• Fire Suppression		✓		
• Microcomputer Support Specialist		✓			Foreign Languages			✓	
Computer Science			✓		Forest Resources Technology		✓		
Criminal Justice		✓			Forestry			✓	
• Juvenile Corrections Certificate	✓				General Educational Development				✓
Dental Assisting	✓				General Science			✓	
Dental Hygiene			✓		General Studies			✓	

Program Name	C	A	T	O	Program Name	C	A	T	O
Geography			✓		Manufacturing Engineering Technologies			✓	
Geology			✓		Mathematics			✓	
Health, Health Education			✓		Medical Office Assisting	✓			
Health Services Management					Nursing				
• <i>Claims Analyst/Medical Reception and Billing</i>	✓				• <i>Practical Nursing</i>	✓			
• <i>Health Information Technology</i>	✓				• <i>Associate Degree Nursing</i>		✓		
• <i>Health Services Management</i>		✓			Occupational Skills Training		✓		
• <i>Medical Transcription</i>		✓			Philosophy			✓	
History			✓		Physical Science			✓	
Home Economics			✓		Pre-Law			✓	
Hospitality and Tourism Management		✓			Pre-Professional Study (medicine, dentistry, veterinary medicine)			✓	
• <i>Travel Agency Operations</i>	✓				Professional-Technical Teacher Preparation	✓	✓		
Hotel, Restaurant and Resort Management			✓		Psychology			✓	
Human Services					Real Estate		✓		
• <i>Addiction Studies</i>		✓			Small Business Management				✓
• <i>Addiction Counselor Certification Preparation</i>	✓				Sociology			✓	
• <i>Social Services</i>		✓			Speech			✓	
Industrial Technology and Apprenticeship		✓			Visual Communications		✓		
Integrated Circuit Mask Design		✓			Welding				
Journalism			✓		• <i>Welding Fabrication</i>		✓		
Management		✓			• <i>Welding Technology</i>	✓			
Manufacturing Engineering Technologies					Zoology			✓	
• <i>Manufacturing Operations</i>	✓								
• <i>Manufacturing Technologies</i>		✓							

PROFESSIONAL-TECHNICAL AND COLLEGE TRANSFER CURRICULA

ACCOUNTING

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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
BT061A	Electronic Calculators A	1
BT085	Business English II	3
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

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

The Accounting program provides you with an opportunity to participate in a number of accounting-related extracurricular activi-

ties. 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 listed below are books, \$1,517; class fees, \$36; 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 I*	4
BA214	Business Communications	3
	or	
WR123	English Composition-Research Writing	3
CS125E	Worksheets-Excel	4
	or	
CS125Q	Worksheets-Quattro	4
	or	
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	Income Tax Accounting I	4
EC200	Introduction To Economics (or higher)	3
WR227	Technical Writing	3
Term 4		
BA056	Intermediate Financial Accounting I	4
BA226	Business Law I	3
BA240	Governmental/Nonprofit Accounting I***	3
	or	
BA257	Income Tax Accounting II	4
BA272	Information Technology in Business	4
FE205C	Interviewing for Success	1
Term 5		
BA057	Intermediate Financial Accounting II	4
BA206	Business Management Principles	3
BA222	Financial Management	3
BA280	Cooperative Work Experience	3
	or	
	Business elective ****	3
	Psychology elective	3
	or	
	Sociology elective	3
Term 6		
BA058	Intermediate Financial Accounting III	4
CA092	Payroll Procedures	3
SP111	Fundamentals of Speech	3

Business elective****	3
or	
BA280C Cooperative Work Experience	3
Humanities/fine arts elective	3

*You must have completed the requirements for, or be concurrently enrolled in MTH062 or MTH070.

**Choose from CS135SS, CA201P, or a programming class.

***If you are interested in working for a government agency, you are strongly encouraged to consider BA240.

****Business elective: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE, except BT084, BT085, BA051, BA052, and BA053

A

GRICULTURE

(college transfer)

Oregon State University offers Bachelor of Science degrees in Agricultural Business Management, Agricultural and Resource Economics, 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 some requirements at OSU. 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 26.

	Term		
First Year	1	2	3
WR121 English Composition-Exposition and Writing or Speech courses* (WR227 Technical Writing and/or SP112 required for some options)	3	3	3
Mathematics (per placement test through MTH111 College Algebra for most majors; MTH243 Probability and Statistics, MTH241 Elementary Calculus, or MTH251, MTH252 Calculus required in several majors; MTH105 for General Agriculture and Ag Education. Check OSU catalog for specific requirements)	(4)	5	(4)
BI101, 102, 103 General Biology or ZOO201, 202, 203 Zoology or CH121, 122, 123 General Chemistry (depending upon major and option)	4-5	4-5	4-5
HPE295 Health and Fitness for Life	3		
CS101 Introduction to Microcomputer Applications (or other computer class needed)		3	
Arts and Letters or Social Science* (EC201, 202 Introduction to Microeconomics and Macroeconomics required in some options)	3	3	3
Electives*	3		

	4	5	6
BA211, 212 Financial Accounting (required for some majors)	(4)	4	
BI101, 102, 103 or CH121, 122, 123 (both sequences recommended but may not be required; some options require ZOO201, 202 Zoology and BOT201, 202 Botany or G201, 202 Geology or PH201, 202 General Physics)	4	4	4
Arts and Letters or Social Science elective*	6	6	6
Electives* (BA226 Business Law or FN225 Nutrition required in some majors; check OSU for additional courses required in specific options)	6	3	6

*To meet OSU general education requirements.

A

NTHROPOLOGY

(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 University and Southern Oregon University both 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 26.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition-Exposition* HPE295 Health and Fitness for Life* or elective	3	3	(3) 3
ANTH101, 102, 103 Human Evolution, Archeology and Introduction to Cultural Anthropology (OSU requires ANTH103 only)	3	3	3
Arts and Letters/Humanities courses*	3	3	0-3
Electives or Foreign Language* (two years of college-level Foreign Language required at PSU and recommended at UO and may be required for graduate work)	3-4	3-4	3-4
Math or Science electives*(EOU requires MTH211 Foundations of Elementary Math or a statistical class at EOU; SOU requires math through MTH243 Probability and Statistics; UO recommends one year of Biology)	4	4	4

Second Year	4	5	6
Social Science electives* (SOC204, 205, 206 General Sociology for EOU and SOC204, 205 for SOU)	3	3	3
Arts and Letters/Humanities electives*	3	3	3
Second-year Foreign Language (for PSU and for graduate studies) or electives*	3-4	3-4	3-4
Math or Science electives**	4	4	4
Electives* (CS101 Introduction to Microcomputer Applications for SOU; UO recommends Computer Science courses)	3	3	3

*To meet four-year college general education requirements.

**MTH243 Probability and Statistics 1 and CS101 Introduction to Microcomputer Applications recommended for students planning to do graduate studies.

ART

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Art are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU has majors in Art History, Fine Arts, Graphic Design, and Photography, and UO has a major in Art History.

A five-year program in Art leading to the Bachelor of Fine Arts (B.F.A.) degree is offered at OSU, SOU, 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 26.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition*	3	3	(3)
ART115, 116, 117 Basic Design (not required for Art History majors at UO)	3	3	3
ART131 Introduction to Drawing, ART234 Figure Drawing 1 for OSU, SOU, and WOU (PSU requires ART131, 132, 133)	3	3	(3)
Science or Mathematics courses*	4	4	4
Social Science courses* (recommend HST110,111, 112 World History for OSU and UO)			3-6
Arts and Letters/Humanities* (non-art: UO requires two years of French, German, Italian, Chinese or Japanese for Art History majors)	3-4	3-4	3-4
Second Year	4	5	6
ART204, 205, 206 Art History	3	3	3

Social Science courses*	3	3	3
Arts and Letters/Humanities electives* (Literature, Philosophy, or a second-year Foreign Language for UO Art History majors)	3-4	3-4	3-4
Science or Mathematics* (MTH111 College Algebra or 211 Foundations of Elementary Math for EOU)	4	(4) 3	(4)
HPE295 Health and Fitness for Life* or elective Studio Art courses (EOU choose from ART154 Pottery I, ART221 Graphic Design, ART261 General Photography, ART271 Introduction to Printmaking, ART281 Painting, ART291 Beginning Sculpture; OSU ART291 take Sculpture, ART221 Graphic Design and ART281 Painting and ART262 Technical Photography and ART264 Digital Photography for some options; PSU choose 9 credits from study concentration and 9 additional Art credits outside of concentration; SOU choose 18 credits from 2 groups listed in SOU catalog; UO Art History majors take 6 hours of studio courses in Drawing, Painting, Sculpture, or Design; WOU 9 hours from ART155 Pottery II, ART274 Printmaking, ART281, ART291)	3	3	3
Electives (CS course required at EOU and SOU; ART221, 222 Graphic Design 1 and 2 recommended for EOU)			0-3

*To meet four-year college general education requirements.

AUTOMOTIVE TECHNOLOGY

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. The one-year program offers training for auto body repair technicians including courses in auto heating and air conditioning, welding, general education courses, and cooperative work experience.

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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

MTH020	Basic Mathematics3
SKD051	Studying for College3
WR040	Writing Skills3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-6519. Failure to be assessed may delay your entry into program classes.

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.

Automotive Body Repair

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$149; class fees, \$22; equipment and supplies, \$500. 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 45 credit hours:

Term 1

AUM056	Automotive Shop Safety	1
AUM076	Automotive Electrical System II	4
AUM280G	Cooperative Work Experience	7
COM051	Communication Skills I	3

Term 2

AUM058	Auto Steering and Suspension	5
AUM086	Automotive Heating and Air Conditioning	5
AUM280C	Cooperative Work Experience	3
MTH052	Introduction to Algebra and Geometry	3

Term 3

AUM078	Automotive Workplace Procedures and Ethics	2
AUM280G	Cooperative Work Experience	7
PSY100	Introduction to Psychology	3
WLD097	Welding	2

Associate of Applied Science degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$542; class fees, \$226; 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 100 required credit hours:

Course	Title	Credit Hours
Term 1		
AUM051	Basic Automotive Engines	5
AUM056	Automotive Shop Safety	1
AUM057	Automotive Brake Systems	5
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
PH060	Applied Physical Science (or higher)	3
Term 2		
AUM052	Automotive Machine Shop	4
AUM058	Automotive Steering and Suspension	5
COM052	Communication Skills II	3
	or	
WR122	English Composition-Logic and Style	3
MTH052	Introduction to Algebra and Geometry (or higher)	3
	Computer science elective (CS101 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	2
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	5
AUM076	Automotive Electrical Systems II	4
Term 5		
AUM067	Advanced Carburetion 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
	or	
AUM280	Cooperative Work Experience	3
AUM081	Tune-up and Driveability	6
PSY100	Introduction to Psychology	3
WLD097	Welding	2

BIOLOGY, BOTANY, GENERAL SCIENCE, ENTOMOLOGY, ZOOLOGY

(college transfer)

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

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 26.

	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
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry is also accepted for OSU Botany and Entomology majors and for UO)	5	5	5
Mathematics sequence (consult an advisor or four-			

year college catalog to determine appropriate math; most require some calculus. MTH111 College Algebra and MTH112 Trigonometry for EOU. EOU requires 16 hours of math or a combination of math and computer science.

MTH111, 112, and 243 Probability and Statistics for SOU; 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; WOU requires MTH251 and MTH252 or MTH243 and CS161)

Arts and Letters/Humanities courses* (SP111 Fundamentals of Speech for SOU)	4-5	4-5	4
	3	3	3

Second Year	4	5	6
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PH201, 202, 203 General Physics or PH211, 212, 213 General Physics for Scientists and Engineers (not required at EOU, WOU 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; **EOU choose between PH211 and MTH251 Differential Calculus; SOU also accepts G201, 201, 203 Geology)	4	4	4
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CH241, 242, 243 Organic Chemistry* (may replace 300-level Organic Chemistry, with acceptable score on ACS national exam, at Oregon universities; not required at WOU or for General Science at OSU and UO; CH243 not required at EOU and PSU. Zoology majors take ZOO201, 202, 203); UO General Science majors may take G201, 202, 203 Geology)	5	5	5
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Social Science courses* (ANTH101 Human Evolution and GEOG105 Introduction to Geography for General Science at UO)	3	3	3
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Arts and Letters/Humanities electives*	3	3	3
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Social Science electives or other electives* (EOU requires CS101 Introduction to Microcomputers and CS125SS Lotus I-Worksheets or computer studies courses at or above the 200 level; OSU General Science requires CIS120, 121 Computer Information Science I and II; UO General Science majors, CS101 and CS133F Fortran)	3	3	3
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*To meet four-year college general education requirements.

**Botany majors should take ZOO201, 202 General Zoology and BOT201, 202 General Botany. Zoology majors should take ZOO201, 202 and BOT201 or 202. PSU General Science degree allows other science choices.

UO General Science needs three-course sequence from BI101, 102, 103; CH121, 122, 123 or 221, 222, 223; G201, 202, 203; PH201, 202, 203 or 211, 212, 213.

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

BUILDING CONSTRUCTION TRAINING

Chemeketa offers Building Construction Training for those whose interests lie in working with their hands and in being outdoors. This three-term (33-week) program can prepare you for a career in the construction trades. Instruction will be given in basic safety, plan reading and site layout, estimating, use of carpentry tools, and framing and finishing.

Estimated costs for students who complete the three-term program are tuition, \$1,680 and fees, \$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 48 required credit hours:

Course	Title	Credit Hours
Term 1		
BC051	Construction Print Reading	.5
BC053	Construction Tools and Materials Application	.5
BC055	Concrete Forming	.5
MTH052	Basic Mathematics (or higher)	.3
Term 2		
BC061	Basic Construction Framing	.8
BC063	Construction Estimating	.3
COM051	Communication Skills I	.3
Term 3		
BC071	Advanced Construction Framing	.8
BC073	Basic Interior Finish	.4
PSY104	Psychology in the Workplace	.4

BUILDING INSPECTION TECHNOLOGY

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

There is a need for certified building inspectors working for public agencies. If you have some experience in the field, after you graduate you may qualify as a construction manager or clerk-of-the-works or perform similar functions in other jobs.

The curriculum covers technical and general education courses. Classes on various codes, plans inspection techniques, and construction materials are complemented by courses in mathematics, communication skills, and public relations. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.

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

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

This program has special admission requirements and enrollment limits. For additional information, contact the Student Records (Admissions) Office at (503) 399-5006.

Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$907; class fees, \$66; 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
Term 1		
BLD051	Building Codes I	.3
BLD063	Structural Inspection-Concrete	.3
BLD071	Plumbing Codes I	.3
BLD081	Mechanical Codes I	.3
BLD093A	Building Inspection-Lab	.1
COM051	Communication Skills I	.3
	or	
WR121	English Composition-Exposition (or higher)	.3
MTH052	Introduction to Algebra and Geometry (or higher)	.3
Term 2		
BLD052	Building Codes II	.3
BLD061	Structural Inspection-Wood	.3
BLD072	Plumbing Codes II	.3
BLD082	Mechanical Codes II	.3
BLD093B	Building Inspection-Lab	.1
COM052	Communication Skills II	.3
	or	
WR122	English Composition-Logic and Style	.3
MTH053	Introduction to Trigonometry with Geometry (or higher)	.3
Term 3		
BLD053	Building Codes III	.3
BLD054	Dwelling Construction under the UBC	.3
BLD055	Building Department Administration	.3
BLD062	Structural Inspection-Masonry	.3
BLD093C	Building Inspection-Lab	.1
COM053	Technical Report Writing	.3
	or	
WR227	Technical Writing	.3
Term 4		
BLD280	Cooperative Work Experience*	.12

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

Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,477; class fees, \$153; equipment and supplies, \$814. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the 109 required credit hours.

Course	Title	Credit Hours
Term 1		
BLD050	Introduction to Building Inspection	.3
BLD051	Building Codes I	.3
BLD081	Mechanical Codes I	.3
BLD093A	Building Inspection-Lab	.1
COM051	Communication Skills I	.3
	or	
WR121	English Composition-Exposition (or higher)	.3
CS101	Introduction to Microcomputer Applications	.3
MTH052	Introduction to Algebra and Geometry (or higher)	.3
Term 2		
BLD052	Building Codes II	.3
BLD059	Material of Construction	.2
BLD082	Mechanical Codes II	.3

BLD061	Structural Inspection-Wood	.3
BLD093B	Building Inspection-Lab	.1
COM052	Communication Skills II	.3
	or	
WR122	English Composition-Logic and Style	.3
DRF102	Print Reading	.2
MTH053	Introduction to Trigonometry with Geometry (or higher)	.3
Term 3		
BLD053	Building Codes III	.3
BLD054	Dwelling Construction Under the UBC	.3
BLD055	Building Department Administration	.3
BLD062	Structural Inspection-Masonry	.3
BLD093C	Building Inspection-Lab	.1
COM053	Technical Report Writing	.3
	or	
WR227	Technical Writing	.3
DRF103	Advanced Print Reading	.2
FE205A	Job Search Preparation	.1
BLD280	Cooperative Work Experience	.12
Term 4		
BLD063	Structural Inspection-Concrete	.3
BLD071	Plumbing Codes I	.3
BLD093D	Building Inspection-Lab	.1
BLD069	Engineering for the Building Inspector	.3
BLD068	Foundations, Excavation and Grading	.3
Term 5		
ART261	General Photography	.3
	or	
	Social science elective	.3
	or	
	Humanities/fine arts elective	.3
BLD064	Structural Inspection Steel	.3
BLD066	Structural Plan Review	.3
BLD072	Plumbing Codes II	.3
BLD093E	Building Inspection-Lab	.1
Term 6		
BLD060	Fire Protection for Buildings	.3
BLD067	Nonstructural Plan Review	.3
BLD091	One and Two Family Electrical Code	.3
	or	
FRP072	Fire Codes and Ordinances	.3
BLD092	One and Two Family Dwelling Code (optional)	.3
BLD093F	Building Inspection-Lab	.1
PSY101	Psychology of Human Relations (or higher)	.3

BUSINESS ADMINISTRATION

(college transfer)

(Includes Accounting, Finance, Marketing, and Management)

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

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

ing and Counseling Center or a Chemeketa advisor in your program.

Many colleges have specific requirements for admission to their Business Administration programs. These include specified GPA, completion of specific courses, and deadlines for admission. As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Advising and Counseling Center or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26

	Term		
First Year	1	2	3
WR121 English Composition-Exposition	3		
WR122 and 123 English Composition for SOU; WR122 or 123 English Composition for UO; WR122 for WOU; WR122 or 227 Technical Writing or BA214 Business Communication for OSU for OSU*		(3)	3
Mathematics per placement test (MTH111 College Algebra, MTH243 Probability and Statistics 1, MTH241 Elementary Calculus for OSU and WOU; MTH241 for EOU; MTH111, 241, 242, and 243 for PSU and UO; MTH111 and 243 for SOU)	5	4	(4)
CS101 Introduction to Microcomputer Applications (also recommend CS178I Internet and CS125A1,2,3 Micro Database Software-Access for OSU and CS125SS Lotus I-Worksheets for EOU)	4	(4)	3
Arts and Letters/Humanities courses* (PHL203 Ethics required for PSU accounting majors)	3	3	3
Social Science courses* (PSU Accounting majors need one course from ANTH, PSY or SOC)	3	3	3
HPE295 Health and Fitness for Life* or elective Electives* (recommend CS178I for PSU)		(3)	(3)
Second Year	4	5	6
BA211, 212 Financial Accounting	4	4	
BA213 Managerial Accounting			4
EC201, 202, 203 Economics (EC203 not required at OSU, SOU, or UO but is recommended)	3	3	3
SP111 Fundamentals of Speech for WOU; SP112 Fundamentals of Persuasion for OSU and PSU; choose one from SP111, 112, 113 Fundamentals of Small Group Communication or SP114 Inter- personal Communication for SOU; SP114 for EOU	3		
BA226 Business Law for EOU, OSU, and WOU; BA101 Business Environment for UO		3-4	
Elective courses to meet general education requirements:		(3)	(3)
Arts and Letters/Humanities electives*	3		3
Science courses*	4	4	4
Social Science courses* (Accounting majors at PSU need PS201, 202 American Government)	(3)	(3)	(3)

*To meet four-year college general education requirements.

B BUSINESS TECHNOLOGY

Chemeketa offers short-term, one-year, and two-year programs in business technology for those who wish to pursue a career as an office support specialist.

The short-term Clerical Basics program is an open-entry, open-exit curriculum for people who want to develop or refresh their clerical skills in order to qualify for 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 specialization. After completing the first term, you may pursue a course of study in word processing, bookkeeping, office support, or general clerical skills. You may earn a Certificate of Completion by successfully completing the credit hours required.

The two-year program is designed for people who want to become secretaries, administrative assistants, or other administrative support specialists. The program has six options: administrative assistant, business assistant, information processing, legal, medical, and office accounting. You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each option.

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 BT280 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, proofreading, MS Works, MS Word, and WordPerfect. 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 listed below are books, \$636; class fees, \$59; equipment and supplies, \$42. 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
CS101	Introduction to Microcomputer Applications	.3
BT061A	Electronic Calculators A	.1
BT084	Business English 1	.3
BT085	Business English 2	.3
BT090	Bookkeeping	.3
BT099A	Proofreading/Editing A	.1
BT116	Office Procedures	.3
BT128A	Introduction to Records Management A	.1
BT128B	Introduction to Records Management B	.1

CA121A	Keyboarding A	1
CA121B	Keyboarding B	1
CA122A	Keyboard Skillbuilding A	1
CA122B	Keyboard Skillbuilding B	1
CA123A	Formatting A	1
CA201X	Word Processing Procedures 1	3
	or	
CA201D	Word Processing Procedures 1	3
	Business elective*	3

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

One-Year Program

The one-year program has four areas of emphasis: bookkeeping, general clerical, office support, 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 Business Technology. The term-by-term schedule that follows shows three areas of specialization. Based on your personal interests and goals, we recommend that you choose one of the specialty areas to follow for your program of study. Your certificate will not show an area of specialization, and you may earn only one certificate in the one-year program area even though you may choose to complete courses in all three specialty areas.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
BT085	Business English 2	3
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the bookkeeping specialization required courses listed below are books, \$793; class fees, \$100; equipment and supplies, \$50. For students who complete the general clerical specialization required courses: books, \$857; class fees, \$90; equipment and supplies, \$50. For students who complete the office support required courses: books, \$777; class fees, \$50; equipment and supplies, \$40. For students who complete the word processing specialization required courses: books, \$829; class fees, \$100; 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 in the one-year program by successfully completing 45 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.)		
BT061	Electronic Calculators	2
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA122	Keyboard Skillbuilding (for General Clerical, Office Support, or Word Processing)	3
	or	
BA051	Accounting Procedures I (for Bookkeeping)	4
BT128	Introduction to Records Management	3

Term 2 (Bookkeeping)

BA052	Accounting Procedures II	4
MTH062	Business Applications Using Mathematics (or higher)	4
CA118B	Current Office Software-Worksheets	1
BT120	Professional Communication Skills	4
CA122	Keyboard Skillbuilding	3

Term 3 (Bookkeeping)

BA214	Business Communications	3
CA091	Computerized Bookkeeping	3
CA092	Payroll Procedures	3
CA201X	Word Processing Procedures 1	3
CA210	Office Micro-Macintosh	3

Term 2 (General Clerical)

BT086	Personal and Professional Development	3
CA119	Exploring Office Desktop Publishing	3
BT120	Professional Communication Skills	4
CA201X	Word Processing Procedures 1	3
	Business elective	3

Term 3 (General Clerical)

BA214	Business Communications	3
CA202X	Word Processing Procedures 2	3
CA203	Advanced Formatting	1
CA210	Office Micro-Macintosh	3
	Business electives*	
	(BT280C Cooperative Work Experience recommended)	6
	or	
	Business electives*	6

Term 2 (Office Support)

BA202	Personal Effectiveness	3
	or	
BT086	Personal and Professional Development	3
BT120	Professional Communication Skills	4
BA206	Business Management Principles	3
CA119	Exploring Office Desktop Publishing	3
CA201D	Word Processing Procedures 1	3

Term 3 (Office Support)

BA214	Business Communications	3
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA118D	Current Office Software-Internet	1
CA118E	Current Office Software-Electronic Messaging Systems	1
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
	Business electives (BT280D Cooperative Work Experience recommended)	4

Term 2 (Word Processing)

BT086	Personal and Professional Development	3
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA119	Exploring Office Desktop Publishing	3
BT120	Professional Communication Skills	4
CA201X	Word Processing Procedures 1	3

Term 3 (Word Processing)

BA214	Business Communications	3
CA202X	Word Processing Procedures 2	3
CA203	Advanced Formatting	1
CA210	Office Micro-Macintosh	3

CA225ABC	Machine Transcription IA, IB, IC	1 ea.
	Business elective*	
	(BT280, CA204X or CA205 recommended)	3

*Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE, except BT084, BT085, CA121, and CS101.

Two-Year Program

Chemeketa's Business Technology two-year program is designed for people who want to become secretaries, administrative assistants, or other administrative support specialists.

If you are employed as an office worker and you want to increase your skills in order to advance in your career, you may benefit from this training. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

The program has six options: administrative assistant, business assistant, information processing, legal, medical, or office accounting.

You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each area. 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.

Alert!

Program requirements have changed. See the "Alert" under the "One-Year Program" heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,418; class fees, \$100; equipment and supplies, \$65. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 93 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

Course	Title	Credit Hours
Term 1		
BT061	Electronic Calculators	2
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA122	Keyboard Skillbuilding	3
CA201X	Word Processing Procedures 1	3
Term 2		
MTH062	Business Applications Using Mathematics (or higher)	4

CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA119	Exploring Office Desktop Publishing	3
BT120	Professional Communication Skills	4
CA202X	Word Processing Procedures 2	3

Term 3

BA214	Business Communications	3
BT086	Personal and Professional Development	3
CA203	Advanced Formatting	1
CA204X	Advanced Word Processing	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
	Social science elective	3

Term 4

BA051	Accounting Procedures I	4
	or	
BA211	Financial Accounting I*	4
BT128	Introduction to Records Management	3
CA205	Desktop Publishing I-PageMaker	3
CA210	Office Micro-Macintosh	3
CA225ABC	Machine Transcription IA, IB, IC	1 ea.

Term 5

BA202	Personal Effectiveness	3
BA251	Office Management	3
	Business elective**	3
CA230	Executive Office Simulation	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3

Term 6

CA232	Integrating Office Software Applications	3
SP111	Fundamentals of Speech	3
	or	
SP114	Interpersonal Communication	3
	or	
SP130	Business and Professional Speaking	3
WR227	Technical Writing	3
	Business elective**	3
	(BT280 Cooperative Work Experience recommended)	6

*If you select BA211 or BA212, you may not use BA051 or BA052 as a business elective.

**Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE, except BT084, BT085, CA121, and CS101.

Business Assistant Option

The Business Assistant option prepares you for a career in a variety of business environments where you are able to work independently, exercising responsible judgment. This program stresses the principles of persuasion and sales, business management, and interpersonal relations. You will develop computer skills, including training in the use of different operating systems and software applications, and the Internet and World Wide Web.

Alert!

Program requirements have changed. See the "Alert" under the "One-Year Program" heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,495; class fees, \$100; equipment and supplies, \$65. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 92 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

Course	Title	Credit Hours
Term 1		
BT061	Electronic Calculators	2
BT099	Proofreading/Editing	3

BT116	Office Procedures	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA122	Keyboard Skillbuilding	3
CA201D	Word Processing Procedures 1	3
or		
CA201X	Word Processing Procedures 1	3
Term 2		
BA206	Business Management Principles	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
CA118B	Current Office Software-Worksheets	1
MTH062	Business Applications Using Mathematics (or higher)	4
Term 3		
BA202	Personal Effectiveness	3
BA214	Business Communications	3
CA118C	Current Office Software-Database	1
CA118D	Current Office Software-Internet	1
CA118E	Current Office Software-Electronic Messaging Systems	1
CA119	Exploring Office Desktop Publishing	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
Term 4		
BA203	Interpersonal Relations in Business	3
CA205	Desktop Publishing I-PageMaker	3
CS125E	Worksheets-Excel	4
or		
CS125SS	Lotus I-Worksheets	4
CS105	Introduction to MS Windows	3
or		
CS125A1-A3	Micro Database Software-Access	3
	Social science elective	3
Term 5		
BA051	Accounting Procedures I	4
or		
BA211	Financial Accounting I	4
BA251	Office Management	3
CS1781	Introduction to the Internet/World Wide Web	3
	Business elective*	3
	Humanities/fine arts elective	3
or		
	Science/applied science elective	3
Term 6		
BA238	Sales and Persuasion	3
BT280C	Cooperative Work Experience	3
CA232	Integrating Office Software Applications	3
SP111	Fundamentals of Speech	3
or		
SP114	Interpersonal Communication	3
or		
SP130	Business and Professional Speaking	3
	Business elective*	3

*Suggested Business Electives: WR227 Technical Writing, CA210 Office Micro-Macintosh, CA206 Desktop Publishing II-PageMaker, CA202D Word Processing Procedures 2, BA052 Accounting Procedures II or BA212 Financial Accounting II, BA204 Teamwork Dynamics, CA204D Advanced Word Processing, CS125A1.A2.A3 Micro Database Software-Access, BA277 Business Ethics, CA091 Computerized Bookkeeping, BA223 Principles of Marketing, BT086 Personal and Professional Development.

Information Processing Option

The Information Processing option prepares you for a career in either a centralized word processing environment or an office emphasizing information processing. This program stresses training on 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.

Alert!

Program requirements have changed. See the "Alert" under the "One-Year Program" heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,378; class fees, \$180; equipment and supplies, \$90. 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		
BT061	Electronic Calculators	2
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA122	Keyboard Skillbuilding	3
CA201X	Word Processing Procedures 1	3
Term 2		
MTH062	Business Applications Using Mathematics (or higher)	4
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA119	Exploring Office Desktop Publishing	3
BT120	Professional Communication Skills	4
CA202X	Word Processing Procedures 2	3
Term 3		
BA214	Business Communications	3
CS125E	Worksheets-Excel	4
BT086	Personal and Professional Development	3
CA204X	Advanced WordPerfect	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
Term 4		
BT128	Introduction to Records Management	3
CA205	Desktop Publishing I-PageMaker	3
CA210	Office Micro-Macintosh	3
	Humanities/fine arts elective	3
or		
	Science/applied science elective	3
CA225ABC	Machine Transcription IA, IB, IC	3
Term 5		
BA211	Financial Accounting I*	4
or		
BA051	Accounting Procedures I	4
BA251	Office Management	3
CS125A1-A3	Micro Database Software-Access	3
or		
CS125FX	Micro Database Software-FoxPro	3
or		
CS125P	Micro Database Software-Paradox	3
CA206	Desktop Publishing II-PageMaker	3
CA230	Executive Office Simulation	3
Term 6		
CA203	Advanced Formatting	1
CA232	Integrating Office Software Applications	3
SP111	Fundamentals of Speech	3
or		
SP114	Interpersonal Communication	3
	Social science elective	3
	Business elective**	3
	(BT280 Cooperative Work Experience recommended)	3

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

**Business electives: Choose courses with prefixes BA, BT, CS, CIS, EC, FIN, and RE, except BT084, BT085, CA121, CS101.

Legal Option

The Legal Option prepares you for an entry-level position in a law office or in the legal department of a company or agency.

The program emphasizes the use of legal terminology, preparation of legal documents and correspondence, management of legal files; study of legal office and court procedures, practice with Ore-

gon legal forms, and training in the use of billing, docketing, and case management software, as well as use of the Internet for researching information and downloading forms. You will work with documents relating to appeals, citations, real estate, litigation, wills and probate, corporations, and family law. Emphasis is placed on professionalism and ethics.

Alert!

Program requirements have changed. See the “Alert” under the “One-Year Program” heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,519; class fees, \$100; equipment and supplies, \$90. 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.

Term 1	
BT061	Electronic Calculators2
BT099	Proofreading/Editing3
BT116	Office Procedures3
BT120	Professional Communication Skills4
CA122	Keyboard Skillbuilding3
Term 2	
BA214	Business Communications3
MTH062	Business Applications Using Mathematics (or higher)4
CA118ABC	Current Office Software3
CA119	Exploring Office Desktop Publishing3
CA201X	Word Processing Procedures 13
Term 3	
BA226	Business Law 13
BT086	Personal and Professional Development3
CA130	Introduction to the Law Office4
CA202X	Word Processing Procedures 23
CA203	Advanced Formatting1
CA225A	Machine Transcription IA1
Term 4	
BT128	Introduction to Records Management3
CA131	Legal Office Procedures 13
CA210	Office Micro-Macintosh3
SP111	Fundamentals of Speech3
	or
SP114	Interpersonal Communication3
	or
SP130	Business and Professional Speaking3
	Social science elective3
Term 5	
BA051	Accounting Procedures 14
	or
BA211	Financial Accounting 14
BA202	Personal Effectiveness3
CJ220	Substantive Law3
	or
	other approved Criminal Justice course3
CA132	Legal Office Procedures 23
	Humanities/fine arts elective3
	or
	Science/applied science elective3
Term 6	
BA251	Office Management3
CA230	Executive Office Simulation3
CA133	Legal Transcription3
CA204X	Advanced WordPerfect3
	Business elective
	(BT280 Cooperative Work Experience recommended)3

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.

Alert!

Program requirements have changed. See the “Alert” under the “One-Year Program” heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,492; class fees, \$175; equipment and supplies, \$95. 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		
H110	Health Information Systems Procedures 14	
H120	Medical Terminology/Systems13	
BT099	Proofreading/Editing3	
BT116	Office Procedures3	
CA122	Keyboard Skillbuilding3	
Term 2		
H114	CPT-IV Coding/Reimbursement3	
H121	Medical Terminology/ Systems 23	
MTH062	Business Applications Using Mathematics (or higher)4	
BT061	Electronic Calculators2	
CA201X	Word Processing Procedures 13	
Term 3		
H101	Medical Law and Ethics3	
H115	ICD-9-CM Coding/Reimbursement3	
BT086	Personal and Professional Development3	
BT120	Professional Communication Skills4	
CA202X	Word Processing Procedures 23	
Term 4		
BA211	Financial Accounting I4	
	or	
BA051	Accounting Procedures I4	
BA214	Business Communications3	
BI071	Body Structure and Function I3	
	or	
BI231	Human Anatomy and Physiology4	
BT128	Introduction to Records Management3	
CA225ABC	Machine Transcription 1A, 1B, 1C3	
Term 5		
BA251	Office Management3	
BI072	Body Structure and Function II3	
	or	
BI232	Human Anatomy and Physiology4	
	or	
BI233	Human Anatomy and Physiology4	
H140	Medical Transcription3	
CA203	Advanced Formatting1	
CA210	Office Micro-Macintosh3	
Term 6		
MED064	Introduction to Medical Science3	
CA230	Executive Office Simulation3	
SP111	Fundamentals of Speech3	
	or	
SP114	Interpersonal Communication3	
	Business elective**	
	(BT280 Cooperative Work Experience recommended)3	
	Social science elective3	

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

**Business electives: Choose courses with prefixes BA, BT, CS, CIS, EC, FIN, and RE, except BT084, BT085, CA121, and CS101..

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.

Alert!

Program requirements have changed. See the "Alert" under the "One-Year Program" heading on Page 49 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,339; class fees, \$135; equipment and supplies, \$95. 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		
BA051	Accounting Procedures I	4
	or	
BA211	Financial Accounting I	4
MTH062	Business Applications Using Mathematics (or higher)	4
BT061	Electronic Calculators	2
BT116	Office Procedures	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA122	Keyboard Skillbuilding	3
Term 2		
BA052	Accounting Procedures II	4
	or	
BA212	Financial Accounting II*	4
BA101	Business Environment	4
CA091	Computerized Bookkeeping	3
BT120	Professional Communication Skills	4
Term 3		
BA053	Accounting Procedures III	4
BA214	Business Communications	3
MTH070	Elementary Algebra (or higher)	4
CA201X	Word Processing Procedures 1	3
Term 4		
CS125E	Worksheets-Excel	4
BT099	Proofreading/Editing	3
BT128	Introduction to Records Management	3
CA210	Office Micro-Macintosh	3
	Business elective **	3
Term 5		
BA251	Office Management	3
CA119	Exploring Office Desktop Publishing	3
CA203	Advanced Formatting	1
CA230	Executive Office Simulation	3
SP111	Fundamentals of Speech	3
	or	
SP114	Interpersonal Communication	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3
Term 6		
BA226	Business Law I	3
BA228	Computer Accounting Applications	3
CA092	Payroll Procedures	3
	Business elective	3
	Social science elective	3

*If you select BA212, you may not use BA052 as a business elective.

**Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE, except BT084, BT085, CA121, and CS101.

CHEMISTRY

(college transfer)

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

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
	1	2	3
First Year			
WR121, 122, and/or 123 English Composition or WR227 Technical Writing*			
CH221, 222, 223 General Chemistry	3	3	3
Mathematics per placement test through MTH254	5	5	5
Vector Calculus I (OSU and UO also require MTH256 Applied Differential Equations; EOU requires through MTH253 Series Calculus; SOU and WOU require MTH251 Differential Calculus and MTH252 Integral Calculus, and MTH253 or second-year Foreign Language)	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
Second Year	1	2	3
PH211, 212, 213 General Physics for Engineers and Scientists (UO and OSU B.A. students may substitute PH201, 202, 203)	4-5	4-5	4-5
Social Science courses*	3	3	3
**CH241-243 Organic Chemistry	5	5	5
Mathematics/Computer Science (EOU requires CS161 Computer Science I. UO recommends CS133F FORTRAN; OSU requires BI101 General Biology; WOU does not require MTH254 and 255 but requires 2 hours of approved electives in Natural Science or Math and CS236)	5	4	4
HPE295 Health and Fitness for Life* or elective	3		
Arts and Letters/Humanities electives or Social Science electives*	3-4	3-4	3-4

*To meet four-year college general education requirements.

**Replaces 300 level requirement at state universities with acceptable score on ACS national exam.

CHIROPRACTIC

(college transfer)

Western States Chiropractic College in Portland offers a degree in Chiropractic Medicine. Students must complete two years of pre-chiropractic 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 26.

	Term		
	1	2	3
First Year			
CH221, 222, 223 General Chemistry	5	5	5
Mathematics per placement test through MTH111 College Algebra and MTH112 Trigonometry	5	5	
WR121 English Composition-Exposition and six hour from J216 Newswriting, SPI11 Fundamentals of Speech, SPI12 Fundamentals of Persuasion, WR122 English Composition-Logic and Style, WR123 English Composition-Research Writing, WR227 Technical Writing WR241, 242, 243 Imaginative Writing	3	3	3
PSY201 and 202 or 203 General Psychology (counts towards 15 credits of required Social Science)		3	3
Approved Humanities or Social Science electives*	3	0	6
Second Year	4	5	6
ZOO201, 202, 203 Zoology or BI231, 232 Biology and one course in Zoology (BI231, 232 recommended)	4	4	4
PH201, 202, 203 General Physics	4	4	4
CH241, 242, 243 Organic Chemistry	5	5	5
Approved Humanities or Social Science electives*	3-6	3-4	3

(from Anthropology, Art History, Economics, English, Fine Arts, Geography, HD220, 221, Human Development and Family Studies, History, Humanities, Journalism, Music Performance, Music, Philosophy, Physical Science, Religion, Sociology, Speech, Theater Arts, Writing, Women's Studies)

CIVIL-STRUCTURAL ENGINEERING TECHNOLOGY

The Civil-Structural Engineering Technology program offers both a one-year Certificate of Completion and a two-year Associate of Applied Science Degree. The one-year certificate program prepares the student for entry-level surveying, drafting, and materials-testing positions. The two-year program prepares the student to provide preliminary designs of public works and structural engineering projects. Both curricula include courses and field experiences in drafting, surveying, and materials testing. The two-year program also includes basic engineering science; communication skills; psychology; 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 wastewater treatment systems. As a technician on construction projects, you may assist in estimating costs, writing specifications, inspecting or testing materials, surveying, drafting, or designing.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SKD051	Studying for College	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5210. Failure to be assessed may delay your entry into program classes.

Survey Technology Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below 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 49 required credit hours:

Course	Title	Credit Hours
Term 1		
BLD063	Structural Inspection Concrete	3
BLD068	Foundations, Excavation and Grading	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to HP48 Calculators	2

MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
CVL060A	Plane Surveying I-Lecture	3
CVL060B	Plane Surveying I-Lab	2
DRF102	Print Reading	2
DRF136	Advanced AutoCAD	3
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
CVL061A	Plane Surveying II-Lecture	3
CVL061B	Plane Surveying II-Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125Q	Worksheets-Quattro	4
	Humanities/fine arts elective	3
	or	
	Social science elective	3

Associate of Applied Science degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,266; class fees, \$126; equipment and supplies, \$355; optional certification exam, \$100. Contact the Financial Aid Office to find out if you qualify for help with these costs.

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).

An Associate of Applied Science degree is awarded upon the successful completion of the required 96 credit hours.

Course	Title	Credit Hours
Term 1		
BLD063	Structural Inspection Concrete	3
BLD068	Foundations, Excavation and Grading	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to HP48 Calculators	2
MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
CVL060A	Plane Surveying I-Lecture	3
CVL060B	Plane Surveying I-Lab	2
DRF102	Print Reading	2
DRF136	Advanced AutoCAD	3
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
CVL061A	Plane Surveying II-Lecture	3
CVL061B	Plane Surveying II-Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125Q	Worksheets-Quattro	4

	Humanities/fine arts elective	3
	or	
	Social science elective	3
Term 4		
BII31	Environmental Science 1	4
CVL080	Applied Mechanics	3
DRF220	GIS ArcView	2
DRF241	Structural Drafting	3
PH081	Applied Physics	4
Term 5		
CVL082	Strength of Materials	4
DRF221	GIS ArcCAD	3
DRF230	Introduction to MicroStation PC	3
DRF245	Civil Drafting-Softdesk	3
	General education elective	3
	or	
CVL280C	Cooperative Work Experience	3
Term 6		
CVL064A	Construction and Route Surveying-Lecture	3
CVL064B	Construction and Route Surveying-Lab	2
CVL088	Environmental and Sanitary Engineering	4
DRF165	CAD System Administration	3
DRF246	Project Development	3

COMPUTER ELECTRONICS TECHNOLOGY

see Electronics Technologies

COMPUTER PROGRAMMING

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

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

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

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

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

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
CA121A	Keyboarding A	1
CS101	Introduction to Microcomputer Applications	3
MTH070	Introductory Algebra	4
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,246; class fees, \$168; equipment and supplies, \$140. 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		
BA101	Business Environment	4
CIS120	Computer Information Science I	4
CIS121	Computer Information Science II	4
WR121	English Composition-Exposition (or higher)	3
Term 2		
BA211	Financial Accounting I	4
CS133C	COBOL I	4
CS140A	OS Concepts and Facilities	3
CS140B	Microcomputer Operating Systems	3
FE205A	Job Search Preparation	1
	or	
FE205B	Resumes and Job Search Correspondence	1
	or	
FE205C	Interviewing for Success	1
Term 3		
CIS122	Computer Information Science III	4
CS233C	COBOL II	4
CS244	Systems Analysis I	3
SP111	Fundamentals of Speech (or higher)	3
WR227	Technical Writing	3
Term 4		
CS133VB	Visual Basic-Event-Driven Programming	4
CS234L	On-Line Programming Techniques	4
CS246	Systems Analysis II	3
CS280C	Cooperative Work Experience	3
	or	
	Computer science elective*	3
MTH105	Introduction to Contemporary Math (or higher)	4
Term 5		
CS171	Principles of Computer Organization	4
CS275	Database Management	4
CS278	Data Communications	3
CS280C	Cooperative Work Experience	3
	or	
	Computer science elective*	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3

Term 6

CS234C	COBOL/CICS Programming Techniques	4
CS280C	Cooperative Work Experience	3
	Computer science electives*	6
	Social science elective	3

*Computer science elective: Choose courses with CS or CIS prefixes above CS101 (additional spreadsheet or database classes will not apply as CS elective).

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 listed below are books, \$1,357; class fees, \$168; equipment and supplies, \$145. 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		
BA101	Business Environment	4
CIS120	Computer Information Science I	4
CIS121	Computer Information Science II	4
WR121	English Composition-Exposition (or higher)	3
Term 2		
BA211	Financial Accounting I	4
CS125A1-A3	Micro Database Software-Access	3
CS133C	COBOL I	4
	or	
CS133U	C++ Language	4
CS140B	Microcomputer Operating Systems	3
FE205A	Job Search Preparation	1
	or	
FE205B	Resumes and Job Search Correspondence	1
	or	
FE205C	Interviewing for Success	1
Term 3		
CIS122	Computer Information Science III	4
CS125E	Worksheets-Excel	4
CS135AC	Advanced Micro Computer Database Software Using Access	3
CS244	Systems Analysis I	3
WR227	Technical Writing	3
Term 4		
MTH105	Introduction to Contemporary Math (or higher)	4
CS133VB	Visual Basic-Event-Driven Programming	4
CS240	Advanced Operating Systems	3
CS246	Systems Analysis II	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3
Term 5		
CS145	Microcomputer Hardware/Software Evaluation	4
CS171	Principles of Computer Organization	4
CS275	Database Management	4
CS278	Data Communications	3
CS280C	Cooperative Work Experience	3
	or	
	Computer science elective*	3
Term 6		
CS050	Data Communications Lab	2
CS060	Techniques of User Training	2
CS279	Network Management	3
CS280C	Cooperative Work Experience	3
	or	
	Computer science elective*	3

SP111	Fundamentals of Speech (or higher)	3
	Social science elective	3

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

COMPUTER SCIENCE

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Computer Science are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Southern Oregon University also has a computer information science option which requires less math. (See SOU 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 26.

	Term		
First Year	1	2	3
CS160 Introduction to Computer Science (required corequisite for Chemeketa's CS161) CS161, 162, 260 Computer Science I, II and III (required by all except UO and EOU; recommended for UO; CS161, 162 EOU)	4	4	4
Mathematics per placement test* (MTH111 prerequisite for CS161; MTH231, 232 Discrete Mathematics prerequisite for CS162 and 260; MTH231, 232 required at OSU and UO)	4	4	4
Science courses to meet college and Computer Science major requirement* (PH211, 212, 213 General Physics for Engineers and Scientists and 4 hours Biological Science for OSU; PH211, 212, 213 Physics for PSU;UO choose PH211, 212, 213 or PH201, 202, 203 General Physics or BI101, 102, 103 General Biology or CH121, 122, 123 or CH221, 222, 223)	4-5	4-5	4-5
WR121, 122 and/or 123 English Composition and/or WR227 Technical Writing* (WR121, 122, 227 for OSU and SOU; WR121 and WR227 for PSU; WR121 and WR122 or 123 for UO; WR121 for WOU)	3	3	(3)

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

Second Year	4	5	6
Computer Science course to meet major requirements (Chemeketa recommends CS171 Principles of Computer Organization for all schools; CS133U C++ Language required for PSU; CS133F FORTRAN IV or CS133C Cobol for SOU; CS236 Advanced Language for Micros required at WOU)	3-4	3-4	3-4
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 for WOU; through MTH252 for SOU and MTH231 and MTH243 Probability and Statistics 1	4	4	4
Social Science courses*	3	3	3
Arts and Letters/Humanities sequence*	3	3	3
HPE295 Health and Fitness for Life* or elective	3		
Electives* (CH221, 222, 223 General Chemistry for PSU)	(3-5)	3-5	3-5

*To meet four-year college general education requirements.

CRIMINAL JUSTICE

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

Some employers may 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 school where the courses also may meet social science requirements. Before you enroll at Chemeketa, consult with the Advising and Counseling Center and an advisor at the institution to which you plan to transfer.

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

This program has special admission requirements. Students are required to complete a Criminal Justice program application packet. To request a packet or for additional information, contact the program chair at (503) 399-5110. Courses in this program are available only to students admitted into Criminal Justice program and professionals in the field, except for the following which are open to students in other disciplines: CJ101 Criminology and CJ206 Crime and Delinquency.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized

program of study, which may include one or more of the following courses:

Course	Title	Credit Hours
CA121A	Keyboarding A	.1
CJ050	Criminal Justice Foundations	.3
MTH020	Basic Mathematics	.3
RD090	College Textbook Reading	.3
WR115	Introduction to Composition	.3
	or	
COM051	Communication Skills I	.3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5048. Failure to be assessed may delay your entry into program classes.

Juvenile Corrections Certificate

Juvenile corrections workers provide supervision, facilitate in the treatment process and crisis intervention, provide social and life skills training, maintain records and documentation, engage in support services, and monitor and ensure a secure environment.

This one-year certificate program is specifically designed for individuals who want to work directly with juvenile offenders through different agencies in various settings. These agencies may include Oregon Youth Authority (OYA), as well as other public, private, and non-profit organizations.

As a statewide cooperative effort among several Oregon community colleges this program is transferable to the following participating schools: Clackamas Community College, Clatsop Community College, Lane Community College, Linn-Benton Community College, Portland Community College, Southwestern Community College, and Treasure Valley Community College. In addition, some courses may be applicable as electives toward a two-year degree. Consult with our Advising and Counseling Center or a Chemeketa advisor on course transferability.

In addition to tuition, estimated costs for students who complete the entire program are books, \$700. Contact the Financial Aid Office to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
CJ101	Criminology	.3
CJ203	Crisis Intervention Seminar	.1
CJ206	Crime and Delinquency	.3
CJ230	Introduction to Juvenile Corrections	.3
CJ232	Introduction to Corrections Casework	.3
CJ280	Cooperative Work Experience	.3
CJ235	Youth, Drugs and Corrections	.3
CS101	Introduction to Microcomputer Application	.3
MTH060	Introductory Algebra	.4
PSY201	General Psychology-Biological Emphasis	.3
PSY202	General Psychology-Cognitive Emphasis	.3
PSY203	General Psychology-Clinical/Social Emphasis	.3
PSY237	Life Span Development	.3
PSY239	Introduction to Abnormal Behavior	.3
SOC206	General Sociology-Social Problems	.3
WR121	English Composition-Exposition	.3

Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,200. Contact the

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

An Associate of Applied Science degree is awarded upon successful completion of the 91 required credit hours listed below. These include the 58 credit hours listed under general education requirements, 18 credit hours of Criminal Justice core requirements, and 15 credit hours of Criminal Justice electives.

General education requirements (58 credit hours)

Course	Title	Credit Hours
CS101	Introduction to Microcomputer Applications (or higher)	.3
MTH060	Introductory Algebra (or higher)	.4
	PE elective (three different activities)	.3
	or	
HPE295	Health and Fitness for Life	.3
SP114	Interpersonal Communication	.3
	or	
	Speech elective	.3
WR121	English Composition-Exposition	.3
WR122	English Composition-Logic and Style	.3
WR227	Technical Writing	.3
	General education electives	.18
	Humanities sequence*	.9
	Social science sequence*	.9

Criminal Justice core requirements (18 credit hours)

CJ100	Survey of the Criminal Justice System	.3
CJ101	Criminology	.3
CJ132	Introduction to Parole and Probation	.3
CJ206	Crime and Delinquency	.3
CJ210	Introduction to Criminal Investigations I: Crimes vs. Persons	.3
CJ226	Introduction to Constitutional Law	.3

Criminal Justice electives (Select 15 credit hours)

CJ110	Introduction to Law Enforcement	.3
CJ112	Field Operations and Patrol Procedures	.3
CJ130	Introduction to Corrections Process	.3
CJ150	Unarmed Private Security	.3
CJ200	Police and Public Policy	.3
CJ203	Crisis Intervention Seminar	.1
CJ207	Seminar in Criminal Justice	.3
CJ211	Introduction to Criminal Justice	
	Investigations II: Crimes vs. Property	.3
CJ215	Criminal Justice Administration	.3
CJ220	Introduction to Substantive Law and Oregon Criminal Code	.3
CJ230	Introduction to Juvenile Corrections	.3
CJ232	Introduction to Corrections Casework	.3
CJ235	Youth, Drugs, and Corrections	.3
CJ253	Introduction to Penology	.3
CJ280	Cooperative Work Experience	.3

*Suggestions for students: Due to current bilingual hiring preferences, students are urged to take SPAN111, 112, 113 for Humanities sequence. Law enforcement and juvenile corrections students are urged to take PSY201, 202, 203 for Social Science sequence.

Students are urged to select general education electives in the following courses:

HE262	Cardiopulmonary Resuscitation Instruction	.2
HUM259	Death and Dying	.3
CA121	Keyboarding	.3
PE185PA	Personal Defense	.1
PSY239	Introduction to Abnormal Behavior	.3
SOC204	General Sociology-Introduction	.3
SOC205	General Sociology-Institutions	.3
SOC206	General Sociology-Social Problems	.3
SP115	Introduction to Intercultural Communication	.3

DENTAL ASSISTING

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

The program includes instruction in assisting dentists in private offices or dental health clinics plus clinical and field trip experiences. Typical duties of dental assistants include preparing patients for treatment, mixing dental materials, taking impressions, sterilization and infection control, exposing and developing radiographs, and inventory control. Laboratory duties include pouring study models of teeth and fabrication of custom trays, temporary crowns, and small appliances. As office manager, a dental assistant acts as a receptionist, schedules appointments, keeps accounts and records, prepares statements, and is responsible for the general appearance of an office.

This program has special admission requirements and enrollment limits. To enroll, you must have a high school diploma or GED certificate. For additional information, contact the Student Records (Admissions) Office at (503) 399-5006.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

AH055	Health Occupations Overview	4
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
SP114	Interpersonal Communication	3
WR090	Fundamentals of Writing	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5058. Failure to be assessed may delay your entry into program classes.

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 Dental Assisting National Board examinations, including radiology.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$444; class fees, \$123; equipment and supplies, \$760; test fees, \$100; physical examination/immunizations, \$200. 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	3
DEN050	Dental Sciences I	3
DEN051	Introductory Concepts in Dental Assisting	3
DEN052	Dental Anatomy and Physiology	3
DEN053	Dental Materials I	4
DEN054	Preventive Dentistry	1
DEN070	Dental Office Management	2
Term 2		
DEN060	Dental Sciences II	4
DEN061	Dental Assisting Practicum I	3
DEN062	Expanded Functions I	3
DEN063	Dental Materials II	4
DEN064	Dental Radiology I	3
Term 3		
DEN071	Dental Office Practicum II	9
DEN072	Expanded Functions II	3
DEN074	Dental Radiology II	2
DEN080	Dental Assistant Seminar	2

DENTAL HYGIENE

(college transfer)

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

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

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

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
ZOO201, 202, 203 General Zoology for OHSU	4	4	4

CH121, 122, 123 College Chemistry (CH104, 105, 106 Chemistry for Allied Health may be substituted**)	4-5	4-5	4-5
PSY201 General Psychology-Biological Emphasis	3		
ANTH103 Cultural Anthropology for OHSU; Psychology elective for OIT			3
WR121, 122 English Composition and 227 Technical Writing for OIT; OHSU WR121 and 122, or 123, or 227	3	3	(3)
SP111 Fundamentals of Speech or SP112 Fundamentals of Persuasion for OHSU; SP113 Fundamentals of Small Group Communication for OIT			3
CS101 Introduction to Microcomputer Applications or CS131 Introduction to Data Processing for OIT (strongly recommend for OHSU)	3		
MTH111 College Algebra (MTH105 may be substituted for OIT)		5	
FN225 Nutrition		4	
Second Year	4	5	6
BI231, 232, 233 Anatomy and Physiology (required for OIT and strongly recommended for OHSU)	4	4	4
Humanities electives* (6 hours for OIT and SP115 Introduction to Intercultural Communication; 6 hours from Art, Literature, Humanities, Philosophy, Speech, Theater Arts, or second-year Foreign Language for OHSU)	3	3	3
BA214 Business Communications for OIT	3	3	
BI234 Microbiology (not required but strongly recommended for OHSU)			4
SOC204 General Sociology-Introduction	3		
Social Science electives*: 3 hours from Anthropology, History, Economics, Geography, Psychology, Sociology, Political Science for OHSU and SOC204 General Sociology-Introduction for OIT		3	3
Electives (additional electives to bring total transferable credits to 91 for OHSU; BI231, 232, 233 Anatomy and Physiology highly recommended for OHSU; BA224 Personnel Management recommended for OIT)	0-9	0-9	0-9

*To meet four-year college general education requirements.

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

DRAFTING TECHNOLOGY CAD

Drafting Technology offers three paths of entry into careers in drafting and design: 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 make knowledgeable decisions about their careers. Choose individual courses to meet your needs, or work toward an Associate of Applied Science degree. You should choose CAD, Mechanical Design, or CAD/CAM as soon as possible during your first year.

For short term or non-credit workshops in this area, call the Training and Economic Development Center at 399-5181 or 1-888-234-4322.

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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SKD051	Studying for College	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5210. Failure to be assessed may delay your entry into program classes.

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 listed below are books, \$1,243; class fees, \$126; equipment and supplies, \$227. Contact the Financial Aid Office to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to HP48 Calculators	2
DRF112	Sketching	1
MFG053	Manufacturing Processes	3
MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
DRF051	Technical Graphics	3
DRF136	Advanced AutoCAD	3
DRF150	Architectural Drafting	3
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry	5
PH081	Applied Physics	4
Term 3		
CVL066A	Surveying for Drafters-Lecture	2
CVL066B	Surveying for Drafters-Lab	2
DRF137	AutoCAD 3-D	3

DRF140	Descriptive Geometry	3
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125Q	Worksheets-Quattro	4
Term 4		
BLD069	Engineering for the Building Inspector	3
	or	
CVL080	Applied Mechanics	3
DRF210	Assembly and Detail Drafting	3
DRF220	GIS ArcView	2
DRF241	Structural Drafting	3
DRF256	AutoLISP Programming	3
Term 5		
DRF221	GIS ArcCAD	3
DRF230	Introduction to MicroStation PC	3
DRF242	3-D Studio	3
DRF245	Civil Drafting-Softdesk	3
	Humanities/fine arts elective	3
	or	
	Social science elective	3
Term 6		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF165	CAD System Administration	3
DRF231	CAD Pipe Systems	3
DRF243	Architectural Design	3
DRF246	Project Development	3
	or	
	Technical elective*	3
	or	
DRF280C	Cooperative Work Experience	3
DRF255	Technical Illustration	3

*Technical elective: May be any professional-technical or math/science course.

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

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,087; class fees, \$108; 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 98 credit hours:

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills I	3
	or	
WR121	English Composition—Exposition (or higher)	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to HP48 Calculators	2
DRF112	Sketching	1
MFG053	Manufacturing Processes	3

MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
DRF051	Technical Graphics	3
DRF136	Advanced AutoCAD	3
MFG069	CMM Operations/QA Applications*	4
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry (or higher)	5
PH081	Applied Physics	4
	or	
PH201	General Physics	4
Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF137	AutoCAD 3-D	3
DRF140	Descriptive Geometry	3
DRF160	Technical Software Applications	3
	or	
CS125Q	Worksheets-Quattro	4
	Humanities/fine arts elective	3
	or	
	Social science elective	3
Term 4		
CVL080	Applied Mechanics	3
	or	
ENGR211	Statics	4
DRF210	Assembly and Detail Drafting	3
DRF241	Structural Drafting*	3
DRF256	AutoLISP Programming*	3
MFG054	Geometric Dimensioning Tolerancing	2
MT100	Electronics Fundamentals for Non-majors	4
	or	
ENGR201	Electrical Fundamentals I	4
Term 5		
CVL082	Strength of Materials	4
	or	
ENGR213	Strength of Materials	4
DRF230	Introduction to MicroStation PC*	3
DRF242	3-D Studio*	3
DRF251	Power Transmission Design	3
DRF260	Tool Design	3
Term 6		
DRF165	CAD System Administration*	3
DRF231	CAD Pipe Systems*	3
DRF252	Flexible Manufacturing Systems	3
DRF255	Technical Illustration*	3
DRF262	Machine Design	3

*Courses above 200 in math, physics, chemistry and engineering may be substituted.

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

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

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

using computers in drafting and in designing and controlling machine tools.

For short-term or non-credit workshops in this area, call the Training and Economic Development Center at 399-5181 or 1-888-234-4322.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,388; class fees, \$141; and equipment and supplies, \$287. 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		
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to HP48 Calculators	2
DRF112	Sketching	1
MFG053	Manufacturing Processes	3
MFG130	CNC Machine Setup/Operation	2
MTH081	Technical Mathematics I	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
DRF051	Technical Graphics	3
DRF136	Advanced AutoCAD	3
MFG064	Milling Machine Processes	3
MFG065	Lathe Fundamentals	3
MFG135	Programming CNC Mills	3
MTH082	Technical Mathematics II	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
DRF137	AutoCAD 3-D	3
DRF140	Descriptive Geometry	3
DRF160	Technical Software Applications	3
	or	
CS125Q	Worksheets-Quattro	4
MFG076	Manufacturing Materials and Cutting Tools	3
MFG140	Programming CNC Lathes	3
Term 4		
CVL080	Applied Mechanics	3
DRF210	Assembly and Detail Drafting	3
MFG054	Geometric Dimensioning/Tolerancing	2
MFG230	CAM Applications/Mills	3
PH081	Applied Physics	4
	or	
PH201	General Physics (or higher)	4
Term 5		
COM051	Communications Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
CVL082	Strength of Materials	4
DRF251	Power Transmission Design	3
DRF260	Tool Design	3
MFG235	CAM Applications/Lathes	3
Term 6		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF252	Flexible Manufacturing Systems	3
DRF165	CAD System Administration	3
DRF262	Machine Design	3
MFG240	CAD/CAM Integrations	4
	Humanities/fine arts elective	3
	or	
	Social science elective	3

EARLY CHILDHOOD EDUCATION

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

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion. Students in the program must earn grades of C or better. In order to enroll in certain courses, students will be required to pass a criminal records check. A valid first-aid card is required for graduation in 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.

Child Development Certificate

The Child Development Certificate program is geared to students seeking on the job training in early childhood education. 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 competency-based 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; basic first aid card, \$25; criminal records check, \$3-\$75; conference registration, \$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 31 required credit hours:

Course	Title	Credit Hours
Term 1		
ECE068A	Observing the Preschool Experience	1
ECE151	Observing and Guiding Behavior	3
ECE280I	Cooperative Work Experience	9
HDFS247	Preschool Child Development	3
	or	
HDFS249	Working and Living with Infants and Toddlers	3

Term 2

ECE068B	Observing the Preschool Experience	1
ECE068C	Observing the Preschool Experience	1
ECE280I	Cooperative Work Experience	9
HDFS248	Learning Experiences for Young Children	4

One-Year Option

In addition to tuition, estimated costs for students who complete the one-year program listed below are books, \$456; class fees, \$35; equipment and supplies, \$36; immunization fees, \$10; basic first aid card, \$35; criminal records check, \$70; conference registration, \$100. Contact the Financial Aid Office to find out if you qualify for help with these costs.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college’s free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CA121A	Keyboarding A	1
MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3
	or	
COM051	Communication Skills I	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-6071. Failure to be assessed may delay your entry into program classes.

You may earn a Certificate of Completion by successfully completing these 55 required credit hours:

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences	1
ECE150	Introduction and Observation in Early Childhood Education	3
ECE161	Infant/Toddler Practicum	3
HDFS222	Family Relationships	3
HDFS225	Prenatal, Infant and Toddler Development	3
HDFS249	Introduction to Working with Infants and Toddlers	3
Term 2		
ECE068B	Observing Preschool Experiences	1
ECE151	Observing and Guiding Behavior	3
ECE152	Creative Activities	3
ECE155	Child Nutrition	2
	or	
FN225	Nutrition	4
ECE162	Early Child Educator Orientation	2
HDFS247	Preschool Child Development	3
MTH060	Introductory Algebra	4
WR121	English Composition-Exposition (or higher)	3
Term 3		
ECE068C	Observing Preschool Experiences	1
ECE153	Music and Movement for Young Children	3
ECE154	Children’s Literature and Literacy	3
ECE163	Preschool Practicum	4
HDFS229	Development in Middle Childhood	3
HDFS248	Learning Experiences for Young Children	4

Two-Year Option

Alert!

Program requirements have changed. See the “Alert” under the “One-Year Option” heading on Page 63 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$924; class fees, \$55; equipment and supplies, \$72; immunization fees, \$10; basic first aid card, \$35; criminal records check, \$70; 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 95 credit hours:

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences	1
ECE150	Introduction and Observation in Early Childhood Education	3
ECE161	Infant/Toddler Practicum	3
HDFS222	Family Relationships	3
HDFS225	Prenatal, Infant and Toddler Development	3
HDFS249	Introduction to Working with Infants and Toddlers	3
Term 2		
ECE068B	Observing Preschool Experiences	1
ECE151	Observing and Guiding Behavior	3
ECE152	Creative Activities	3
ECE155	Child Nutrition	2
	or	
FN225	Nutrition	4
ECE162	Early Child Educator Orientation	2
HDFS247	Preschool Child Development	3
WR121	English Composition-Exposition (or higher)	3
Term 3		
ECE068C	Observing Preschool Experiences	1
ECE153	Music and Movement for Young Children	3
ECE154	Children’s Literature and Literacy	3
ECE163	Preschool Practicum	4
HDFS229	Development in Middle Childhood	3
HDFS248	Learning Experiences for Young Children	4
Term 4		
ECE251	Environment for Young Children	3
ECE261	Student Teaching I, ECE	6
HDFS285	Professional Issues in ECE	3
MTH060	Introductory Algebra (or higher)	4
Term 5		
ECE280D	Cooperative Work Experience	4
ED258	Multicultural Education	3
	or	
ED268	Educating the Mildly and Severely Handicapped	3
HDFS257	Home, School and Community	3
	Computer science elective	3
	Humanities/fine arts elective*	3
	or	
	Science/applied science elective*	3
	or	
	Communications elective*	3
Term 6		
ECE262	Student Teaching II, Early Childhood Education	6
ECE295	Administration of Early Childhood Education Programs	3
	Humanities/fine arts elective*	3
	or	
	Science/applied science elective*	3
	or	
	Communications elective*	3

*Selection may not be repeated.

ECONOMICS

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Economics are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. 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 Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
WR121, WR122 and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Social Science courses*(OSU recommends a minor or earning concurrent degree in another major; WOU requires a minor)	3	3	3
Arts and Letters/Humanities courses*	3	3	3
Math or Science courses (MTH111 College Algebra and MTH241 Elementary Calculus or MTH251 Differential Calculus for OSU**; MTH111, MTH243 Probability and Statistics 1, and MTH241 for PSU; UO requires MTH111, 241, 242, 243 or MTH251, 252, 253 Calculus and MTH243; SOU recommends MTH251, 252, 253 for graduate work; WOU requires MTH111)*	5	4	4
HPE295 Health and Fitness for Life* or electives	3		
Electives*		3	3-6
Second Year	4	5	6
Economics sequence: EC201, 202, 203 Introduction to Microeconomics, Introduction to Macroeconomics or Applications of Economic Issues (EC203 not required at OSU or UO)	3	3	3
Science Electives*	4	4	4
Arts and Letters/Humanities or Social Science electives*	3	3	3
Electives (BA211 and BA212 Financial Accounting for PSU; CS course beyond CS101 for WOU)	6-7	6-7	6-7

*To meet four-year college general education requirements.

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

EDUCATION

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

Elementary Education

(college transfer)

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

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

Admission to both four-year and fifth-year education programs requires a minimum grade point average (GPA), usually 2.75 to 3.00. Admission also requires passing the California Basic Educational Skills Test (CBEST). Students transferring to WOU are advised to take the 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 outlined below is designed to meet prerequisite requirements at WOU. 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 an advisor in your program.

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

	Term		
First Year	1	2	3
WR121, 122, 123 English Composition	3	3	3
Mathematics (per placement test through MTH211, 212, 213 Foundations of Elementary Mathematics; MTH095 prerequisite)	3-4	3-4	3-4

Literature sequence (ENG104, 105, 106 Introduction to Literature or ENG107, 108, 109 World Literature recommended)	3	3	3
Social Science courses other than Psychology	3	3	3
HPE295 Health and Fitness for Life	3		
Computer Science elective (CS101)*		3	
Speech elective (SP111 recommended)			3
Second Year	4	5	6
MTH211, 212, 213 Foundations of Elementary Mathematics (if not taken first year)	(3)	(3)	(3)
Creative Arts electives (courses in ART, MUS or TA)	3	3	3
Science Sequence (three lab science courses, two from same discipline)	4-5	4-5	4-5
PE electives*	1	1	
Philosophy or Religion elective	3		
Social Science elective	3	3	
Electives ED209B Practicum: Introductory Observation and Experience (LDC) recommended for those lacking verified classroom work with children. (WOU revised requirements not available at time of catalog publication; see 1998 WOU Catalog)	0-3	3-6	3-6

*To meet four-year college general education requirements.

Secondary Education

(college transfer)

Oregon state colleges and universities offering secondary education programs are Eastern Oregon University and Western Oregon University, which offer Bachelor of Science and Bachelor of Arts degrees in secondary education, and Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, 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 WOU 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 26.

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 Bachelor of General Studies/Liberal Arts degrees 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 multicultural/bilingual 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.

In order to complete the certificate program, you must demonstrate, through transcribed courses or competency assessments, a writing skill equivalent to completion of WR115 (or higher); a math skill equivalent to completion of 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 any practicum.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CA121A	Keyboarding A1
MTH020	Basic Mathematics3
RD090	College Textbook Reading3
WR040	Writing Skills3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5048. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the certificate program listed below are books, \$410; class fees, \$78; measles vaccine, \$10, and criminal history check, \$17. 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	Title	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 electives (6 hours required):		
ED213	Advanced Instructional Techniques in Reading Strategies	3
ED214	Advanced Instructional Techniques in Mathematics and Science	3
ED235	Instructional Technology	3
ED236	Introduction to Library/Media 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

ELECTRONICS TECHNOLOGIES

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

To successfully complete the Electronics Technologies programs, You must earn grades of C or better in all required courses.

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.

For tours of the electronics laboratory or career information, call (503) 589-7626.

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 an Intel-compatible computer (Pentium or better) and be computer literate.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CA121A	Keyboarding A	1
CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5248. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,340; class fees, \$290; equipment and supplies, \$87; Intel-compatible computer (Pentium 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:

Course	Title	Credit Hours
Term 1		
WR121	English Composition-Exposition (or higher)	3
	or	
COM051	Communication Skills I	3
ELT111	Electronics Orientation	1
ELT113	Electronics Problems I	1
ELT123	Computer Operating Systems	3
	or	
CS140B	Microcomputer Operating Systems	3
	or	
CS240	Advanced Operating Systems	3
ELT131	Electronic Concepts I	4
ES071	Work Place Safety Skills	1
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics I	4
Term 2		
ELT114	Electronics Problems II	1
ELT132	Electronics Concepts II	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4

MTH112	Trigonometry (or higher)	5
MTH082	or Technical Mathematics II	4
Term 3		
WR227	Technical Writing	3
COM053	or Technical Report Writing	3
ELT133	Electronic Concepts III	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuits Fundamentals	3
ELT161	Linear IC Fundamentals	4
Term 4		
ELT121	Programming Concepts I	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
PH201	General Physics	4
PH081	or Applied Physics	4
SP111	Fundamentals of Speech	3
FE205B	and Resumes and Job Search Correspondence	1
COM052	or Communications Skills II	3
Term 5		
CS278	Data Communications	3
ELT253	Microcomputer Systems	5
ELT254	Computer Peripherals	4
PH203	General Physics	4
PH082	or Applied Physics	4
PSY104	Psychology in the Workplace	4
PSY101	or Psychology of Human Relations	3
Term 6		
ELT122	Programming Concepts II	4
ELT183	Video Display Systems	5
ELT255	Advanced Data Communication	5
ELT256	Advanced Computer Architecture	4

Electronic Engineering Technician Option

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

As a graduate of this option, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the course work required for a bachelor's degree. If you wish to transfer, declare your intent before the first term and work closely with the electronic engineering advisor, Roger White, at (503) 399-5068, and the institution to which you plan to transfer. Students entering this option should have an Intel-compatible computer.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be

assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5248. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below 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	Title	Credit Hours
Term 1		
DRF101	Basic CAD for Electronics	2
DRF136	or Advanced AutoCAD	3
DRF072	or Introduction to AutoCAD	3
ELT111	Electronics Orientation	1
ELT113	Electronic Problems I	1
ELT131	Electronic Concepts I	4
ES071	Work Place Safety Skills	1
MTH111	College Algebra (or higher)	5
MTH081	or Technical Mathematics I	4
WR121	English Composition-Exposition (or higher)	3
COM051	or Communication Skills I	3
Term 2		
ELT114	Electronic Problems II	1
ELT132	Electronic Concepts II	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
MTH082	or Technical Mathematics II	4
Term 3		
ELT133	Electronic Concepts III	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
COM053	or Technical Report Writing	3
Term 4		
ELT121	Programming Concepts I	4
ELT252	Digital Circuit Applications	3
ELT244	Electronic Circuit Analysis	4
SP111	Fundamentals of Speech	3
FE205B	and Resumes and Job Search Correspondence	1
COM052	or Communication Skills II	3
PH201	General Physics	4
PH081	or Applied Physics	4
Term 5		
ELT181	Antennas and Transmission Lines	2
ELT182	Telecommunications	3
ELT253	Microcomputer Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics	4
PH082	or Applied Physics	4

Term 6

ELT183	Video Display Systems	5
ELT191	Advanced Industrial Electronics	4
MTH241	Elementary Calculus	4
	or	
MTH243	Probability and Statistics 1	4
	or	
MTH251	Differential Calculus (or higher)	5
	or	
ELT122	Programming Concepts II	4
	or	
MT227A	Introduction to Hydraulics/Pneumatics	3
PSY104	Psychology in the Workplace	4
	or	
PSY101	Psychology of Human Relations	3
	Approved electronics elective*	3

***Approved electronics electives:**

ELT254	Computer Peripherals	4
ELT255	Advanced Data Communication	5
ELT256	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
MTH252	Integral Calculus	5
PH202	General Physics	4

Microelectronics/ Industrial Electronics Option

Students selecting this option 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. This option stresses mechanical, computer and electronic theory, and communication and human relation skills needed for career advancement.

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 Microelectronics advisor, Gary Boyington, at (503) 399-5218, and the institution to which you plan to transfer. Students entering this option should have an Intel-compatible computer.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5248. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below 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		
DRF101	Basic CAD for Electronics	2
	or	
DRF136	Advanced AutoCAD	3
	or	
DRF072	Introduction to AutoCAD	3
ELT111	Electronics Orientation	1
ELT113	Electronic Problems I	1
ELT131	Electronic Concepts I	4
ES071	Work Place Safety Skills	1
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics I	4
WR121	English Composition-Exposition (or higher)	3
	or	
COM051	Communication Skills I	3
Term 2		
ELT114	Electronic Problems II	1
ELT132	Electronic Concepts II	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics II	4
Term 3		
ELT133	Electronic Concepts III	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
	or	
COM053	Technical Report Writing	3
Term 4		
	Approved technical electives*	3
SP111	Fundamentals of Speech	3
	and	
FE205B	Resumes and Job Search Correspondence	1
	or	
COM052	Communication Skills II	3
ELT252	Digital Circuit Applications	3
ELT121	Programming Concepts I	4
PH201	General Physics	4
	or	
PH081	Applied Physics	4
Term 5		
	Approved technical electives*	3-4
ELT253	Microcomputer Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics	4
	or	
PH082	Applied Physics	4
Term 6		
	Approved technical electives*	9-10
ELT191	Advanced Industrial Electronics	4
PSY104	Psychology in the Workplace	4
	or	
PSY101	Psychology of Human Relations	3

***Approved technical electives:**

Fall		
MT110	Microelectronics	3
CH201	Chemistry for Engineers	4
	or	
CH121	College Chemistry	5

Winter

DRF251	Power Transmission Design	3
MTH243	Probability and Statistics I	4

Spring

MT227A	Introduction to Hydraulics/Pneumatics	3
DRF252	Flexible Manufacturing Systems	3
MT223	High Vacuum Technology	3

Advanced Technology Endorsement

If you already have an associate degree in electronics or are a journeyman electronics technician, this endorsement can help you get the skills needed to advance your career. This endorsement can also build on your past experience and help you obtain the skills needed by Oregon's new, high-growth, microelectronics\ semiconductor industry. To be admitted to this program you must be interviewed by the electronics program chair Gary Boyington, (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 listed below 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

CH201	Chemistry for Engineers	4
	or	
CH121	College Chemistry	5
MFG079	Industrial Systems*	3
MT110	Microelectronics*	3
MTH243	Probability and Statistics I	4
	or	
MTH241	Elementary Calculus	4
	or	
MTH251	Differential Calculus (or higher)	5
	or	
MTH231	Discrete Mathematics	4
WR122	English Composition-Logic and Style	3

Term 2

DRF251	Power Transmission Design*	3
PSY104	Psychology in the Workplace	4
	or	
PSY101	Psychology of Human Relations	3
SP113	Fundamentals of Small Group Communication	3
CH202	Chemistry for Engineers	4
	or	
CH122	College Chemistry	5
CS060	Techniques of User Training	2
	or	
BA224	Personnel Management	3
	or	
MFG070	Total Quality Manufacturing	4

Term 3

CH203	Chemistry for Engineers	4
	or	
CH123	College Chemistry	5
	or	
PH203	General Physics	4
DRF252	Flexible Manufacturing Systems*	3
ELT191	Advanced Industrial Electronics*	4
MT223	High Vacuum Technology*	3
MT227A	Pneumatics *	3

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

EMERGENCY MEDICAL TECHNOLOGY/ PARAMEDIC

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

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

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

Students working toward EMT Paramedic certification will complete approximately 300 hours of hospital clinical experience, and 320-500 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. This program has special admission requirements and enrollment limits. To assess the time you will need to complete the program, please call (503) 399-5163.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,250; class fees, \$232; equipment and supplies, \$719. 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)	4
EMT051	Emergency Medical Technician Basic, Part 1	5
EMT075	Introduction to Emergency Medical Services	3
	or	
ES072	Introduction to Emergency Services	4
H120	Medical Terminology/Systems 1	3
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	4
EMT280A	Cooperative Work Experience	1
MTH070	Elementary Algebra (or higher)	4
Term 3		
BI233	Human Anatomy and Physiology (or higher)	4
EMT069	EMT Rescue	3
	or	
FRP056	Fire Service Rescue Practices	4

EMT070	Emergency Communication and Patient Transportation	3
	or	
FRP053	Fire Incident Related Experience	3
PSY101	Psychology of Human Relations	3
	or	
HUM259	Death and Dying	3
	or	
PSY201	General Psychology-Biological Emphasis	3
SP118	Interpersonal Communication in the Health Professions	3
Term 4		
CS101	Introduction to Microcomputer Applications (or higher)	3
EMT096	EMT Paramedic, Part 1	14
Term 5		
EMT097	EMT Paramedic, Part 2	14
	Social science elective	3
	or	
	Humanities/fine arts elective	3
Term 6		
EMT280F	Cooperative Work Experience	6
HPE295	Health and Fitness for Life	3
	Approved electives	3
*Approved electives (3 hours required):		
AH050	Health Care Delivery	1
ASL101	American Sign Language, Term 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 1	3
FRP078	Fire Service Instructor Training 2	3
HE250	Personal Health	3
HE262	Cardiopulmonary Resuscitation Instruction	2
HS101	Addiction Pharmacology and Physiology	4
HS150	Personal Effectiveness for Human Service Workers	3
HS154	Community Resources	3
H101	Medical Law and Ethics	3
H114	CPT IV Coding/Reimbursement	3
H121	Medical Terminology/Systems 2	3
H122	Advanced Topics in the Language of Medicine	3
HUM259	Death and Dying	3
MED064	Introduction to Medical Science	3
MTH243	Probability and Statistics 1	4
PSY101	Psychology of Human Relations	3
PSY201	General Psychology-Biological Emphasis	3
WR227	Technical Writing	3
	Foreign language course	3

E

ENGINEERING

(college transfer)

Oregon State University and Portland State University offer a Bachelor of Science or a Bachelor of Arts in Engineering. OSU offers degrees in Chemical, Civil, Electrical and Computer, 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 26.

	Term		
	1	2	3
First Year	1	2	3
GE101 Engineering Orientation	3		
GE115 Engineering Graphics (not required for Electrical Engineering; CS161 Computer Science I required for Electrical Engineering)	(-4)	3	
GE102 Engineering Computations		3	
CS162 Computer Science II-C Language (required for Electrical Engineering)		4	
GE103 Engineering Computations			3
MTH251, 252 Calculus and Calculus with Analytic Geometry; MTH253 Series Calculus and Linear Algebra	5	5	4
CH201, 202 Chemistry for Engineers	4	4	
Biological Science course*	4		
WR121 English Composition-Exposition		3	
WR227 Technical Writing			3
HPE295 Health and Fitness for Life			3
Arts and Letters/Humanities or Social Science electives*		3	3
Second Year	4	5	6
ENGR211 Statics	4		
ENGR212 Dynamics		4	
ENGR213 Strength of Materials (not required for Electrical Engineers)			(4)
ENGR201, 202 Electrical Fundamentals I and II (ENGR202 not required for Civil Engineering)	4	(4)	
ENGR203 Electric Control Fundamentals (not required for Mechanical or Civil Engineering)			(4)
MTH256 Applied Differential Equations			4
MTH254 Vector Calculus I	4		
MTH255 Vector Calculus II (not required for Mechanical or Civil Engineering)		(4)	
PH211, 212, 213 General Physics for Engineers and Scientists	5	5	5
Arts and Letters/Humanities or Social Science electives and SP111 Fundamentals of Speech or SP112 Fundamentals of Persuasion		0-6	0-6

*To meet four-year college general education requirements.

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

ENGLISH

(college transfer)

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

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 26.

	1	2	3
First Year			
WR121, 122, 123 English Composition (Chemeketa recommends taking all courses although some colleges do not require both WR122 and 123; SOU will accept WR123 or 227 Technical Writing)	3	3	3
Literature sequence (ENG204, 205, 206 Introduction to English Literature and ENG253, 254, 255 Introduction to American Literature, take any four for EOU; choose two sequences from ENG107, 108, 109 World Literature, ENG204, 205, 206, or ENG253, 254, 255 for OSU; PSU recommends ENG204, 205, 206; a minimum of two courses from ENG107, 108, 109, 204, 205, 206, 253, 254, 255 for UO; ENG204, 205, 206, 253 and 254 or 255 for WOU)	3	3	3
First-year Foreign Language (required at EOU, OSU, PSU, UO, and WOU; required for B.A. degree at SOU but not for B.S. degree)	4	4	4
Social Science courses	3	3	3
Science or Math* (SOU requires three courses in math, computer science, statistics or logic for BS degree)	4	4	4
Second Year	4	5	6
ENG201, 202, 203 Introduction to Shakespeare; EOU requires ENG201; OSU requires any one course; UO requires any two; PSU, SOU, and WOU do not require any	3	3	3
Second-year Foreign Language sequence (required at EOU, OSU, PSU, UO, and WOU) or electives	4	4	4
Arts and Letters/Humanities electives*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Additional Social Science or Math/Science courses* Additional courses to meet major requirements or electives (J216 Newswriting and WR241, 242, or 243 Imaginative Writing for EOU)	3-4	3-4	3-4
	3	3	

*To meet four-year college general education requirements.

ENTOMOLOGY

see Biology

FARM BUSINESS MANAGEMENT

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 recordkeeping 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 recordkeeping 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.

FINANCIAL SERVICES

Consider the Financial Services program if you want training to enter financial fields or if you are employed with a financial institution and want to become eligible for advancement or promotion to officer trainee or officer positions. The one-year program offers training for entry-level positions such as teller, proof operator, new accounts teller, accounting clerk, and data entry clerk. The two-year program offers further training for those choosing a career in financial services. There are 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 financial services classes are offered mainly at night; other required classes are offered both days and evenings.

Chemeketa and the American Institute of Banking interchange credits for specified courses. The Financial Services 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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
BT085	Business English 2	3
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

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 FIN280 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 listed below are books, \$820; class fees, \$36;

equipment and supplies, \$45. 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		
BA202	Personal Effectiveness	3
BA214	Business Communications	3
CA122	Keyboard Skillbuilding	3
SP114	Interpersonal Communication	3
	Financial services elective**	4
Term 2		
BA051	Accounting Procedures I	4
	or	
BA211	Financial Accounting I	4
BT061	Electronic Calculators	2
BT128A	Introduction to Records Management	1
BT128B	Introduction to Records Management	1
CA118	Current Office Software***	3
	or	
CA210	Office Micro-Macintosh	3
	or	
CA210W	Office Micro-Windows	3
	Financial services elective**	4
Term 3		
FIN280F	Cooperative Work Experience	6
	or	
	Business elective*	6
BA238	Sales and Persuasion	3
BT086	Personal and Professional Development	3
CA091	Computerized Bookkeeping	3

*Business elective: Choose courses with prefixes BA, BT, FIN, CA, CS, CIS, EC, RE except BA051, BA052, and BA053.

**Financial services elective: Choose courses with FIN prefixes and BA269, BA270, BA273, BA278, BA281, BA282, and BA284.

***Choose three: CA118A-Current Office Software, Operating Systems/Utilities; CA118B-Current Office Software-Worksheets; CA118C-Current Office Software-Database; CA118D-Current Office Software-Internet; CA118E-Current Office Software-Electronic Messaging Systems.

Associate of Applied Science degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,667; class fees, \$36; equipment and supplies, \$180. 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	4
BA202	Personal Effectiveness	3
BA211	Financial Accounting I	4
CA122A	Keyboard Skillbuilding	1
	Financial services elective*	3
Term 2		
BA203	Interpersonal Relations in Business	3
BA206	Business Management Principles	3
BA212	Financial Accounting II	4
EC200	Introduction to Economics	3
	or	
EC201	Introduction to Microeconomics	3
	Psychology elective	3
Term 3		
BA204	Teamwork Dynamics	3
BA213	Managerial Accounting	4
BA214	Business Communications	3

MTH095	Intermediate Algebra	4
	or	
MTH243	Probability and Statistics 1	4
	Financial services elective**	2
Term 4		
BA238	Sales and Persuasion	3
BT061A	Electronic Calculators A	1
SP111	Fundamentals of Speech	3
	Financial services elective**	6
CA118	Current Office Software***	3
	or	
CA210	Office Micro-Macintosh	3
	or	
CA210W	Office Micro-Windows	3
Term 5		
BA222	Financial Management	3
BA223	Principles of Marketing	3
	or	
BA273	Marketing for Bankers	3
EC202	Introduction to Macroeconomics	3
	or	
SP114	Interpersonal Communication	3
	Business elective*	3
	or	
	Financial services elective**	3
	or	
FIN280C	Cooperative Work Experience	3
	Financial services elective**	3
Term 6		
BT086	Personal and Professional Development	3
FIN280C	Cooperative Work Experience	3
	or	
	Business elective*	3
	or	
	Financial services elective**	3
	Computer science elective	3
	Financial services elective**	3
	Humanities/fine arts elective	3

*Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE except BA051, BA052, BA053, BA066, BT084, BT085, and CS101. College transfer students should take BA213 and EC203.

**Financial services electives: Choose courses with FIN prefixes and BA269, BA270, BA273, BA278, BA281, BA282, and BA284.

***Choose three: CA118A-Current Office Software-Operating Systems/Utilities; CA118B-Current Office Software-Worksheets; CA118C-Current Office Software-Database; CA118D-Current Office Software-Internet; CA118E-Current Office Software-Electronic Messaging Systems.

FIRE PROTECTION TECHNOLOGY

The Fire Protection program offers career training in Fire Suppression and Fire Prevention. 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 Board on Public Safety Standards and Training.

Classes in this program are offered in the traditional on-campus classroom setting for students just beginning their fire protection training, and by distance education for fire service professionals active in the field. Distance education may include earning college credit for prior learning such as local training and work experience, individualized instructional contracts, transfer credits from local schools, and independent study courses by modem or corre-

spondence. For information about distance education call (503) 399-5163.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, and then meet with the department program chair. You may need to complete program prerequisite course work. You will be assigned a program advisor to help you develop an individualized program of study. For information call (503) 399-5163.

The Fire Suppression degree option can be coordinated with the Emergency Medical Technician-Paramedic program so that both degrees can be earned in between nine and eleven terms. For information call (503) 399-5163.

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 courses. Each term, students take a Fire Incident Related Experience course which focuses on developing required skills, attitudes, and work habits. On-campus fire suppression students work a 24-hour duty shift each week and respond to actual emergency incidents under the supervision of fire department officers.

This program has special admission requirements and enrollment limits. Applications are accepted every nine months. For additional information, call (503) 399-5163. The program operates year-round, including summer term.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,387; class fees, \$140; equipment and supplies, \$702. 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 100 required credit hours:

Course	Title	Credit Hours
Term 1		
EMT051	Emergency Medical Technician Basic, Part 1	5
FRP050	Introduction to Fire Protection	3
	or	
ES072	Introduction to Emergency Services	4
FRP051	Fire Incident Related Experience	3
FRP064	Hazardous Materials Operations	3
MTH070	Elementary Algebra (or higher)	4
Term 2		
CS101	Introduction to Microcomputer Applications	3
CH111	Chemistry for Fire Science and Emergency Services	5
EMT052	Emergency Medical Technician Basic, Part 2	4
EMT280A	Cooperative Work Experience	1
FRP052	Fire Incident Related Experience	3
WR121	English Composition-Exposition (or higher)	3
Term 3		
FRP053	Fire Incident Related Experience	3
Term 4		
FRP054	Water Supply Operations	3
FRP058	Fire Pump Construction and Operations	3
FRP069	Fire Department Leadership	3
PH111	Physical Science for Fire Science and Emergency Services ..	5
Term 4		
FRP060	Fundamentals of Fire Prevention	3
FRP061	Fire Incident Related Experience	3
FRP066	Building Construction for Fire Suppression	3

HPE295	Health and Fitness for Life	3
	General education elective	3

Term 5

FRP056	Fire Service Rescue Practices	4
FRP062	Fire Incident Related Experience	3
FRP072	Fire Codes and Ordinances 1	3
SP118	Interpersonal Communication in the Health Professions	3
	Approved electives*	3

Term 6

FRP063	Fire Incident Related Experience	3
FRP071	Fire Protection Systems and Extinguishers	3
FRP079	Wildland Urban Interface	3
PSY101	Psychology of Human Relations (or higher)	3
WR227	Technical Writing	3

***Approved Electives**

AH080	Crisis Intervention	3
BA255	Elements of Supervision	3
BI231	Human Anatomy and Physiology	4
BI232	Human Anatomy and Physiology	4
BI233	Human Anatomy and Physiology	4
BLD050	Introduction to Building Inspection	3
BLD051	Building Code I	3
BLD052	Building Code II	3
EMT065	Emergency Medical Technician Intermediate, Part 1	5
EMT066	Emergency Medical Technician Intermediate, Part 2	5
EMT075	Introduction to Emergency Medical Services	3
EMT096	EMT Paramedic, Part 1	3
EMT097	EMT Paramedic, Part 2	3
EMT280F	Cooperative Work Experience	6
FRP059	Major Emergency Strategy and Tactics	3
FRP070	Fire Fighting Tactics and Strategies	3
FRP073	Law for Emergency Services	3
FRP074	Fire Investigation	3
FRP075	Aircraft Crash/Fire Rescue	1
FRP077	Fire Service Instructor Training 1	2
FRP078	Fire Service Instructor Training 2	2
FRP086	Advanced Detection and Protection Systems	3
FRP087	Fire Insurance Fundamentals	3
H120	Medical Terminology/Systems 1	3
HE262	Cardiopulmonary Resuscitation Instruction	2
HUM259	Death and Dying	3

Fire Prevention Option

Graduates of this option may be hired by public fire departments and industrial businesses as fire prevention specialists.

Our Cooperative Work Experience program allows you to apply your knowledge and skills while earning college credit for working in a state or local fire prevention bureau. With the approval of the program chair, you may enroll in FRP280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

In addition to tuition, estimated costs for students who complete the entire program listed below 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 99 credit hours. For information call (503) 399-6241.

Course	Title	Credit Hours
Term 1		
FRP050	Introduction to Fire Protection	3
	or	
ES072	Introduction to Emergency Services	4
FRP060	Fundamentals of Fire Prevention	3
FRP066	Building Construction for Fire Suppression	3
MTH070	Elementary Algebra (or higher)	4
WR121	English Composition-Exposition (or higher)	3

Term 2

CS101	Introduction to Microcomputer Applications	3
DRF102	Print Reading	2
FRP072	Fire Code and Ordinances 1	3
FRP081	Fire Prevention Inspection	3
PH111	Physical Science for Fire Science and Emergency Services	5
PSY101	Psychology of Human Relations (or higher)	3

Term 3

CH111	Chemistry for Fire Science and Emergency Services	5
FRP071	Fire Protection Systems and Extinguishers	3
FRP089	Fire Codes and Ordinances 2	3
SP118	Interpersonal Communications in the Health Professions	3
WR227	Technical Writing	3

Term 4

BLD051	Building Codes 1	3
FRP074	Fire Investigation	3
FRP080	Hazardous Materials for Inspectors	3
FRP280C	Cooperative Work Experience	3
	Approved electives	3

Term 5

BLD052	Building Codes 2	3
FRP073	Law for Emergency Services	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 (six hours required)**

BLD081	Mechanical Codes 1	3
FRP064	Hazardous Materials Operations	3
FRP065	Interface Fire Prevention and Mitigation	2
FRP067	Hazardous Materials Regulations	3
FRP068	Law Enforcement Procedures for Fire Prevention	3
FRP069	Fire Department Leadership	3
FRP070	Fire Fighting Tactics and Strategies	3
FRP077	Fire Service Instructor Training 1	2
FRP078	Fire Services Instructor Training 2	2
FRP079	Wildland Urban Interface	3
FRP083	Incident Report Writing	2
FRP086	Advanced Detection and Protection Systems	3

FOREIGN LANGUAGES

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts degrees in Foreign Languages are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU offers degrees in French, German, and Spanish; PSU offers degrees in French, German, Japanese, Russian, and Spanish; UO offers degrees in Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, and Spanish; and SOU and WOU offer a degree in Spanish. Eastern Oregon University offers a degree in Liberal Studies with a concentration in French, German, or Spanish.

If you complete your second year of course work in the language during your first year at Chemeketa, plan to transfer to a four-year institution for your sophomore year.

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

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

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

	Term		
	1	2	3
First Year			
WR121, WR122 and/or WR123 English Composition*	3	3	(3)
Arts and Letters or Humanities courses*	3	3	3
Mathematics or Science courses*	4	4	4
Foreign Language sequence (French, German, Japanese, Russian, or Spanish)	4	4	4
Social Science* (PSU recommends History and Geography classes of countries in which the language is spoken; UO recommends History)	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*(UO recommends literature, philosophy)	3	3	3
Science*	4	4	4
Electives (OSU requires a Foreign Language sequence in addition to the one chosen for the major. SOU requires CS101 Introduction to Microcomputer Applications)	3	3	3

*To meet four-year college general education requirements.

Note: Prior to graduation, OSU requires graduates to participate in an approved study program or work experience in the country where the language is spoken or complete an alternative prescribed by the faculty.

FOREST RESOURCES TECHNOLOGY

The Forest Resources Technology curriculum includes instruction and field work in the basic knowledge and technical skills required of forest technicians. There are job opportunities in forest management, silviculture, fire prevention and control, and surveying. In addition, there is an increasing demand for technicians in the fields of fish and wildlife, forest recreation, and watershed management. Potential employers include federal and state agencies and private timber or consulting firms.

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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CA121A	Keyboarding A	1
COM051	Communication Skills I	3
HD112	Study Skills	3
MTH070	Elementary Algebra	4

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5210. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimate costs for students who complete the program listed below are books, \$921; class fees, \$179; equipment and supplies, \$355. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 102 credit hours:

Course	Title	Credit Hours
Term 1		
BI131	Environmental Science 1	4
CS101	Introduction to Microcomputer Applications (or higher)	3
FT051	Introduction to Forest Resources	4
FT061	Oregon Tree and Shrub Identification I	3
Term 2		
BI132	Environmental Science 2	4
FT055	Forest Surveying I	3
FT063	Forest Photo Interpretation	3
MTH081	Technical Mathematics I (or higher)	4
WR121	English Composition-Exposition (or higher)	3
Term 3		
BI133	Environmental Science 3	4
FT062	Oregon Tree and Shrub Identification II	3
FT071	Forest Inventory	5
FT280F	Cooperative Work Experience	6
MTH082	Technical Mathematics II (or higher)	4
Term 4		
DRF220	GIS ArcView	2
FT056	Forest Surveying II	5
FT072	Timber Cruising/Log Scaling	5
FT081	Introduction to Silviculture	3
WR227	Technical Writing	3
Term 5		
FE205ABC	Job Search Techniques	3
FT052	Forest Seminar	1
FT065	Forest Insect and Disease Management	3
FT086	Principles of Supervision	3
SOC235	Society and Forestry	3
SP111	Fundamentals of Speech	3
Term 6		
BI251	Principles of Wildlife Conservation	3
ES071	Workplace Safety Skills	1

FT075	Forest Contracts	3
FT088	Forest Policy	4
FT095	Forest Management Problem Solving	4

FORESTRY

(college transfer)

Oregon State University offers degrees in Forest Engineering, Forest Management, Forest Products, and Forest Recreation Resources and Natural Resources. Although these programs are designed as four-year programs of 192 credit hours, Forest Engineering is a 200 credit baccalaureate degree program. Students should plan to transfer after one year at Chemeketa.

The program suggested below is for students wishing to transfer to OSU for Forest Management, Forest Recreation Resources or Natural Resources. Those students wishing to transfer into the Forest Products or Forest Engineering majors should check with a counselor or forestry advisor for appropriate courses.

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
Science sequence or electives* (BI101, 102, 103 General Biology for Natural Resources; BOT201, 202, and ZOO201, 202 for Forest Management)	4	4	4
CH121 and 122 College Chemistry for Forest Management	5	5	
Mathematics (per placement test through MTH241 Elementary Calculus; Forest Management and Forest Recreation Resources also require MTH243, Probability and Statistics I)	4-5	4-5	4-5
WR121 English Composition-Exposition	3		
Writing and/or Speech* (SP112 Fundamentals of Persuasion for Forest Management and Forest Recreation Resources)		3	3
HPE295 Health and Fitness for Life or elective		3	
Electives* (EC201 Introduction to Microeconomics, EC202 Introduction to Macroeconomics for Forest Management; EC201 for Forest Recreation Resources)	(3)	(3)	3

*To meet four-year college general education requirements.

GENERAL STUDIES

(college transfer)

Most Oregon state colleges and universities offer Bachelor of Arts and/or Bachelor of Science degrees in General Studies. The major is listed as General Studies at Portland State University, Liberal Studies at Eastern Oregon University and Oregon State University, Arts and Letters (Humanities) at University of Oregon, and Interdisciplinary Studies at Southern Oregon University and Western Oregon University.

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 26. Chemeketa also offers an Associate of General Studies Degree. Specific requirements are listed on Page 30.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Social Science courses*	3	3	3
Mathematics per placement test* or Science courses*	4-5	4-5	4-5
Arts and Letters/Humanities* (UO requires second year college level Foreign Language)	3-4	3-4	3-4
HPE295 Health and Fitness for Life*	(3)		
Electives (ART204, 205, or 206 Art History and other history courses recommended for UO)	0-3	0-3	0-3
Second Year	4	5	6
Arts and Letters/Humanities*	3	3	3
Social Science courses*	3	3	3
Science sequence or electives*	4	4	4
Electives* or to meet Chemeketa's A.A. degree requirements. (CS101 Introduction to Microcomputer Applications and a Speech course recommended, CS101 required for EOU and SOU; UO recommends PHL201, 202, or 203 Philosophical Problems and Elementary Ethics; WOU requires study from two or more academic areas with a minimum of 27 hours in each)	6	6	6

*To meet four-year college general education requirements.

GEOGRAPHY

(college transfer)

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

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 26.

	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; GEOG106 for OSU; GEOG105, 106 for PSU and UO)	3	3	3
Mathematics per placement test*, ** (MTH111 and 112 Trigonometry for OSU; MTH243 Probability and Statistics I for PSU and SOU; UO has four choices to meet requirements [see UO catalog for courses] MTH111 for WOU)	4-5	4-5	4-5
HPE295 Health and Fitness for Life* or elective Arts and Letters/Humanities electives* (second-year Foreign Language required at UO)	3	3	3
Electives*(Biological science for OSU)	3-4		3-6
Second Year	4	5	6
Social Science electives* (EOU requires EC201 Introduction to Microeconomics and PS201, 202 American Government)	3	3	3
Science electives* (G201, 202 Geology for OSU)	4	4	4
Arts and Letters/Humanities electives*(second-year Foreign Language for UO)	3	3	3
Electives (CS101 Introduction to Microcomputer Applications required for EOU and SOU), CS113 recommended for PSU; CS161, 162 for WOU or second-year Foreign Language)	6	6	6

*To meet four-year college general education requirements.

**A three-term sequence in calculus or MTH241, 242, and 243, (and 242 at UO) is required for graduate work at UO.

GEOLOGY

(college transfer)

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

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
WR121, 122 and/or WR123 or 227*	3	3	(3)
Arts and Letters/Humanities courses*	3	3	3
Mathematics per placement test (EOU requires MTH111, 112; OSU requires Math through MTH252 Integral Calculus; PSU through MTH254 Vector Calculus I; SOU through MTH252 Integral Calculus, MTH253 Series Calculus and Linear Algebra or MTH243 Probability and Statistics 1; UO through MTH253)	4-5	4-5	4-5
G201, 202, 203 Geology	4	4	4
Social Science*	3	3	3-6
Second Year	4	5	6
PH201, 202, 203 General Physics or PH211, 212, 213 General Physics for Engineers and Scientists (OSU recommends PH211, 212, 213)	4	4	4
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry also accepted at OSU and UO)	5	5	5
HPE295 Health and Fitness for Life* or elective Arts and Letters/Humanities or Social Science electives*	3	3	3
Electives (OSU requires four credits of a biological science and computer science including Internet; CCC recommends a CS course; CS133F FORTRAN IV recommended for UO)	3-4	3-4	3-4

*To meet four-year college general education requirements.

Note: UO recommends that students obtain a graduate degree for most professional positions.

HEALTH, HEALTH EDUCATION

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health, Health Education and/or Public Health Education are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, and Western Oregon University. EOU's degree is in Physical Education and Health. OSU offers options in Environmental Health, Health Promotion and Education, and Health Care Administration; PSU offers Health Education. SOU offers a Health and Physical Education degree, WOU 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 WOU. 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 26.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 or 227 English Composition or WR227 Technical Writing* (WR227 for Environmental Health and Occupational Safety at OSU and SP111 Fundamentals of Speech for Occupational Safety at OSU)	3	3	(3)
BI231, 232, 233 Anatomy and Physiology for EOU, OSU and SOU except Health Care Administration at OSU (BI101, 102, 103 General Biology prerequisite for several required courses at WOU and are required for Environmental Health at OSU; BI101, 102 required for Health Promotion and Education at OSU)	4	4	4
Mathematics per placement test* (MTH111 College Algebra or MTH211, 212, or 213 Foundations for Elementary Mathematics for EOU; Environmental Health and Health Care Administration at OSU require MTH111 and MTH243 Probability and Statistics I; MTH111 for Health and Fitness at PSU; Occupational Safety and Environmental Health at OSU requires MTH111 and MTH241)	4	4	4
HPE295 Health and Fitness for Life* (required for major at EOU, SOU, and PSU)	3		

HE250 Personal Health (required at SOU and WOU)			3
Arts and Letters/Humanities*	3	3	3
Electives** (BI234 Microbiology for OSU and WOU and for Community Health at PSU; BA101 Business Environment and BA226 Business Law for Occupational Safety at OSU; EOU requires one year of chemistry as prerequisite for BI231, 232, 233; SOU and WOU require FN225 Nutrition)			3
Second Year	4	5	6
CH121, 122, 123 College Chemistry (not required at SOU and WOU or for Health Care Administration at OSU, only CH121 required for Health Promotion and Education at OSU)	5	5	5
Social Science courses to meet four-year college general education or major requirements (Some OSU options require EC201, 202 Introduction to Microeconomics and Macroeconomics and/or PSY201, 202 General Psychology and/or SOC204 General Sociology Introduction; WO requires PSY201, 202 as prerequisites for required courses)	6	6	6
Speech class* (SP112 Fundamentals of Persuasion required for Occupational Safety at OSU; any Speech class for WOU)			3
Electives* to meet four-year college general education or major requirements (Some OSU options require FN225 Nutrition and CS101 Introduction to Microcomputer Applications; Occupational Safety at OSU requires PH201, 202, 203 General Physics; and Environmental Health requires PH201; CS101 recommended for EOU for some options; PE131 Introduction to Health, PE and Recreation for WOU)	6	3-6	6

*To meet four-year college general education requirements.

**See OSU catalog for Health Care Administration requirement.

HEALTH SERVICES MANAGEMENT

The Health Services Management program offers short-term, one-year, and two-year training for students on a career ladder in health care delivery. You may enroll in a two-term program to become a claims analyst/medical reception and biller. 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.

Short-Term Program

Claims Analyst/Medical Reception and Billing

The Claims Analyst/Medical Reception and Billing 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 patient scheduling, medical office software, 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, \$1,600 (\$800 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 32 required credit hours:

Course	Title	Credit Hours
Term 1		
H110	Health Information Systems Procedures 1	4
H114	CPT IV Coding/Reimbursement	3
H120	Medical Terminology/Systems 1	3
CA121	Keyboarding	3
CA210	Office Micro-Macintosh	3
Term 2		
H102	Professional Development A	1
H112	Health Information Systems Procedures 2	5
H115	ICD-9-CM Coding/Reimbursement	3
H121	Medical Terminology/Systems 2	3
H280D	Cooperative Work Experience	4

One-Year Program

Health Information Technology

As a graduate of the Health Information Technology 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 CA210 Office Micro-Macintosh 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 Student Records (Admissions) Office at (503) 399-5006.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

AH055	Health Occupations Overview	4
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$525; class fees, \$85; 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 48 required credit hours:

Course	Title	Credit Hours
Term 1		
BI071	Body Structure and Function I	3
H101	Medical Law and Ethics	3
H102	Professional Development A	1
H110	Health Information Systems Procedures 1	4
H120	Medical Terminology/Systems 1	3
WR121	English Composition-Exposition (or higher)	3
Term 2		
BI072	Body Structure and Function II	3
H103	Professional Development B	1
H114	CPT-IV Coding/Reimbursement	3
H112	Health Information Systems Procedures 2	5
H116	Introduction to Allied Health Data	3
H121	Medical Terminology/Systems 2	3
Term 3		
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	5
H131	Medical Practice Seminar	1

Two-Year Programs

Health Services Management

As a graduate of this two-year program, you will be prepared for a variety of middle-management jobs in the health care field. You may be employed by hospitals, state agencies, medical clinics, or other health care organizations.

The Health Services Management program curriculum focuses on four areas: applied science, the U.S. health care delivery system, accounting, business, and health management and general education courses.

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

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

AH055	Health Occupations Overview	4
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire second year listed below are books, \$1,400; class fees, \$135; equipment and supplies, \$250. 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 97 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		
BI071	Body Structure and Function I	3
H101	Medical Law and Ethics	3
H110	Health Information Systems Procedures 1	4
H120	Medical Terminology/Systems 1	3
WR121	English Composition-Exposition (or higher)	3
Term 2		
BI072	Body Structure and Function II	3
H112	Health Information Systems Procedures 2	5
H114	CPT-IV Coding/Reimbursement	3
H116	Introduction to Allied Health Data	3
H121	Medical Terminology/Systems 2	3
Term 3		
BA206	Business Management Principles	3
H115	ICD-9-CM Coding/Reimbursement	3
H122	Advanced Topics in the Language of Medicine	3
MTH070	Elementary Algebra (or higher)	4
WR227	Technical Writing	3
Term 4		
BA202	Personal Effectiveness	3
H210	Introduction to Health Services	3
H250	Health Services Management I	3
MTH095	Intermediate Algebra (or higher)	4
BA211	Financial Accounting I	4
	Social science elective (200 or higher)	3
Term 5		
CS103	Microcomputer Skills Problem Solving (or higher)	3
FE205A	Job Search Preparation	1
FE205B	Resumes and Job Search Correspondence	1
FE205C	Interviewing for Success	1
H251	Health Services Management II	3
	Communications elective (100 or higher)	3
	Humanities/fine arts elective (100 or higher)	3
	Business, Economic or Social science elective (200 or higher)	3

Term 6

BA224	Personnel Management	3
H216	Health Care Data and Statistics	3
H230	Health Services Externship	6
H231	Health Services Seminar	1
	General education elective (100 or higher) (HPE295 recommended)	3

Medical Transcription

The two-year medical transcription 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 Student Records (Admissions) Office at (503) 399-5006.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

AH055	Health Occupations Overview	4
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
WR090	Fundamentals of Writing	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,400; class fees, \$155; equipment and supplies, \$175. 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		
BI071	Body Structure and Function I	3
	or	
BI231	Human Anatomy and Physiology	4
H101	Medical Law and Ethics	3
H102	Professional Development A	1
H110	Health Information Systems Procedures 1	4
H120	Medical Terminology/Systems 1	3
BT085	Business English 2	3
Term 2		
BI072	Body Structure and Function II	3
	or	
BI232	HUMAN Anatomy and Physiology	4

H103	Professional Development B	1
H112	Health Information Systems Procedures 2	5
H116	Introduction to Allied Health Data	3
H121	Medical Terminology/Systems 2	3
H140	Medical Transcription	3
Term 3		
BA214	Business Communications	3
H104	Professional Development C	1
H122	Advanced Topics in the Language of Medicine	3
H141	Advanced Medical Transcription 1	3
BT099	Proofreading/Editing	3
CA201X	Word Processing Procedures 1 (or higher)	3
Term 4		
H142	Advanced Medical Transcription 2	3
H210	Introduction to Health Services Organization	3
H250	Health Services Management I	3
MTH070	Elementary Algebra (or higher) or	4
BA211	Financial Accounting I*	4
CA202X	Word Processing Procedures 2 (or higher)	3
Term 5		
BA202	Personal Effectiveness	3
H143	Advanced Medical Transcription 3	3
H251	Health Services Management II	3
SP114	Interpersonal Communication Humanities/fine arts elective	3
Term 6		
H144	Medical Transcription Seminar	1
H216	Health Care Data and Statistics	3
H280L	Cooperative Work Experience	12

*With MTH060 or higher.

HISTORY

(college transfer)

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

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 26.

		Term		
		1	2	3
First Year				
WR121, 122 and/or 123 English Composition		3	3	(3)
HST110, 111, 112 World History		3	3	3
Science courses*		4	4	4
Arts and Letters/Humanities courses* (PSU and UO require Foreign Language and recommended by OSU and SOU)		3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective		3		
Electives (EOU requires CS101 Introduction to Microcomputer Applications or CA201P Word Processing Procedures 1; SOU and WOU require CS101)			3	6
Second Year		4	5	6
HST201, 202, 203 History of the United States		3	3	3
Mathematics per placement test* (WOU requires a minimum of one math beyond MTH105 Introduction to Contemporary Math or second-year foreign language)		4	4-5	
Arts and Letters/Humanities* (SOU recommends second-year Foreign Language for graduate work; PSU and UO require second-year foreign language)		3-4	3-4	3-4
Social Science courses other than history*		3	3	3
Additional Arts and Letters/ Humanities or Social Sciences or electives* WOU requires a minimum of one additional computer science class beyond CS101 or second-year Foreign Language		3	3	6

*To meet four-year college general education requirements.

HOME ECONOMICS

(college transfer)

Oregon State University offers a Bachelor of Science degree in Home Economics. Students major in Apparel, Interiors, Housing, and Merchandising or Human Development and Family Science; or Nutrition and Food Management. There are several options for each major. It is essential that you work closely with Chemeketa's home economics advisor or an advisor from OSU to ensure 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 26.

		Term		
		1	2	3
First Year				
WR121 English Composition-Exposition		3		
WR122, 123, 227, or BA214 Business Communications			3	3

Mathematics per placement (through MTH105 Introduction to Contemporary Mathematics or MTH111 College Algebra, depending on major; some majors require higher math)	(4)	4-5	3
HPE295 Health and Fitness for Life			3
Biological and Physical Science** (Chemistry and/or biology required in some majors)	4-5	4-5	4-5
Social Science** (PSY 201, 202 General Psychology and HST111, 112 World History required in most options or EC201, 202, Introduction to Microeconomics and Macroeconomics)	6	3	6
Literature and Arts elective* (ART115 Basic Design required in most majors)	3		
SP112 Fundamentals of Persuasion		3	
Second Year	4	5	6

Additional required courses can be taken at Chemeketa during a second year. These vary considerably, depending upon option chosen. It is important to work carefully with a home economics advisor to meet OSU's general education (Baccalaureate core) requirements, major requirements, and option requirements.

*To meet OSU general education requirements.

**Check OSU catalog for requirements in your major and option.

HOSPITALITY AND TOURISM MANAGEMENT

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; meeting and convention management; and casino management. Six terms of foreign language is required. 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.

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.

In addition to tuition, estimated costs for students who complete the entire program listed below 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 37 required credit hours:

Course	Title	Credit Hours
Term 1		
HSM071	Travel Agency Sales and Marketing	3
HTM104	Introduction to the Travel and Tourism Industry	3
HTM114	Travel Destination Geography 1	3
HTM117	Travel Agency Basics	3
Term 2		
HSM072	Travel Agency Management	3
HSM074	Computer Reservation Systems	3
HTM115	Travel Destination Geography 2	3
SP113	Fundamentals of Small Group Communication	3
	or	
SP114	Interpersonal Communication	3
	or	
SP115	Introduction to Intercultural Communication	3
Term 3		
FE205A	Job Search Preparation	1
HSM280I	Cooperative Work Experience	9
HTM116	Travel Destination Geography 3	3

Hospitality and Tourism Management

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5296. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,494; 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	Introduction to the Hospitality Industry	3
HTM104	Introduction to the Travel and Tourism Industry	3
WR121	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-Biological Emphasis (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
	Foreign language sequence	4
Term 4		
HTM280I	Cooperative Work Experience	9
Term 5		
BA211	Financial Accounting I	4
CA208	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
*Approved Electives:		
HTM108	Introduction to the Leisure and Recreation Industry	3
HTM109	Front Desk Operations	3
HTM111	Cultural Heritage Tourism	3
HTM112	Bed and Breakfast Operations	3
HTM117	Travel Agency Basics	3
HTM119	Introduction to Casino Management	3
HTM126	Meeting and Event Planning	3

HOTEL, RESTAURANT, AND RESORT MANAGEMENT

(college transfer)

Southern Oregon University offers a Bachelor's degree in Business Administration with a concentration in Hotel, Restaurant, and Resort Management. An agreement has been made with SOU 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 University. 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 26.

Course	Title	Credit Hours
Term 1		
CS101	Introduction to Microcomputer Applications	3
ENG104	Introduction to Fiction	3
HTM100	Introduction to Hospitality Industry	3
WR121	English Composition-Exposition (or higher)	3
	Science elective with lab	4
Term 2		
ENG105	Introduction to Dramatic Literature	3
HTM105	Introduction to Food Service Industry	3
MTH111	College Algebra	5
WR122	English Composition-Logic and Style	3
	Science elective with lab	4
Term 3		
ENG106	Introduction to Poetry	3
HTM106	Introduction to the Lodging Industry	3
MTH243	Probability and Statistics 1	4
WR123	English Composition-Research Writing	3
	or	
WR227	Technical Writing	3
	Science elective with lab	4
Term 4		
BA211	Financial Accounting	4
EC201	Introduction to Microeconomics	3
HTM104	Introduction to Travel and Tourism Industry	3
PSY201	General Psychology-Biological Emphasis	3
WR241	Imaginative Writing	3
Term 5		
BA212	Financial Accounting II	4
BA214	Business Communications	3
EC202	Introduction to Macroeconomics	3
HPE295	Health and Fitness for Life	3
PSY202	General Psychology-Cognitive Emphasis	3
	or	
	History elective	3
Term 6		
BA213	Managerial Accounting	4
EC203	Applications to Economics	3
PSY203	General Psychology-Clinical/Social Emphasis	3
SP111	Fundamentals of Speech	3
	or	
SP112	Fundamentals of Persuasion	3

HUMAN SERVICES

The Human Services program offers training for entry-level positions in social service agencies. It is a two-year program which combines academic course work with five quarters of supervised field work in two different sites. Students specialize in one of two options: Addiction Studies or Social Services.

Post BA/BS students are also eligible to complete the Addiction Counselor Certification Preparation program and receive a one-year certificate.

This program has special admissions requirements and enrollment limits. For additional information, contact the Student Records (Admissions) Office at (503) 399-5006.

Admission to the certificate program is assessed individually by the Human Services staff.

WR121 and all Human Services courses used to meet certificate or 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.

Addiction Studies Option

The Addiction Studies 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, case management, and basic and group counseling skills.

Alert!

To apply for the two-year program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5048. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$895; class fees, \$20; equipment and supplies, \$112; 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 101 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	Addiction Pharmacology and Physiology	4
HS150	Personal Effectiveness for Human Service Workers	3
HS154	Community Resources	3
HS170	Introduction to Practicum	3
WR121	English Composition-Exposition (or higher)	3
Term 2		
HS104	Terminology for Human Service Workers	1
HS152	Stress Management	1
HS260	Group Dynamics	3
HS284A- HS288A	Practicum: Human Services	4-8
PSY201	General Psychology-Biological Emphasis	3
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking	3

Term 3

HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory/Techniques	3
HS201	Family Addiction	3
HS284A- HS288A	Practicum: Human Services	4-8
PSY202	General Psychology-Cognitive Emphasis	3
	or	
PSY203	General Psychology-Clinical/Social Emphasis	3
	or	
PSY239	Introduction to Abnormal Behavior	3

Term 4

CS101	Introduction to Microcomputer Applications (or higher)	3
HS202	Foundations for Addiction Professionals	4
HS284A- HS288A	Practicum: Human Services	4-8
MTH060	Introductory Algebra (or higher)	4
SOC204	General Sociology-Introduction	3

Term 5

FE205A	Job Search Preparation	1
	or	
FE205B	Resumes and Job Search Correspondence	1
	or	
FE205C	Interviewing for Success	1
HS203	Practice of Addiction Treatment	4
HS284A- HS288A	Practicum: Human Services	4-8
SOC205	General Sociology-Institutions	3
	or	
SOC206	General Sociology-Social Problems	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3

Term 6

HS204	Readiness for Addiction Professionals	4
HS267	Systems Strategies	3
HS284A- HS288A	Practicum: Human Services	4-8
PSY237	Life Span Development	3
SSC150	Ethnic Cultures of the Northwest United States	3
	or	
SSC206	Dealing With Diversity	3

Addiction Counselor Certification Preparation

This one-year certificate program is designed for individuals with a baccalaureate or master's degree seeking the necessary course work and practical experience to enable them to compete for employment in the field of addiction treatment. This certificate prepares students to take the Oregon Level I Certified Alcohol and Drug Counselors (CADC) exam.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$450; class fees, \$20; equipment and supplies, \$60; measles vaccine, \$10. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 43 required credit hours:

Course	Title	Credit Hours
Term 1		
HS101	Addiction Pharmacology and Physiology	4
HS150	Personal Effectiveness for Human Service Workers	3
HS202	Foundations for Addiction Professionals	4
HS285A	Practicum: Human Services	5

Term 2		
HE210	H.I.V., A.I.D.S. and other S.T.D.'s	1
HS103	Ethics for Human Service Workers	2
HS203	Practice of Addiction Treatment	4
HS260	Group Dynamics	3
HS285A	Practicum: Human Services	5
Term 3		
HS201	Family Addiction	3
HS204	Readiness for Addiction Professionals	4
HS285A	Practicum: Human Services	5

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.

Alert!

Program requirements have changed. See the "Alert" under the "Addiction Studies Option" heading on page 84 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$975; class fees, \$18; equipment and supplies, \$115; measles vaccine, \$12. 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 101 credit hours. Twenty-five credits of practicum are required, at least 15 of which must be in a social service placement.

Course	Title	Credit Hours
Term 1		
HS150	Personal Effectiveness for Human Service Workers	3
HS154	Community Resources	3
HS170	Introduction to Practicum	3
PSY201	General Psychology-Biological Emphasis	3
WR121	English Composition-Exposition (or higher)	3
Term 2		
HS104	Terminology for Human Service Workers	1
HS260	Group Dynamics	3
HS284S-		
HS288S	Practicum: Human Services	4-8
PSY202	General Psychology-Cognitive Emphasis	3
	or	
PSY203	General Psychology-Clinical/Social Emphasis	3
	or	
PSY239	Introduction to Abnormal Behavior	3
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking	3
Term 3		
HS101	Addiction Pharmacology and Physiology	4
HS155	Interviewing Theory and Techniques	3
HS103	Ethics for Human Service Workers	2
HS284S-		
HS288S	Practicum: Human Services	4-8
PSY237	Life Span Development	3
Term 4		
CS101	Introduction to Microcomputer Applications (or higher)	3
HS152	Stress Management	1

HS220	Aging and Society	3
	or	
HS221	Physical Aging	3
	or	
HS222	Aging and Behavior	3
HS265	Casework Interviewing	3
HS284S-		
HS288S	Practicum: Human Services	4-8
SOC204	General Sociology-Introduction	3
Term 5		
HS266	Case Management	3
HS284S-		
HS288S	Practicum: Human Services	4-8
MTH060	Introductory Algebra (or higher)	4
SOC205	General Sociology-Institutions	3
	or	
SOC206	General Sociology-Social Problems	3
	Social services elective*	3
Term 6		
FE205A	Job Search Preparation	1
	or	
FE205B	Resumes and Job Search Correspondence	1
	or	
FE205C	Interviewing for Success	1
HS267	Systems Strategies	3
HS284S-		
HS288S	Practicum: Human Services	4-8
SSC150	Ethnic Cultures of the Northwest United States	3
	or	
SSC206	Dealing with Diversity	3
	Social services elective*	3
	Humanities/fine arts elective	3
	or	
	Science/applied science elective	3

*Social services electives (6 hours total):

Any class in human services, anthropology, history, political science, psychology numbered 200 or above, sociology, women's studies, criminal justice, early childhood education, education certificate, sign language, or credit for prior learning.

I NDUSTRIAL TECHNOLOGY AND APPRENTICESHIP

Industrial Technology

Chemeketa grants an Associate of Applied Science degree in industrial technology. Journey-level men 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 journey-level 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 journey-level status, 47 credit hours for trade-related training, and seven credit hours of Cooperative Work Experience.

If you have questions about the requirements, call (503) 399-5255 or (503) 399-5210. Failure to be assessed may delay your entry into program classes.

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 recognized by the Oregon Bureau of Labor and Industries (BOLI). It combines full-time, on-the-job work experience with trade-related theoretical instruction.

The instruction at Chemeketa is for people working at particular trades who need to improve their knowledge of trade theory. Students generally are apprentices who are registered with the Oregon Bureau of Labor and Industries, journey-level men and women who wish to upgrade their skills and knowledge, pre-apprenticeship students, and others as approved by local committees.

Chemeketa has apprenticeship classes for plumbers, carpenters, electricians, sheet metal workers, machinists, welders, and other trades, as required by local committees.

I NTEGRATED CIRCUIT MASK DESIGN

Graduates of the Integrated Circuit (IC) Mask Design program are employed by firms who design and manufacture the subminiature electronic circuits that are at the nucleus of all electronic and computerized equipment. Integrated circuit mask designers use computer-aided-design systems to design the templates or masks that are used to manufacture microelectronic circuits.

The IC Mask Design program includes courses in computer-aided-design (CAD), CMOS layout, electronics, computer programming, computer operating systems, and the semiconductor manufacturing process, as well as the communication and human relation skills needed for career advancement. Graduates of this program may also be employed as electronic circuit board designers and layout specialists.

If you have any questions about this program or the registration process, call Advising and Counseling at (503) 399-5120 or (503) 399-5248. You may also meet with the Integrated Circuit Mask Design program faculty or tour the facilities. Call (503) 589-7626 to see when the next advising session is scheduled.

Students entering this program must have an Intel-compatible computer.

To successfully complete the IC Mask Design program, you must earn a grade of C or better in all classes.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

CA121A	Keyboarding A	1
CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5248. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1400; class fee, \$290; equipment and supplies \$87; Intel-compatible computer (Pentium or better), \$1200. 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 hours.

Term 1

DRF101	Basic CAD for Electronics*	2
	or	
DRF136	Advanced AutoCAD	3
ELT111	Electronics Orientation	1
ELT113	Electronic Problems I	1
ELT131	Electronic Concepts I	4
ES071	Work Place Safety Skills	1
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics I	4
WR121	English Composition-Exposition (or higher)	3
	or	
COM051	Communication Skills I	3

Term 2

ELT114	Electronic Problems II	1
ELT132	Electronic Concepts II	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry	5
	or	
MTH082	Technical Mathematics II	4

Term 3

ELT133	Electronic Concepts III	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
	or	
COM053	Technical Report Writing	3

Term 4

ELT121	Programming Concepts I	4
ELT252	Digital Circuit Applications	3
MT110	Microelectronics	3
PH201	General Physics	4
	or	
PH081	Applied Physics	4
SP111	Fundamentals of Speech	3
	and	
FE205B	Resumes and Job Search Correspondence	1
	or	
COM052	Communications Skills II	3

Term 5

DRF201	CMOS I	4
ELT253	Microcomputer Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics	4
	or	
PH082	Applied Physics	4

Term 6

CS140U	UNIX	3
DRF202	CMOS II	3

ELT122	Programming Concepts II	4
	or	
	Approved programming elective**	3-4
PSY104	Psychology in the Workplace	4
	or	
PSY101	Psychology of Human Relations	3
WR122	English Composition-Logic and Style	3
	or	
BA204	Teamwork Dynamics	3
	or	
SP113	Fundamentals of Small Group Communications	3
	or	
MTH251	Differential Calculus	5

* Other approved course substitutions:

DRF072 or higher may be substituted for DRF101

**Approved programming electives: see program chair.

JOURNALISM

(college transfer)

The University of Oregon offers Bachelor of Arts and Bachelor of Science degrees in Journalism. Southern Oregon University offers Bachelor of Arts and Bachelor of Science degrees in Communication: Journalism with concentration in News-Editorial, Public Relations, Photojournalism, 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 26.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition* (WR227 Technical Writing for SOU)	3	3	
Humanities courses* (SOU recommends two years of Literature and Foreign Language; UO requires 16 credits in Literature)	3	3	3
Social Science courses (HST110, 111, 112 History of World Civilization or HST201, 202, 203 History of the United States recommended at SOU, required at UO)	3	3	3

Mathematics per placement test*	(4)	5	(4)
J224 Introduction to Journalism for UO	3		
Electives (J216 Newswriting required and CA205 Desktop Publishing 1-PageMaker recommended for SOU; UO requires additional credits from their Arts and Letters requirements)**	3	3	6

Second Year **4 5 6**

Social Science or other elective courses* (SOU recommends one year of Political Science and one year of Economics; UO requires EC201, 202, 203 Introduction to Microeconomics, Introduction to Macroeconomics, and Application to Economic Issues.)	3-4	3-4	3-4
Humanities or Social Science courses* (second-year Foreign Language or Literature recommended for SOU; Literature for UO)	3	3	3
Science courses*	4	4	4
Electives (Check SOU for electives for each option; ART261 General Photography and SP115 Introduction to Intercultural Communication meet requirements in most options; choose courses for general education requirement at UO)	6	6	6

*To meet four-year college general education requirements.

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

MANAGEMENT

As a graduate of Chemeketa's Management program, you may begin as 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.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
BT085	Business English 2	3
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

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 listed below are books, \$1,312; 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 99 credit hours:

Course	Title	Credit Hours
Term 1		
BA101	Business Environment	4
BA202	Personal Effectiveness	3
BA211	Financial Accounting I*	4
MTH062	Business Applications Using Mathematics (or higher)	4
	Social science elective***	3
Term 2		
BA203	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
CS125E	Worksheets-Excel	4
	or	
CS125Q	Worksheets-Quattro	4
	or	
CS125SS	Lotus I-Worksheets	4
Term 4		
BA215	Cost Accounting	3
BA223	Principles of Marketing	3
BA226	Business Law I	3
EC200	Introduction to Economics (or higher)	3
FE205C	Interviewing for Success	1
	Humanities/fine arts elective	3
Term 5		
BA222	Financial Management	3
BA227	Business Law II	3
BA272	Information Technology in Business	4
BA277	Business Ethics	3
	or	
WR227	Technical Writing	3
SP111	Fundamentals of Speech	3
	Business elective****	3
	(BA280 Cooperative Work Experience recommended)	3
Term 6		
BA224	Personnel Management	3
	Business elective****	3
	(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 BA051 requires concurrent enrollment in MTH070 or higher math placement.

**Placement in math and English determined by testing. College transfer classes may be substituted. WR123 may be substituted for BA214.

***Social science electives: Choose from PSY100, 101, 201, 202, 203; SOC204, 205, 206; HST110, 111, 112, 201, 202, 203.

****Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE except BT084, BT085, BA051, BA052, and BA053.

*****Choose from CS133VB, CS133C, CS133E, CS133F, CS133R, CS133U, CS135SS, or CA201X.

MANUFACTURING ENGINEERING TECHNOLOGIES

The Manufacturing Engineering Technologies program offers training in manufacturing skills. Employees may become involved in research and development; inspection and quality control; planning, managing, and producing prototypes; performing routine

manufacturing; or completing simple to complex repairs. You may enroll in the three-term Manufacturing Operations option or the six-term Manufacturing Technologies option. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for on-the-job work you do relating to your program. With the approval of the program chair, you may enroll in MFG280 Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

MTH020	Basic Mathematics	3
SKD051	Studying for College	3
WR040	Writing Skills	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5210. Failure to be assessed may delay your entry into program classes.

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 listed below are books, \$601; class fees, \$190; equipment and supplies, \$200. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 48 required credit hours:

Course	Title	Credit Hours
Term 1		
MFG058	Machining Fundamentals	3
MFG059	Industrial Safety Seminar	1
MFG061A	Lab Practice-A	1
MFG063	Interpreting Engineering Drawings	4
MFG068	Metrology	3
MFG130	CNC Machine Setup/Operation	2
MTH052	Introduction to Algebra and Geometry (or higher)	3
Term 2		
MFG064	Milling Machine Process	3
MFG065	Lathe Fundamentals	3
MFG069	CMM Operations/QA Applications	4
MFG135	Programming CNC Mills	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3

Term 3		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
MFG066	Lathe Processes	3
MFG070	Total Quality Manufacturing	3
MFG076	Manufacturing Materials and Cutting Tools	3
MFG140	Programming CNC Lathes	3

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; interpretation of engineering drawings and measuring practices; inspection and coordinate measuring machine practices.

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 listed below are books, \$460; class fees, \$165; equipment and supplies, \$180. 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		
MFG058	Machining Fundamentals	3
MFG059	Industrial Safety Seminar	1
MFG061A	Lab Practice-A	1
MFG063	Interpreting Engineering Drawings	4
MFG068	Metrolgy	3
MFG130	CNC Machine Setup/Operation	2
MTH052	Introduction to Algebra and Geometry (or higher)	3
Term 2		
MFG064	Milling Machine Process	3
MFG065	Lathe Fundamentals	3
MFG069	CMM Operations/QA Applications	4
MFG135	Programming CNC Mills	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3
Term 3		
COM051	Communication Skills I	3
	or	
WR121	English Composition-Exposition (or higher)	3
MFG066	Lathe Processes	3
MFG070	Total Quality Manufacturing	3
MFG076	Manufacturing Materials and Cutting Tools	3
MFG140	Programming CNC Lathes	3
Term 4		
MFG071	CAD for CAM	3
MFG079	Industrial Systems	3
MFG081A	Manufacturing Process Planning	2

MFG081B	Manufacturing Process Planning Lab*	2
MFG230	CAM Applications/Mills	3
MT100	Electronic Fundamentals for Non-majors	4

Term 5

COM053	Communication Skills I	3
	or	
WR227	Technical Writing	3
MFG090A	Fixture Design and Manufacturing	2
MFG090B	Fixture Design and Manufacturing-Lab*	2
MFG235	CAM Applications/Lathes	3
PH060	Applied Physical Science (or higher)	3
	Psychology elective	3

Term 6

MFG061B	Lab Practice-B	2
	or	
MFG280C	Cooperative Work Experience	3
MFG083A	Production/Assembly/Control Methods	2
MFG083B	Production/Assembly/Control Methods-Lab*	2
MFG088	Hydraulics	3
MFG240	CAD/CAM Integrations	4
WLD077	Welding Process	4

*Courses must be taken concurrently with corresponding "A" class. Approved CWE course may be substituted, contact instructor for details.

MANUFACTURING ENGINEERING TECHNOLOGIES

(transfer to OIT)

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 OIT to learn of any possible changes in the program.

Course	Title	Credit Hours
Term 1		
MFG058	Machining Fundamentals	3
MFG059	Industrial Safety Seminar	1
MFG061A	Lab Practice-A	1
MFG063	Interpreting Engineering Drawings	4

MFG068	Metrology	3
MFG130	CNC Machine Setup/Operation	2
WR121	English Composition-Exposition (or higher)	3
Term 2		
MFG064	Milling Machine Processes	3
MFG065	Lathe Fundamentals	3
MFG069	CMM Operations/QA Applications	4
MFG135	Programming CNC Mills	3
MTH111	College Algebra	4
Term 3		
MFG066	Lathe Processes	3
MFG070	Total Quality Manufacturing	3
MFG076	Manufacturing Materials and Cutting Tools	3
MFG140	Programming CNC Lathes	3
MTH112	Trigonometry	4
Term 4		
MFG054	Geometric Dimensioning/Tolerancing	2
MFG071	CAD for CAM	3
MFG081A	Manufacturing Process Planning	2
MFG081B	Manufacturing Process Planning-Lab	2
MFG230	CAM Applications/Mills	3
PH201	General Physics	4
Term 5		
MFG061B	Lab Practice-B	2
MFG090A	Fixture Design and Manufacturing	2
MFG090B	Fixture Design and Manufacture-Lab	2
MFG235	CAM Applications/Lathes	3
PH202	General Physics	4
WR122	English Composition-Logic and Style	3
Term 6		
CH104	Chemistry for Allied Health	5
MFG083A	Production/Assembly/Control Methods	2
MFG083B	Production/Assembly/Control Methods-Lab	2
MFG088	Hydraulics	3
MFG240	CAD/CAM Integrations	4
WLD077	Welding Processes	4
WR227	Technical Writing	3
Additional classes that transfer to OIT:		
CS101	Introduction to Microcomputer Applications	3
ENGR211	Statics	4
ENGR213	Strength of Materials	4
MTH243	Probability and Statistics 1	4
MTH251	Differential Calculus	5
MTH252	Integral Calculus	5
SP111	Fundamentals of Speech	3

MATHEMATICS

(college transfer)

Oregon state system of higher education universities offering Bachelor of Arts and/or Bachelor of Science degrees in Mathematics are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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 26.

	Term		
	1	2	3
First Year			
WR121, 122 and/or 123, English Composition and/or WR227 Technical Writing*	3	3	(3)
Mathematics per placement test* MTH251, 252, 254 Calculus required (EOU, OSU, SOU, WOU also requires 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.	4-5	4-5	4-5
Arts and Letters/Humanities courses** (UO requires two second-year level languages from German, French, or Russian for admission to Ph.D. program)	3-4	3-4	3-4
Computer Science courses or electives (EOU requires at least 7 hours of Computer Science; CS161 Computer Science I or other higher level language for OSU; CS161 or CS133F FORTRAN IV for PSU; CS161 and 162 Computer Science II for WOU)	4	4	4
HPE295 Health and Fitness for Life* or elective			3
Second Year	4	5	6
Mathematics through MTH255 Vector Calculus II and MTH253 Series and Linear Algebra (OSU also requires MTH256; PSU and UO require MTH256 and MTH231 Discrete Mathematics; MTH255 not required at PSU, UO, and WOU; recommended for EOU and SOU)	4	(4)	(4)
Science courses* (OSU requires PH211 General Physics for Engineers and Scientists and approved courses in the physical or biological sciences for all options and PH212, 213 for Applied Mathematics option)	4	4	4
Social Science courses*	3	3	3
Arts and Letters/Humanities or Social Science electives*	3	3	3
Electives	3	3-6	3-6

*To meet four-year college general education requirements.

**PSU strongly advises students planning to do graduate work in mathematics to complete two years of study in German, French or Russian; UO requires second-year level of two of these languages for the Ph.D. program.

MEDICAL OFFICE 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 responsible 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 Student Records (Admissions) Office at (503) 399-5006.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

AH055	Health Occupations Overview	4
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
SP114	Interpersonal Communication	3
WR090	Fundamentals of Writing	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5058. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$353; class fees, \$93; equipment and supplies, \$350; physical examination, \$100; measles vaccination, \$10; Hepatitis B vaccination series, \$150. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 46 required credit hours:

Course	Title	Credit Hours
Term 1		
BI071	Body Structure and Function I	3
H120	Medical Terminology/Systems 1	3
MED054	Medical Office Procedures	5
MED056	Medical Assisting Basic Procedures	4
Term 2		
BI072	Body Structure and Function II	3
H121	Medical Terminology/Systems 2	3
FE205B	Resumes and Job Search Correspondence	1
MED057	Medical Assisting, Advanced Procedures	6
PSY101	Psychology of Human Relations (or higher)	3

Term 3

MED064	Introduction to Medical Science	3
MED130	Medical Assisting Practice	5
MED131	Medical Assisting Seminar	1
BT090	Bookkeeping	3
	General education elective	3

*General education electives:

AH080	Crisis Intervention	3
BA173	Public Relations in Business	3
CS101	Introduction to Microcomputer Applications (or higher)	3
H101	Medical Law and Ethics	3
H115	ICD-9-CM Coding/Reimbursement	3
H140	Medical Transcription	3
HE250	Personal Health	3
HS101	Psychoactive Drug Pharmacology and Physiology	4
HUM259	Death and Dying	3
PE	Physical education	3
SPAN101	First Year Spanish, Term 1 (or higher)	4

NURSING

Chemeketa offers a career ladder program for women and men who want to become licensed practical nurses or registered nurses.

The program is approved by the Oregon State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC). NLNAC may be contacted for information about the program's accreditation status, tuition, fees, and length. The address for NLNAC is 61 Broadway, New York, NY 10006. Their telephone number is (212) 989-9393.

Chemeketa's 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, CH110 or CH104 or CH121 or CH221 or one year of high school chemistry. A full sequence of chemistry is recommended for students planning to pursue a four year degree.
3. Anatomy and Physiology, BI231.
4. Nursing Success Strategies, NUR060.

These 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 pre-nursing packet that you may obtain from the Advising and Counseling Center. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact the Student Records (Admissions) Office at (503) 399-5006,

or the Advising and Counseling Center at (503) 399-5120 for details if you are considering the Nursing program. Most 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 licensure at the following levels:

Practical Nursing

A 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.

In addition to tuition, estimated costs for students who complete the entire Level I program listed below are books, \$953; class fees, \$138; equipment and supplies, \$380; testing fee, \$158. 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		
BI232	Human Anatomy and Physiology	.4
NUR106	Nursing	.9
PSY201	General Psychology-Biological Emphasis	.3
Term 2		
BI233	Human Anatomy and Physiology	.4
NUR108	Nursing	.9
PSY237	Life Span Development	.3
Term 3		
BI234	Medical Microbiology	.4
NUR109	Nursing	.10
WR121	English Composition-Exposition (or higher)	.3

Note: The number of clock hours required for the above courses is higher than the number of credit hours. Details about clock hours for each course can be found in the Course Descriptions section of this catalog. Nursing courses are a combination of classroom and clinical hours with each classroom credit hour equal to one clock hour per week and each clinical credit hour equal to three clock hours per week. Preparation time for class and clinical experiences is outside the clock hours required for each course.

Associate Degree Nursing

You may earn an Associate of Applied Science degree in Nursing by successfully completing 92 required credit hours of the two-year Nursing program (43 credits during the second year after the 49 credits of Practical Nursing). 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 (RN).

RNs apply knowledge drawn from a broad, in-depth education in the social and physical sciences to 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 needs 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 listed below are books, \$488; class fees, \$67; equipment and supplies, \$142; testing fee, \$158. Contact the Financial Aid Office to find out if you qualify for help with these costs.

Course	Title	Credit Hours
Term 4		
CS101	Introduction to Microcomputer Applications*	.3
NUR206	Nursing	.10
Term 5		
NUR208	Nursing	.10
	Social science elective	.3
	Sociology elective	.3
Term 6		
NUR209	Nursing	.8
	Humanities/fine arts elective	.3
	or	
	Communications elective	.3
	General education elective	.3

*May substitute a higher number CS course with CS101 as a prerequisite.

For clock hour information, see **Note** following Practical Nursing course plan.

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. For more information about refresher courses, contact the Nursing office, (503) 399-5252.

NURSING

(college transfer)

Oregon Health Sciences University offers Bachelor of Science degrees in Nursing at Eastern Oregon University, Oregon Institute of Technology, Southern Oregon University, and at OHSU's School of Nursing in Portland. The curriculum is a two-year, upper division major.

Admission to the nursing programs is competitive. Students must complete 91 credits of general education requirements before being admitted to the nursing major. A 2.5 GPA is required. Deadline for admission to the program is February 15, 1998. 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 I		4	
FN225 Nutrition			4
WR121, 122, 123 English Composition or WR227 Technical Writing	3	3	3
Humanities elective (Foreign Language, Philosophy, SP115 Introduction to Intercultural Communication or ASL101, 102, 103 American Sign Language strongly recommended)	3-4	3-4	3-4
Second Year	4	5	6
BI231, 232, 233 Anatomy and Physiology	4	4	4
BI234 Microbiology		4	
Humanities electives			3
SOC204 General Sociology-Introduction (SOC205, SOC206 General Sociology may be substituted)	3		
PSY201 General Psychology-Biological Emphasis	3		
PSY237 Life Span Development		3	
Literature elective			3
SP114 Interpersonal Communication	3		
SP113 Fundamentals of Small Group Communication			3
ANTH103 Cultural Anthropology			3
Social Science electives (EC200 or 201 Introduction to Economics or Microeconomics; Political Science elective, Business Administration elective, or SSC206 Dealing with Diversity preferred)			3
Electives (to total 91 transferable credit hours; CS101 Introduction to Microcomputer Applica- tions recommended)	3	3	3

OCCUPATIONAL SKILLS TRAINING

The Occupational Skills Training program offers students the opportunity to earn college credit for work-site-based training at an approved community training site. When you enroll in this short-term program (up to four terms or 60 credits), 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 you, your sponsoring agency (if applicable), and a 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.

Costs will include the per-credit tuition rate multiplied by 15 credits plus estimated costs for books and supplies for related classes of up to \$150 per term. Additional travel fees may be charged for out-of-district students. Consult with your sponsoring agency counselor regarding funding or contact the Financial Aid Office to find out if you qualify for help with these costs.

NOTE: Some sites may receive an additional \$336 per term employer/trainer incentive in addition to the above tuition costs if approved and paid 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 or students should contact an Occupational Skills Training Coordinator in building 17, (503) 399-5026, on the Salem Campus.

PHILOSOPHY

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Philosophy are Oregon State University, Portland State University, and University of Oregon.

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	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	3
HPE295 Health and Fitness for Life* or elective			3
Electives (OSU requires 12 credits in Computer Science and Quantitative Studies for B.S. degree or two years of Foreign Language for B.A. degree; UO requires two years of Foreign Language)	3	3	3
Second Year	4	5	6
Humanities courses* (PHL201 Philosophical Problems and PHL203 Elementary Ethics required at PSU)	3	3	3
Social Science electives*	3	3	3
Math or Science electives*	4	4	4
Electives (second-year Foreign Language for UO)	6	6	6

*To meet four-year college general education requirements.

PHYSICAL EDUCATION/ HUMAN MOVEMENT STUDIES

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physical Education, Human Movement Studies, or Exercise and Movement Science are Eastern Oregon University, Oregon State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU offers a bachelor's degree in Exercise and Sports Science with options in Athletic Training, Fitness Program Management, Physical Activity and Development, and Applied Exercise and Sports Science. SOU offers options in Athletic Training/Sports Medicine and Health Promotion/Fitness Management. WOU has teaching and non-teaching options. Those students planning to teach Physical Education will need to complete a year of post-baccalaureate work to meet teacher certification at all state system colleges except WOU. Refer to the section on Elementary and Secondary Education in this catalog.

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
WR121 and/or WR122 or 123 English Composition or SP111 Fundamentals of Speech*	3	3	(3)
Mathematics per placement test (through MTH112 Trigonometry for OSU; MTH241 Elementary			

Calculus or 251 Differential Calculus for UO; to meet general education or B.S. degree requirements at SOU and WOU; MTH111 or 211, 212, or 213 for EOU)	(4)	4-5	4-5
Arts and Letters/Humanities courses*	3	3	3
PE194 Professional Activities (not required at most schools)	2	2	2
CH121, 122, 123 College Chemistry or CH221, 222, 223 General Chemistry required at OSU and UO; choose electives for other colleges; Chemistry is prerequisite for Anatomy and Physiology sequence which is required at EOU and SOU	(5)	(5)	(5)
PE131 Introduction to Physical Education (recommended; required at WOU)	3		
Elective (BA101 Business Environment and BA211 Financial Accounting for Fitness Management at OSU)			(3)
Second Year	4	5	6
Social Science courses (PSY201 General Psychology Biological Emphasis for OSU, and PSY201 and 202 for UO and for Athletic Training option at SOU)*	3	3	3
HPE295 Health and Fitness for Life* (EOU, OSU, SOU, WOU)			3
HE250 Personal Health (not required at UO or EOU or for some options at OSU)	3		
Science courses* (BI231, 232, 233 Human Anatomy and Physiology for EOU, OSU, and SOU; PH201, 202, 203 General Physics required at UO; BI101, 102 and 103 General Biology for WOU)	4	4	4
Social Science or other electives*	3	3	3
Arts and Letters/Humanities* or electives (FN225 Nutrition required for some options at OSU and at SOU and WOU)	0-8	0-8	0-8

*To meet four-year college general education requirements.

PHYSICS

(college transfer)

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

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3

Mathematics per placement test (OSU, UO and PSU require MTH251 Differential Calculus through MTH256 Applied Differential Equation, PSU does not require MTH255; EOU and SOU require Math through MTH254)	4-5	4-5	4-5
CH221, 222, 223 General Chemistry (Not required at SOU; CH121, 122, 123 also accepted at UO)	5	5	5
WR121, 122, and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Arts and Letters/Humanities or Social Science courses* **	3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective			(3)
Second Year	4	5	6
Mathematics	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/Science electives* or free electives	3	3	3
Electives (EOU requires CS161 Computer Science I; PSU requires other approved courses in a related area of science or Computer Science; Chemeketa recommends CS161, 162 Computer Science I-C and II-C Language)	(3-4)	(3-4)	(3-4)

*To meet four-year college general education requirements.

**French, German, or Russian recommended for students planning on graduate work.

POLITICAL SCIENCE

(college transfer)

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

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 26.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition*	3	3	(3)
Social Science courses*	3	3	3
Arts and Letters/Humanities courses*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Math/Science courses*(MTH111 College Algebra, MTH112 Trigonometry, or MTH241 or 251 Calculus for B.S. degree for OSU. One math course beyond			

MTH105 Introduction to Contemporary Mathematics for WOU)	4	4	4
Electives (Foreign Language for B.A. degree, Computer Science, or Math for BS degree required at OSU; CS101 Introduction to Microcomputer Applications for SOU and WOU; Foreign Language or MTH105 Contemporary Math, MTH111 College Algebra, MTH243 Probability and Statistics 1 for UO)	3	3	3
Second Year	4	5	6
PS201, 202 American Government (required at SOU and recommended for OSU; PS201 for WOU; PS201, 202 not required at PSU; PS201 required for UO)	3	3	
PS203 State and Local Government and/or PS205 International Relations recommended (required at WOU; PS203 required at OSU; PS205 required at SOU, UO, and WOU)			(3)
Math/Science courses*	4	4	4
Arts and Letters/Humanities courses*	3	3	3
Social Science courses*	3	3	3
Electives (Social Science electives and one computer science class beyond CS101 for WOU or second-year Foreign Language; second-year Foreign Language for OSU if chosen instead of math and computer science; second-year Foreign Language for UO if Foreign Language is chosen rather than three terms of math)	3-4	3-4	3-4

*To meet four-year college general education requirements.

PRE-ENGINEERING

see Engineering

PRE-LAW

(college transfer)

University of Oregon is the only Oregon state college or university which has a School of Law. (Lewis and Clark College and Willamette University are the Oregon independent schools which have Schools of Law.) Applicants for law school must have a baccalaureate degree from an accredited college or university. Admission to law schools is highly competitive.

Law schools do not recommend any particular major for pre-legal education. In general, they prefer a liberal undergraduate background to one which is narrowly specialized. Students may pursue an undergraduate major of their choice. The University of Oregon School of Law emphasizes the importance of well-developed skills in writing and communications and of acquiring the ability to read with understanding, to think logically, and to perform research and analysis competently.

Although not required for admission, University of Oregon recommends the following courses: BA211, 212, 213 Financial Accounting and Managerial Accounting; EC201, 202 Introduction to Microeconomics and Introduction to Macroeconomics;

HST201, 202, 203 History of the United States; WR121, 122, 123 English Composition; as well as Literature, Philosophy, Psychology, and Sociology courses.

PRE-PROFESSIONAL STUDY (MEDICINE, DENTISTRY, VETERINARY MEDICINE)

(college transfer)

Oregon Health Sciences University offers a D.M.D. degree in Dentistry and an M.D. degree in Medicine, and Oregon State University offers a D.V.M. in Veterinary Medicine.

Because admission into these professional schools is highly competitive, students should plan to transfer to a four-year institution upon completion of the first year at Chemeketa. Students should complete the most rigorous chemistry sequence for which they are qualified, as well as stipulated courses in basic science and general education.

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

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

Refer to the Oregon Associate of Arts Transfer Degree information in the Degrees, Diplomas, Certificates, and Transfer Information section of this catalog beginning on Page 26.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition or approved Communications course*	3	3	3
CH221, 222, 223 General Chemistry (CH121, 122, 123 College Chemistry if not qualified for CH221-223)	5	5	5
Mathematics (per placement test)	4.5	4.5	4.5
Arts and Letters/Humanities sequence	3	3	3
Social Science sequence or electives*	3	3	3

*To meet four-year college general education requirements.

PROFESSIONAL-TECHNICAL TEACHER PREPARATION

The Professional-Technical Teacher Preparation program is designed for people who have gained professional skills from business and industry who now desire to share their knowledge and experience as teachers. Graduates of this program will be eligible to apply for a special license enabling them to teach in Ore-

gon's public high schools. Additional upper division coursework is required for a bachelor's degree and basic teaching certificate.

The one-year certificate option offers training for those who wish to apply through a school district for a special three-year non-renewable professional-technical certificate. Students who complete the two-year Associate of Applied Science degree, combined with one year of successful teaching, will be eligible to apply through a school district for a five-year renewable professional-technical teacher certificate.

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: accounting/financial systems, agricultural science and technology, drafting technology, electronics technology, forestry/natural resources, graphic design and production, health occupations, hospitality, tourism and recreation, marketing, office systems, manufacturing technology (metals), and mechanical technology. 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. Interested students should contact the program chair prior to enrolling in this program.

Certificate of Completion

In addition to tuition, estimated costs for students who complete the one-year program listed below are books, \$400; class fee, \$70; measles vaccination, \$10, criminal history check, \$17. Contact the Financial Aid Office to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 46 required credit hours, plus any additional professional-technical coursework determined necessary by your appraisal/advisory committee:

Course	Title	Credit Hours
Term 1		
ED110	Psychology of Learning	.3
ED133	Instructional Media and Materials	.3
ED209B	Practicum: Introductory Observation and Experience (LDC)	.3
ED251	Overview of Students with Special Needs	.3
ED258	Multicultural Education	.3
ES071	Work Place Safety Skills	.1
Term 2		
ED131	Teaching Techniques	.3
ED209C	Professional Technical Practicum I	.6
ED217	Comprehensive 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 listed 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.

Course	Title	Credit Hours
Term 4		
CS101	Introduction to Microcomputer Applications (or higher)	3
SP111	Fundamentals of Speech	3
	or	
SP114	Interpersonal Communication (or higher)	3
WR121	English Composition-Exposition (or higher)	3
	Professional-technical elective*	6
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.

PSYCHOLOGY

(college transfer)

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

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 26.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition (WR227 Technical Writing required by SOU)*	3	3	(3)
PSY201, 202, 203 General Psychology (PSY201, 202 for OSU, SOU and UO; PSY201 for WOU)	3	3	3
Mathematics per placement test* (Mathematics			

through MTH111 College Algebra required by EOU; PSU requires MTH241 Elementary Calculus and MTH243 Probability and Statistics 1; UO requires MTH111, 243 and one additional Math course; WOU requires one Math class beyond MTH105 Introduction to Contemporary Mathematics)	(4)	4-5	(4)
Arts and Letters/Humanities courses*	3	3	3
HPE295 Health and Fitness for Life* or elective Electives	3-6	3-6	0-6
Second Year			
Social Science courses*	3	3	3
Arts and Letters/Humanities* (EOU recommends five hours of Philosophy)	3	3	3
Science courses* (SOU requires BI101 and 102 or 103 General Biology; UO requires Biology, Chemistry, or Physics; PSU recommends BI101, 102, 103)	4-5	4-5	4-5
Electives (SOU and WOU require CS101 Introduction to Microcomputer Applications and one additional CS course; Chemeketa recommends CS101 or other			
Computer Science courses for all schools)	6	6	6

*To meet four-year college general education requirements.

REAL ESTATE

The goal of the Real Estate program is to prepare students for a wide variety of jobs which require knowledge of the complexities of real estate. The required courses cover factors affecting the value, control, use, appreciation, responsibilities, and privileges associated with real property. You may select individual courses to meet your needs, state license requirements, or you may work toward an Associate of Applied Science degree.

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

Students interested in fee appraising should consult with the real estate program chair, Ken Wachal at (503) 399-6041, 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 earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

BA066	Succeeding in Business	6
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
WR115	Introduction to Composition	3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5114. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below 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 97 credit hours:

Course	Title	Credit Hours
Term 1		
BA101	Business Environment	4
BA260	Real Estate Principles	3
EC200	Introductions to Economics (or higher)	3
MTH070	Elementary Algebra (or higher)	4
WR121	English Composition-Exposition (or higher)	3
Term 2		
BA214	Business Communications	3
BA263	Real Estate Law	3
BA264	Real Estate Finance	3
CS125E	Worksheets-Excel	4
MTH062	Business Applications Using Mathematics (or higher)	4
Term 3		
BA211	Financial Accounting I	4
BA262	Real Estate Practices	3
PSY101	Psychology of Human Relations (or higher)	3
RE061	Real Estate Appraisal I	3
WR227	Technical Writing	3
Term 4		
RE062	Real Estate Appraisal II	3
RE066	Real Estate Investment Analysis I	3
RE067	Residential Real Estate Appraisal	3
	Humanities/fine arts elective*	3
	or	
	Science/applied science elective*	3
	Computer elective***	3
Term 5		
RE063	Real Estate Appraisal III	3
	or	
RE085	Property Management	3
RE070	Zoning, Subdivision and Community Planning	3
RE071	Uniform Standards and Professional Appraisal Practice (USPAP)	2
MTH105	Introduction to Contemporary Mathematics	4
	or	
BA232	Introduction to Business Statistics	3
	Business elective**	
	(RE280/Cooperative Work Experience or BA226 Business Law or BA238 Sales and Persuasion recommended)	6
Term 6		
BLD054	Dwelling Construction Under UBC	3
RE069	Elements of Design and Construction	3

Business elective** (RE280 Cooperative Work Experience recommended)9

*Students may choose among the following electives: Art, Foreign Languages, Multidisciplinary Studies, Philosophy, General Science, Geology, Physical Science, and Physics.

**Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, FIN, and RE, except BT084.

***Computer elective (select three): CA118A, CA118C, CA118D, CA118E.

SMALL BUSINESS MANAGEMENT

The Small Business Management program is designed to provide practical skills to owners of small businesses and their partners.

This one-year course features monthly evening classes, workshops, and on-site 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.

Classes cover small business taxation, recordkeeping and accounting, marketing and advertising, and human relations and legal considerations. For more information or to be evaluated for enrollment, call (503) 399-5181.

SOCIOLOGY

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts or Bachelor of Science degrees in Sociology are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Eastern Oregon University offers an Anthropology/Sociology degree with emphasis in 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 26.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition or WR227 Technical Writing* (OSU strongly recommends WR123 or 227; WR121, 122, 123 required at SOU)	3	3	(3)
SOC204, 205, 206 General Sociology (OSU, SOU, and UO require only SOC204; OSU accepts a maximum of 12 credit hours of lower division Sociology)	3	3	3
Mathematics or Science* (EOU requires MTH212 Foundations of Elementary Mathematics; PSU requires Math through MTH243 Probability and Statistics 1; WOU requires MTH105 Introduction to Contemporary Mathematics and MTH111 College Algebra)	4-5	4-5	4-5
Arts and Letters/Humanities sequence* (OSU strongly recommends PHL201 Philosophical Problems: Metaphysics)	3	3	3
Second Year	4	5	6
Social Science electives* (EOU requires ANTH101, 102, 103 Human Evolution, Archeology, Introduction to Cultural Anthropology; SOU requires ANTH103 Introduction to Cultural Anthropology)	3	3	3
Arts and Letters/Humanities electives*	3	3	3
Math or Science courses*	4	4	4
HPE295 Health and Fitness for Life* or elective Electives* (CS101 Introduction to Microcomputer Applications for SOU; CS101 and CS161 Computer Science I for WOU)	3	6	6

*To meet four-year college general education requirements.

SPEECH

(college transfer)

Oregon State University, Portland State University, and Western Oregon University offer Bachelor of Arts and/or Bachelor of Science degrees in Speech or Speech Communications. Southern Oregon University 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 26.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition	3	3	(3)
SP111 Fundamentals of Speech (not required at OSU or WOU)	3		
SP112 Fundamentals of Persuasion (SP111 or 112 required at PSU; not required at SOU)		3	
SP113 Fundamentals of Small Group Communication (not required at OSU, PSU, or WOU)			3
SP114 Interpersonal Communication			3
Arts and Letters/Humanities courses*	3	3	3
Social Science courses*	3	3	3
Math or Science* (MTH243 Probability and Statistics 1 for PSU; MTH111 College Algebra and MTH105 Introduction to Contemporary Mathematics for WOU; OSU requires additional math and/or computer programming or second-year Foreign Language)	4	4	4
Second Year	4	5	6
Social Science electives*	3	3	3
Arts and Letters/Humanities electives*	3	3	3
Science courses*	4	4	4
HPE295 Health and Fitness for Life* or elective Electives (SOU requires SP115 Introduction to Intercultural Communications and recommends PHL203 Elementary Ethics and PHL204 Introduction to Logic for Human Communications majors and J224 for Broadcasting majors; WOU requires CS101 Introduction to Microcomputer Applications and 15 hours as electives in Journalism, Speech, and Writing; J224 Introduction to Journalism recommended)	3	6	6

*To meet four-year college general education requirements.

VISUAL COMMUNICATIONS

The Visual Communications Program is constantly growing and changing, reflecting the rapid changes in the entire field of graphic arts. The logo you design or the photograph you take may be simultaneously printed in a four color book or animated on a web page.

The traditional steps of layout, pasteup, process camera, film assembly, plate and proof making and printing are now dominated by digital technology. Some of these traditional techniques are still taught, but students entering the field today must be fluent in the use of computers and graphics software. You will work with computers, scanners, digital cameras, imagesetters, platemakers and printing presses. The program includes the study of graphic design, typography, photography, layout, digital imaging, photo manipulation, prepress image assembly and printing technology.

The Visual Communications Program offers a two-year Associate of Applied Science degree. You may choose from several pro-

gram options: graphic design, electronic prepress, or printing technology. The program has special admissions requirements and enrollment limits. New students must complete VC080A, B, or C, Introduction to Graphic Processes, which serves as an introduction to the program as well as the field of graphic arts. Other prerequisites may also be required. A meeting with an instructor will determine what steps you may need to complete before entering the program.

This is a hands-on, intensive program which can lead to numerous career options. Interested students are encouraged to come to building 4, room 284 or call 399-5070 and ask to speak with an instructor. For additional information, contact the Student Records (Admissions) Office at (503) 399-5006.

Alert!

To apply for this program, you need to take part in an assessment process. The first step is to take the college's free placement test, then meet with advising and counseling staff. You may need to complete program prerequisite (Bridge) courses. You will be assigned a program advisor to help you develop an individualized program of study, which may include one or more of the following courses:

COM051	Communication Skills I	3
CS101	Introduction to Microcomputer Applications	3
MTH020	Basic Mathematics	3
SKD014ABC	Intermediate Spelling	3
SKD051	Studying for College	3
VC080ABC	Introduction to Graphic Processes A,B,C	1-3

If you have questions about the requirements, call Advising and Counseling at (503) 399-5120 or (503) 399-5184. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$300; class fees, \$100; equipment and supplies, \$350. A 35mm camera is required for the photography courses. Contact the Financial Aid Office to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
ART261	General Photography	3
MTH060	Introductory Algebra (or higher)	4
VC111	Survey of the Graphic Arts	3
VC114	Introduction to Computers for Graphics	3
WR121	English Composition-Exposition (or higher)	3
Term 2		
ART115	Basic Design	3
	or	
	Approved elective*	3
ART224	Type Design 1	3
ART262	Technical Photography	3
VC100	Special Topics in Visual Communications	1
	or	
VC171	Special Projects	1
VC121	Layout and Design 1	3
VC145	Print Production 1	3
	or	
VC151	Electronic Imaging 1	3
Term 3		
ART116	Basic Design	3

	or	
	Science/applied science elective	3
	or	
	Humanities/fine arts elective	3
PSY100	Introduction to Psychology (or higher)	3
SP111	Fundamentals of Speech (or higher)	3
VC100	Special Topics in Visual Communications	1
	or	
VC171	Special Projects	1
VC122	Layout and Design 2	3
VC151	Electronic Imaging 1	3
	or	
VC145	Print Production 1	3
Term 4		
ART221	Graphic Design 1	3
	or	
	Approved elective*	3
ART225	Type Design 2	3
	or	
VC241	Prepress Production 2	3
	or	
VC261	Advanced Press Production 1	3
ART263	Intermediate Photography	3
	or	
VC173	Special Projects	3
VC100	Special Topics in Visual Communications	1
VC245	Print Production 2	3
	or	
VC173	Special Projects	3
VC251	Electronic Imaging 2	3
Term 5		
ART222	Graphic Design 2	3
	or	
VC241	Prepress Production 2	3
	or	
VC262	Advanced Press Production 2	3
ART264	Digital Photography	3
	or	
VC173	Special Projects	3
VC100	Special Topics in Visual Communications	1
VC221	Layout and Design 3	3
	or	
VC262	Advanced Print Production 2	3
	or	
VC241	Prepress Production 2	3
VC245	Print Production 2	3
	or	
VC173	Special Projects	3
WR227	Technical Writing	3
	or	
	General education elective	3
Term 6		
ART223	Graphic Design 3	3
	or	
	Approved elective*	3
FE205B	Resumes and Job Search Correspondence	1
VC183	Business of Graphic Arts	3
VC184	Portfolio Preparation	3
VC222	Layout and Design 4	3
	or	
	Approved elective*	3
VC280C	Cooperative Work Experience	3
	or	
VC173	Special Projects	3
*Approved electives:		
ART115	Basic Design	3
ART116	Basic Design	3
ART131	Introduction to Drawing 1	3
ART221	Graphic Design 1	3
ART222	Graphic Design 2	3
ART223	Graphic Design 3	3
ART238	Introduction to Illustration	3
ART239	Introduction to Computer Illustration	3

ART270	Introduction to Printmaking: Screen Printing 1, Beginning . . .	3
ART271	Introduction to Printmaking: Press Process 1	3
CA205	Desktop Publishing I -PageMaker	3
CA206	Desktop Publishing II-PageMaker	3
CA208	Computer Presentations for the Workplace-MS PowerPoint . . .	3
DRF072	Introduction to AutoCAD	3
J215	Publications Lab	2
J226	Editing/Design	3
VC130	Beginning Photoshop	2
VC131	Advanced Photoshop	2
VC133	Page Layout with Quark XPress	2
VC137	Web Graphics	1
VC139	Beginning Freehand	2

WELDING

The Welding program offers two options. The three-term Welding Technology program combines training with classes in the background knowledge needed by workers in welding occupations. You practice and develop your welding skills in the laboratory and may take an examination for certification in arc welding. The six-term Welding Fabrication program is for those who want to acquire the technical knowledge and skills required for workers in welding, fabrication, and related occupations.

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

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

Welding Technology

This program prepares you for a variety of positions in job specialty production and maintenance shops. Graduates may find work as metallic inert gas (MIG) welders, arc welders, oxyacetylene welders, semiautomatic welding equipment operators, and tungsten inert gas (TIG) welders.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$278; class fees, \$302; equipment and supplies, \$412; certification test \$200 (optional). Contact the Financial Aid Office to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
MTH052	Introduction to Algebra and Geometry (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 Gas Metal Arc Welding (MIG)	3
WLD073	Basic Gas Tungsten Arc Welding (TIG)	4
WLD081	Welding Metallurgy I	2
Term 3		
COM051	Communication Skills I	3
WLD053	Advanced Arc Welding	3
WLD058	Weld Shop Problems	7
WLD063	Advanced 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 listed below are books, \$870; class fees, \$544; equipment and supplies, \$412; 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 93 credit hours:

Course	Title	Credit Hours
Term 1		
MTH052	Introduction to Algebra and Geometry (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 Gas Metal Arc Welding (MIG)	3
WLD073	Basic Gas Tungsten Arc Welding (TIG)	4
WLD081	Welding Metallurgy I	2
Term 3		
COM051	Communication Skills I	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		
MFG071	CAD for CAM	3
GS104	Physical Science (or higher)	4
MFG058	Machining Fundamentals	3
MFG079	Industrial Systems	3
MFG130	CNC Machine Setup/Operation	2

Term 5

MFG064	Milling Machine Processes	3
MFG065	Lathe Fundamentals	3
MFG135	Programming CNC Mills	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3
WFB087	Fabrication Practices III	3

Term 6

COM052	Communication Skills II (or higher)	3
MFG066	Lathe Processes	3
PSY100	Introduction to Psychology (or higher)	3
WFB088	Fabrication Practices IV	3
WFB096	Shop Projects	2

ZOOLOGY

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, **F**, **W**, **Sp**, and **Su** at the end of a course description indicate the term (fall, winter, spring, summer) the course is usually offered.

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

Chemeketa also offers many non-credit personal enrichment courses not included here. They are also listed in the Schedule of Classes.

DEFINITIONS OF ELECTIVES

You may find the information listed below helpful in choosing the classes necessary to fulfill your Associate of Applied Science, Associate of Arts, and Associate of General Studies degree requirements. The general area of study is followed by the course prefixes which satisfy the elective requirements in those areas. (All courses selected must be numbered 050 or higher.)

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: **BA214**, **HD112**, **BT120**, **RD115**, and **RD116**.

Humanities/Fine Arts Electives: **ART** (Art), **ASL** (American Sign Language), **ENG** (English), **FA** (Film Arts), **FR** (French), **GER** (German), **JPN** (Japanese), **HUM** (Humanities), **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).

HOW COURSES ARE NUMBERED

Chemeketa Community College is committed to offering instruction that provides students with the opportunity for self-improvement, entry-level employment skills, and completion of the first two years of a baccalaureate degree. The following course prefixes describe the primary intent of the courses offered:

DEVELOPMENTAL COURSES*

MTH:	Mathematics
RD:	Reading
SKD:	Skills Development
WR:	Writing

*Developmental courses numbered less than 50 are considered below collegiate level academic and Professional Technical Education courses, and do not apply to meeting the requirements of the AAOT, A.A.S. or A.G.S. degree.

PROFESSIONAL-TECHNICAL COURSES**

AH:	Allied Health
APR:	Apprenticeship
AUM:	Automotive Technology
BC:	Building Construction
BLD:	Building Inspection
BT:	Business Technology
CA:	Computer Applications
CIS:	Computer Information Science
CJ:	Criminal Justice
COM:	Communication Skills
CPL:	Credit for Prior Learning
CS:	Computer Science
CTX:	Construction Skills
CVL:	Civil-Structural Engineering Technology
DEN:	Dental Assisting
DRF:	Drafting Technology
ECE:	Early Childhood Education
ED:	Education
ELE:	Electronics Technology
ELT:	Electronics Technology
EMT:	Emergency Medical Technology
ENL:	English as a Non-Native Language
ES:	Emergency Services
FE:	Field Experiences
FIN:	Financial Services
FRP:	Fire Protection Technology
FT:	Forest Resources Technology
HDF:	Human Development Family Studies
H:	Health
HD:	Human Development
HDF:	Human Development and Family Studies
HR:	Human Resources
HS:	Human Services
HSM:	Health Services Management
HTM:	Hospitality and Tourism Management
MED:	Medical Office Assisting
MFG:	Manufacturing Technologies
MT:	Microelectronics/Industrial
NUR:	Nursing
QS:	Quality Science
RE:	Real Estate
SKD:	Skills Development
ST:	Occupational Skills Training
VC:	Visual Communications
WFB:	Welding Fabrication
WLD:	Welding

**Many professional-technical courses are applicable to the baccalaureate degree. Check with the BA-granting institution.

LOWER DIVISION COLLEGIATE COURSES

(first two years of the baccalaureate degree.)

ANTH:	Anthropology
ART:	Art
AS:	Aerospace
ASL:	American Sign Language
BA:	Business Administration***
BI:	Biology***
BOT:	Botany
CH:	Chemistry
CIS:	Computer Information Science***
CS:	Computer Science***
EC:	Economics
ENG:	English
ENGR:	Engineering
FA:	Film Arts
FN:	Foods/Nutrition
FR:	French
G:	Geology
GE:	General Engineering
GEOG:	Geography
GER:	German
GS:	General Science
HDFS:	Human Development and Family Studies
HE:	Health Education
HPE:	Health and Physical Education
HST:	History
HUM:	Humanities
J:	Journalism
JPN:	Japanese
MS:	Military Science
MTH:	Mathematics***
MUP:	Music Performance
MUS:	Music
OC:	Oceanography
PE:	Physical Education
PHL:	Philosophy
PH:	Physics
PSY:	Psychology
PS:	Political Science
RD:	Reading***
RUS:	Russian
R:	Religion
SOC:	Sociology
SP:	Speech
SPAN:	Spanish
SSC:	Social Science
TA:	Theater Arts
VTN:	Vietnamese
WR:	Writing***
WS:	Women's Studies
ZOO:	Zoology

***A number below 100 indicates a support course, which is usually not transferable to a BA-granting institution.

ACCOUNTING

see Business Administration

AH

ALLIED 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 health care and services, the role of health workers as members of a health team, and the rights and responsibilities of patients as members of a health team. **F, W, Sp, Su**

AH055 Health Occupations Overview

4 class hrs/wk, 4 cr.

An introduction to health occupations careers. Surveys health career options and career preparation requirements, health care delivery systems and trends, standards of professional behavior, teamwork and leadership skills, basic to legal and ethical concepts, societal issues, health promotion and wellness, and preventive procedures and safety practices. Integrates academic success strategies with health care applications. **F, Sp, Su**

AH080 Crisis Intervention

3 class hrs/wk, 3 cr.

Intervention in behavioral crises of sudden death, suicide, rape, murder, vehicle accidents, disease, trauma, and child abuse. Focuses on supportive behavioral patterns and handling emotional stress of the individual as well as coping with emotional conflict within oneself. **Sp**

ANTH

ANTHROPOLOGY

ANTH101 Human Evolution

3 class hrs/wk, 3 cr.

Studies the processes of the biocultural evolution of humans with emphasis on evolutionary theory, Mendelian and population genetics, the fossil record, classification of primates, and the nature of race. **F, W, Sp**

ANTH102 Archaeology

3 class hrs/wk, 3 cr.

An overview of human's prehistoric development. Covers basic archaeological method and theory and the techniques used for dating the prehistoric past. Focuses on the agricultural revolution and the rise of the world's earliest civilizations, and provides a general overview of the time of unrecorded human experience and the early beginnings of recorded history. **W, Sp**

ANTH103 Introduction to Cultural Anthropology

3 class hrs/wk, 3 cr.

A survey of culture and how it structures "human nature," including an examination of cross-cultural methodology and anthropological theory. Presents a general overview of language, economic and political systems, technology, social orientation, art, religion, warfare, and the nature of play. **F, Sp**

ANTH207 Cultural Anthropology

3 class hrs/wk, 3 cr.

An analysis of the significance of culture for humans, including its diverse forms and degrees of elaboration among different groups of people. Emphasizes the divisions of anthropology and the rise of anthropological theory, the structure of language and how it transmits culture, the varieties of human subsistence patterns and technologies, and interdependence of heredity, society, and environment. **Offered as needed.**

ANTH208 Cultural Anthropology

3 class hrs/wk, 3 cr.

An exploration of human culture. Includes a cross-cultural study of marriage and the family, and an examination of kinship and social groupings, belief systems, mythology, the functions of religion, 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 anthropology, and the future of humanity. **Prerequisite:** ANTH207 and ANTH208 recommended. **Offered as needed.**

ART

ART

see also Visual Communications

ART101 Understanding Art

3 class hrs/wk, 3 cr.

Designed to provide a student with the tools to look at, think about, and communicate ideas about the visual arts. Focuses on purposes of art; subject, form, and content; media and techniques; critical, historical, analytical, and interpretive approaches to art. **Prerequisite:** College-level writing skills. **F, W, Sp, Su**

ART115, 116, 117 Basic Design

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

An introduction to basic principles of design, visual perception, and organization of visual elements in works of art. **ART115:** Explores black and white two-dimensional design. **ART116:** Focuses on color and two-dimensional design. **ART117:** A study of three-dimensional design. **ART115: Su, F, Sp; 116: W, Su; 117: Sp**

ART131 Introduction to Drawing 1

6 class hrs/wk, 3 cr.

Introduces fundamental gesture, contour, and value approaches to drawing, using a variety of monochromatic media. Covers traditional methods of representing shape and space on a two-dimensional surface. Provides individualized instruction in practical drawing skills designed for the beginner. **F, W, Sp, Su**

ART132 Introduction to Drawing 2

6 class hrs/wk, 3 cr.

Covers basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasizes composition and

the understanding of visual form, and introduces style as a means to personal expression. **Prerequisite:** ART131 or consent of instructor (based on portfolio review). **W, Sp, Su**

ART133 Introduction to Drawing 3

6 class hrs/wk, 3 cr.

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

ART154 Pottery I-Handbuilding

6 lab hrs/wk, 3 cr.

An introduction to ceramics through handbuilding. Includes basic form and design considerations as well as pinch, coil, slab construction, press mold, 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. **F, W, Sp**

ART156 Pottery III-Intermediate Techniques

6 lab hrs/wk, 3 cr.

Designed to expand on the basic skills acquired in ART155. Includes production of lidded containers, teapots, combined forms, and altered forms; study of kiln theory and design, development and testing of glazes, and use of alternative firing techniques. **Prerequisite:** ART155 or consent of instructor. Class fee \$9. **Sp**

ART198A-E Independent Studies

Variable 1-5 credits

By use of the college learning contract, provides student and instructor with vehicle to allow independent study in an area of student interest. **Prerequisite:** Consent of instructor. **Offered as needed.**

ART199E Special Studies: European Foreign Study Tour

3 credits

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

ART204 Introduction to Art History

3 class hrs/wk, 3 cr.

Examines art in the Western tradition from the Pre-historic era through the Early Christian/Byzantine period. **F**

ART205 Introduction to Art History

3 class hrs/wk, 3 cr.

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

ART206 Introduction to Art History**3 class hrs/wk, 3 cr.**Examines art in the Western tradition from A.D. 1500 to the present. **Sp****ART210 Topics in Art History****3 class hrs/wk, 3 cr.**Covers specific historical art topics. Topics will vary and may include historical styles and periods, genres, women artists, and media. **Offered as needed.****ART221 Graphic Design 1****2 class and 2 lab hrs/wk, 3 cr.**Introduces the use of illustration software on the Macintosh computer as a tool in the production of graphic design. Work is primarily in black and white and includes both communication and decoration graphics. **Prerequisite:** ART115 and computer experience. Specific software knowledge is not required. Class fee \$15. **F, offered as needed.****ART222 Graphic Design 2****2 class and 2 lab hrs/wk, 3 cr.**Continues exploration of graphic design with multiple colors, using the Macintosh computer and illustration software as a design and production tool. **Prerequisite:** ART115 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 fee \$15. **Sp, offered as needed.****ART224 Type Design I****2 class and 2 lab hrs/wk, 3 cr.**Introduces the study of letterforms and their importance in the design of visual communications. **Prerequisite:** VC114, or concurrent enrollment in VC114, or consent of instructor. Class fee \$15. **F, offered as needed****ART225 Type Design II****2 class and 2 lab hrs/wk, 3 cr.**Continues the study of typography as a design element. **Prerequisite:** ART224 or consent of instructor. Class fee \$15. **W, offered as needed.****ART230 Drawing: Anatomy for Artists****1 class and 4 lab hrs/wk, 3 cr.**An introductory anatomy course designed specifically for art students. Includes a brief overview of body organization and terminology, an examination of body proportions and of the skeletal and musculature systems, and a summary of surface features (e.g. skin, superficial vessels). Expands on basic skills developed in beginning drawing classes. **Prerequisite:** Grade C or better in a college-level drawing class. **W****ART233 Contemporary Drawing Media****6 lab hrs/wk, 3 cr.**Emphasizes the development of personal style and expressive exploration of personal imagery. Contemporary, color, and mixed-media approaches will be introduced. **Prerequisite:** ART131 or consent of instructor. **Offered as needed.****ART234 Figure Drawing 1****6 lab hrs/wk, 3 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****ART235 Figure Drawing 2****6 lab hrs/wk, 3 cr.**Offers further study and practice in drawing the human figure. **Prerequisite:** ART131 and ART234, or consent of instructor. Class fee \$9. **Offered as needed.****ART236 Figure Drawing 3****6 lab hrs/wk, 3 cr.**Continued study and practice in drawing the human figure. **Prerequisite:** ART131, ART234, and ART235, or consent of instructor. Class fee \$9. **Offered as needed.****ART238 Introduction to Illustration****2 class and 2 lab hrs/wk, 3 cr.**Introduces concepts of illustration in the graphic arts and offers training in traditional (non-digital) illustration techniques for students with strong skills in drawing and/or painting. **Prerequisite:** ART131, ART132, or other 200 level drawing or painting course. ART115 and ART116 and art history courses are recommended. Class fee \$15. **Offered as needed.****ART239 Introduction to Computer Illustration****2 class and 2 lab hrs/wk, 3 cr.**Introduces the basics of computer illustration with a variety of software and techniques. Includes black and white, color and working with scanned images. **Prerequisite:** CS101, VC114, or previous Macintosh (or compatible) computer experience; ART131, ART221, and previous experience in color media. Class fee \$15. **Offered as needed.****ART244 Stained Glass****6 lab hrs/wk, 3 cr.**Provides individualized instruction for the beginner in the design and construction of two moderately challenging stained glass windows made of both smooth clear and textured colored glass. Introduces techniques in designing, pattern making, glass cutting, assembling, soldering, and putting 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 hrs/wk, 3 cr.**Provides individualized instruction for the intermediate level student who has taken ART244 or equivalent as determined by instructor. Students consult with the instructor and complete projects which are original, challenging, and complex. Students will learn glass techniques such as sandblasting, fusing, and slumping. **Prerequisite:** ART244. Class fee \$9. **F, W, Su****ART246 Advanced Stained Glass****6 lab hrs/wk, 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-tech and high-tech application and processes. **Prerequisite:** ART154, ART155, ART156, or consent of instructor. Class fee \$9. **Offered as needed.****ART256 Art as a Profession****3 class hrs/wk, 3 cr.**Designed to provide visual artists with the professional skills necessary to succeed in their own art business. Through a series of marketing, promotion, presentation, employment and education-related assignments, students will gain an understanding of the business aspects involved in being a visual artist. **Prerequisite:** Completion of a studio art class or experience with studio art, 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 35mm black and white photography. Includes camera equipment, correct exposure calibrations, film processing, darkroom techniques, and presentation of enlargements. Class fee \$15. **F, W, Sp, offered as needed.****ART262 Technical Photography****2 class and 4 lab hrs/wk, 3 cr.**Introduction to studio and technical photography. Includes 35mm, large format cameras, lighting, art direction, and copystand work. **Prerequisite:** ART261. Class fee \$15. **Sp, offered as needed.****ART263 Intermediate Photography****2 class and 4 lab hrs/wk, 3 cr.**Introduces color techniques, special effects, and commercial photography. Further development of traditional darkroom skills. **Prerequisite:** ART261. Class fee \$15. **F, offered as needed.****ART264 Digital Photography****2 class and 4 lab hrs/wk, 3 cr.**Adds digital imaging and manipulation to traditional photographic skills. **Prerequisite:** ART261, VC151 or Macintosh experience, and ART263, or consent of instructor. Class fee \$15. **W, offered as needed.****ART270 Introduction to Printmaking:****Screen Printing 1, Beginning****6 lab hrs/wk, 3 cr.**Introduces the methods, materials, and techniques of silk- screen printing, including the photostencil process through lecture, demonstration, and studio experience. Students will design and pull their own prints. **Prerequisite:** ART131, ART115, or consent of instructor. Class fee \$9. **F****ART271 Introduction to Printmaking:****Press Process 1****6 lab hrs/wk, 3 cr.**Demonstrates methods, materials and techniques of printmaking with an intaglio press, using media such as intaglio (etching), relief (woodcut and linocut), and monotypes. Offers lectures, demonstrations, and studio experience. **Prerequisite:** ART131 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 printmaking using media such as relief (woodcut, linocut, embossing), intaglio (etching, engraving, collography), monotype/monoprint, and lithography. Emphasizes studio practice and experimentation with all printmaking processes and style development as a means of personal expression. Relates historical and modern contexts. **Prerequisite:** ART271. Class fee \$9. **Sp**

ART273 Printmaking: Press Processes 3
6 lab hrs/wk, 3 cr.

An integration of the methods and materials introduced in ART271 and ART272 to create mixed media prints. Emphasizes collage plate printmaking and mixed media monoprinting. Offers lectures, demonstrations, and studio experience. **Prerequisite:** ART271 and ART272. Class fee \$9. **Sp**

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

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

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

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

ART281 Painting
6 lab hrs/wk, 3 cr.

Introduces traditional approaches to and techniques of painting. Includes introduction to materials, color theory, and historical perspectives. For beginning painters who have strong fundamental drawing skills. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART131 or consent of instructor based upon demonstration in drawing. ART115 and ART116 recommended. **W, Sp**

ART284 Watercolor
6 lab hrs/wk, 3 cr.

Technique and use of watercolor. Includes characteristics of watercolor as a medium, compositional problems, observation of detail, potential for personal expression, and color theory and design elements. **Prerequisite:** ART131, or consent of instructor based upon demonstrated skill in drawing. ART115 and ART116 recommended. **F, W, Sp**

ART285 Intermediate Watercolor
6 lab hrs/wk, 3 cr.

Continuation of ART284 to develop technical control and acquire formal knowledge of art in general. **Prerequisite:** ART284 or consent of instructor. **F, W, Sp**

ART286 Advanced Watercolor
6 lab hrs/wk, 3 cr.

A continuation of projects and explorations begun in ART284 and ART285. A self-motivated contract class. **Prerequisite:** ART284 and ART285, or consent of instructor. **F, W, Sp**

ART291 Beginning 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. **F**

ART292 Ceramic Sculpture
6 lab hrs/wk, 3 cr.

An introduction to the potential and characteristics of clay as a creative sculptural medium. Class fee \$9. **W**

ART293 Wax to Bronze Sculpture
6 lab hrs/wk, 3 cr.

An introduction to the casting and finishing of bronze sculpture through the lost wax process using ceramic shell technologies. Class fee \$9. **Sp**

AS

AEROSPACE SCIENCE

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

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

AS120 Leadership Laboratory
3 lab 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 cr. each

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

AS220 Leadership Laboratory
3 lab hrs/wk, 1 cr.

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

AS280A Preprofessional Officer Course
3 lab hrs/wk, 1 cr.

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

an Air Force junior officer. Cadets develop their leadership style in a practical and supervised laboratory. **Offered as needed.**

ASL

AMERICAN SIGN LANGUAGE

ASL101 American Sign Language, Term 1
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. **F, W, Sp, Su**

ASL102 American Sign Language, Term 2
3 class hrs/wk, 3 cr.

Continuation of ASL101. 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.

Continuation of ASL102. Study and application of ASL vocabulary and grammar is further incorporated. **Prerequisite:** ASL102. **Sp**

ASTRONOMY

see Physics

AUM

AUTOMOTIVE TECHNOLOGY

AUM050 Introduction to Automotive Technology

4 class and 8 lab hrs/wk, 3 cr.

Presents an in-depth look at the automotive mechanic's duties and job opportunities and explores current and future employment trends. Emphasizes the complexity and rapidly changing expectations of the auto mechanic. **Su**

AUM051 Basic Automotive Engines
3 class and 6 lab hrs/wk, 5 cr.

Designed to familiarize the student with construction, working principles, and methods of servicing a gasoline internal combustion engine. Proper use of tools, torque 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 lab hrs/wk, 4 cr.

Designed to familiarize the student with the methods, technical aspects, theory, checks, and procedures used to recondition internal combustion engines and related components. Classroom theory along with hands-on laboratory experiences using precision measuring tools, torque wrenches, and machining equipment will introduce the student to the duties of an automotive machinist. Examines procedures, precision measuring devices, and special tools as well as theories of leverage, pressure/volume, expansion, momentum, inertia, and work related to engines. **Prerequisite:** AUM051 or consent of instructor. Class fee \$30. **W**

AUM056 Automotive Shop Safety

1 class hr/wk, 1 cr.

A study of guidelines for safety in the automotive industry. Safety rules, regulations, and methods for the safe use of automotive shop equipment and work areas will be explored through class discussion and the use of audio-visual aids. **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, drive shafts and universal joints, front-wheel-drive axles, manual transmissions, manual transaxles, rear axles, and differentials (including open and limited slip). Includes friction, gear reduction, and torque multiplication through use of gearsets, inertia, and momentum as they apply to power train components. Class fee \$15. **Sp**

AUM062 Manual Drive Trains and Axles II

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

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

AUM063 Automatic Transmissions and Transaxle

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

Fundamentals of automatic transmission operation, including methods of gear change, power flows, and basic hydraulic principles used in automatic transmissions. Emphasizes servicing and proper overhaul of automatic transmissions. Class fee \$15. **F**

AUM066 Basic Fuel Systems

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

Principles of carburetion and carburetor circuits. Covers the basics of pressure differential, the venturi principle, fuel systems, gasoline, and engine variables pertinent to gasoline. Basic one-, two-, and four-barrel carburetor overhaul, service and adjustment, and fuel pump testing and inspection. Introduces closed loop systems. Class fee \$5. **F**

AUM067 Advanced Carburetion and Fuel Injection

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

A hands-on course dealing with advanced carburetor systems: the diagnosis of problems in the systems, technical coverage of operating principles, service of modern electro-mechanical (feedback) carburetors, theory and principles of carburetor-accessory special feature devices, carburetor computer control operation, and adjustments. Covers automotive fuel injection systems from introduction to in-depth coverage of today's systems, including computer functions, inputs, and commands; system diagnosis; causes of emissions; testing; and instrumentation studies. Examines infra-red, four-gas, and five-gas analyzer testing. **Prerequisite:** AUM066 or consent of instructor. 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, and circuitry. **Sp**

AUM073 Automotive Repair

7 lab hrs/wk, 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 repair and service of automatic transmissions, automatic transaxles, 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

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

Designed to familiarize the student with fundamentals of DC electricity as it pertains to the automotive trade. Includes a review of basic electrical fundamentals, and presents an overview of storage batteries, starters, charging systems, and ignition systems. Class fee \$5. **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

2 class hr/wk, 2 cr.

Outlines duties and responsibilities of parts and service department personnel and their interaction with automotive technicians. Covers the legal aspects and responsibilities of the technician as they pertain to Environmental Protection Agency, OSHA, and safety regulations. Stresses work habits, ethical practices, and interaction with employers, potential employers, and other employees. **Sp**

AUM081 Tune-up and Driveability

3 class and 8 lab hrs/wk, 6 cr.

Designed to familiarize the student with tune-up and diagnosis procedures of the gasoline internal

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. **Sp**

AUM082 Electronic Vehicle Controls

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

Familiarizes the student with the theory, operation, and testing of automotive electronic engine control system. 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**

AUM083 Advanced Electronic Vehicle Control Systems

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

Designed to provide advanced training in the operation and testing of automotive electronic control systems. **Prerequisite:** AUM082 or consent of instructor. Class fee \$15. **Sp**

AUM086 Automotive Heating and Air Conditioning

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

Theory and operation of automotive heating and air conditioning systems, methods for service and repair of heating and air conditioning systems, and troubleshooting techniques. Class fee \$15. **W**

AUM086A Automotive Air Conditioning and Heating

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

A course designed to familiarize the student with the theory and operation of automotive heating and air conditioning systems. Methods for service and repair of heating and air conditioning will be covered, along with troubleshooting techniques. Class fee \$10 **Offered as needed.**

AUM087 Introduction to Autobody Technology

3 lab hrs/wk, 1 cr.

An introduction to the basic principles of autobody repair. Includes entry-level training in the use of autobody tools, equipment, and techniques in the repair of various damaged autobody components. Class fee \$15. **Offered as needed.**

AUM088 Automotive Machine Shop-Upper Engine

1 class and 3 lab hrs/wk, 2 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 \$20. **F**

AUM089 Automotive Machine Shop-Lower Engine

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

Instruction in the theory and practice of automotive machining. Includes precision measuring tools, torque wrenches, cylinder block boring and honing, cylinder block resurfacing, mainline

checks and repairs, and connecting rod reconditioning. Class fee \$20. **W**

AUM090 Automotive Machine Shop-Engine 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 \$20. **Sp**

AUM092 Automotive Diesel Engines

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

Construction, working principles, and methods of servicing automotive diesel engines. **Prerequisite:** AUM051. Class fee \$5. **Sp**

AUM280A-L Cooperative Work Experience

1-12 cr.

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

BA

BUSINESS ADMINISTRATION

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. **F, Sp, Su**

BA052 Accounting Procedures II

4 class hrs/wk, 4 cr.

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

BA053 Accounting Procedures III

4 class hrs/wk, 4 cr.

A study of accounting for corporations, capital stock, corporate earning, corporate bonds, investments, analysis of financial statements, and manufacturing firms. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's Accounting program. **Prerequisite:** BA052 and BA101. **Sp**

BA055 Governmental/Nonprofit Accounting II

3 class hrs/wk, 3 cr.

Compares and contrasts principles of accounting and reporting for state and local government with those of state and local school systems, colleges and universities, hospitals, and the federal government. Familiarizes the student with budgeting, cost determination, and audits of governmental and nonprofit entities. **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, monetary assets, valuations of inventories, and current liabilities. **Prerequisite:** Concurrent enrollment in BA213 or consent of instructor. **F, Sp**

BA057 Intermediate Financial Accounting II

4 class hrs/wk, 4 cr.

Comprehensive study of plant assets, depreciation, depletion, intangible assets, long-term liabilities, issuance and reacquisition of capital stock, additional paid-in capital and retained earnings, dilutive securities and earnings per share calculations, long-term investments in securities and funds, and revenue recognition. **Prerequisite:** BA056 or consent of instructor. **W, F**

BA058 Intermediate Financial Accounting III

4 class hrs/wk, 4 cr.

Comprehensive study of revenue recognition, accounting changes, error analysis, income taxes, pension plans, leases, statement of changes in financial position, financial statement analysis, full disclosure, and price level adjusted financial statements. **Prerequisite:** BA057 or consent of instructor. **Sp, W**

BA062A AMA Coaching for Top Performance

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

Designed for managers and supervisors. Presents training, communication, and motivational skills to build a solid foundation of coaching techniques. Class fee \$89. **Offered as needed.**

BA062B AMA Managing and Resolving Conflict

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

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

BA062C AMA Communication Skills for Managers

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

Focuses on effective oral, non-verbal, and written communication. Participants will develop techniques to better express themselves in writing reports, conferencing with colleagues, and running meetings. This course is designed for managers and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062D AMA First-Line Supervision

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

Covers the essential elements of supervising others. Focuses on leadership styles, decision making, rewards, productivity, conflict, grievances, and problem employees. Designed for managers and supervisors in business, industry, and government. Class fee \$104. **Offered as needed.**

BA062E AMA Reading and Interpreting Financial Statements

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

Covers the essential elements of accounting: balance sheet, income statement, and statement of cash flows. Emphasizes analysis of financial statements and their relationship to the overall financial condition of an organization. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062F AMA What Managers Do

2.5 class hrs/5 wks, 1 cr.

Focuses on contemporary management skills, including planning, organizing, staffing, motivating, and controlling. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062G AMA Getting Results with Time Management

2.5 class hrs/5 wks, 1 cr.

Focuses on techniques to increase productivity and efficiency by better use of time and organizational skills. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062H AMA How to Delegate Effectively

2.5 class hrs wk for 5 weeks, 1 cr.

Focuses on effective delegation methods. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **Sp**

BA062I AMA A Manager's Guide to Human Behavior

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

Focuses on the skills necessary to inspire employees to high performance, maximize positive impact on others, deal with on-the-job conflict, develop more productive working relationships, establish rapport and mutual trust, and receive performance feedback. Designed for management and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062J AMA Successful Negotiating

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

Focuses on negotiation techniques. Topics range from the steps used in pre-negotiation planning to the use of details such as seating arrangements and meeting site selection to determine the results of negotiations. Designed for managers and supervisors in business, industry, and government. Class fee \$104. **W**

BA062K AMA Leadership Skills for Managers

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

Presents methods for enhancing the leadership qualities necessary for managing a diverse and changing workforce. Emphasizes the development of visioning, coaching, and empowerment skills. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **W**

BA062L AMA Fundamentals of Finance and Accounting for Non-financial 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.**

BA062M AMA Writing for Management Success

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

Designed for supervisors and managers in business and industry. Training, communication, and motivational skills will be covered in order to build a solid foundation of coaching techniques. Class fee \$89. **Offered as needed.**

BA062N AMA-Total Quality Management

2.5 class hrs/5 wks, 1 cr.

Reviews the history, concepts, techniques and implementation of Total Quality Management (TQM) processes for both manufacturing and service organizations. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **Offered as needed.**

BA062O AMA How to Make Teams Work

12.5 class hrs, 1 cr.

Presents team-building skills for a changing business environment. In the role of team leader, participants will gain an understanding and management tools to make teams function. Class fee \$89. **Offered as needed.**

BA062P AMA-Effective Team-Building for Managers

2.5 class hrs/5 wks, 1 cr.

Focuses on methods of team-building: from recruiting the right team members to empowering them with authority and responsibility for their decisions and performance. Covers method of building trust, confidence, and group work skills. Designed for managers and supervisors in business, industry, and government. Class fee \$89. **W**

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 collaborating while creating a business plan, a marketing plan, and business operations procedures. **F, W, Sp, Su**

BA070 Merchandising

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

Study of merchandise display problems including space utilization, improvisations, seasonal display, lighting, and organization. Covers the basic merchandising procedures of a retail establishment, and includes other types and considerations of merchandising. **Prerequisite:** BA223. **Offered as needed.**

BA077 New Supervisor Orientation

2 class hrs/wk, 2 cr.

How front-line supervisors may guide and motivate employees toward greater productivity. Focuses on management styles, communication, performance appraisals, and personnel development. **Offered as needed.**

BA092 Federal Cost Principles, Monitoring and Reporting

1 class hr/wk, 1 cr.

Study of federal cost principles and allocation. Includes federal financial assistance reporting and monitoring of A-128 and A-133 subrecipients. **Offered as needed.**

BA093 Fixed Assets Accounting and Reporting

2 class hrs/wk, 2 cr.

Accounting for fixed assets in governmental and proprietary funds. Includes study of capitalization policy, property disposition, and generally accepted accounting principles (GAAP) and financial reporting requirements. **Prerequisite:** Six

credit hours of accounting or consent of instructor.

Offered as needed.

BA094 Reconciliations/Verifications

1 class hr/wk, 1 cr.

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

BA095 State Financial Management System: RSTARS INTRO

3 class hrs/wk, 3 cr.

The course will cover the Relational Statewide Accounting and Reporting System (RSTARS) General User Training Manual, a manual developed by KPMG Peat Marwick and the State of Oregon, specifically for the Oregon Statewide Financial Management System. **Prerequisite:** BA211 and BA054. **Offered as needed.**

BA096 State Financial Management System: ADPICS

2 class hrs/wk, 2 cr.

One of two course offerings that are part of the State of Oregon accounting and reporting system. Covers requisitions, purchase orders, receiving, invoices, and voucher payables. **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**

BA106A,B,C Business Leadership Practicum

2 class hrs/wk, 2 cr. each

Designed to develop leadership qualities, present opportunities for student-community participation, and provide a setting for self-improvement in conjunction with business student organizations. **Offered as needed.**

BA160 Purchasing I

3 class hrs/wk, 3 cr.

Discusses purchasing functions, policies, procedures, manuals, legal considerations, public relations, ethics, quality and sources of supplies, store-keeping, 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.**

BA200K Conflict Resolution at Work

1 class hr/wk, 1 cr.

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

BA201 Community Leadership

1 class hr and 7 lab hrs/wk, 3 cr.

Study of effective leadership action within the community. Includes motivation techniques to prepare individuals to assume leadership positions within the community. Participants will attend seminars, tours, and briefings and will talk with people in decision-making positions. **Offered as needed.**

BA202 Personal Effectiveness

3 class hrs/wk, 3 cr.

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

BA203 Interpersonal Relations in Business

3 class hrs/wk, 3 cr.

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

BA204 Teamwork Dynamics

3 class hrs/wk, 3 cr.

Fundamentals of effective work-team relationships. Covers 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 hrs/wk, 3 cr.

Analyzes and synthesizes historical and current theories in leadership, group processes, organizational structures, personnel policies, motivation, and training that allow an individual to plan, organize, control, staff, and direct subordinates in an organization. **Prerequisite:** BA066 and BT085. **F, W, Sp, Su**

BA207 Collective Bargaining and Labor Arbitration

3 class hrs/wk, 3 cr.

An introduction to the history of collective bargaining in the United States. Covers labor agreements, management rights, conditions of employment, contract negotiation procedures, resolution of impasses, grievances, and arbitration. **Offered as needed.**

BA211 Financial Accounting I

4 class hrs/wk, 4 cr.

Accounting for service and merchandising firms. Includes recording transactions, adjustments, financial statements, worksheets, closing entries, cash and accounts receivable, notes and interest, and accounting for inventories. For accounting program students and students transferring to four-year institutions. **Prerequisite:** MTH062 or higher, or concurrent enrollment in MTH062. **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 inventories; accounting for inventories; inventories; costing of capital assets; current, long-term, and partnership liabilities; formation and division of earnings; changes in ownership and liquidation; capital acquisition and reporting; dividends; stock splits; donated capital; earnings measurement theory and practice; reporting income taxes on financial statements; corporate bonds; corporation accounting principles; and cash-flow statements. **Prerequisite:** BA101, BA211, and MTH070 or higher, or concurrent enrollment in MTH070, or consent of instructor. **F, W, Sp, Su**

BA213 Managerial Accounting

4 class hrs/wk, 4 cr.

Covers the accountant's role in an organization, cost terms and purposes, cost-volume-profit relationships, budgeting, systems design, standard costs, flexible budgets and overhead control, joint costing, cost allocation, income effects of alternative product-costing methods and relevant costs, and the contribution approach to decisions. **Prerequisite:** BA212. **F, W, Sp, Su**

BA214 Business Communications

3 class hrs/wk, 3 cr.

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 students to work as individuals and groups, performing written and oral assignments. **Prerequisite:** BT120 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**

BA218 Personal Finance

3 class hrs/wk, 3 cr.

Principles and concepts of consumer economics. Covers consumer decision making, money management, use of credit, food shopping, housing, family transportation, insurance, savings, and investment. **F, Sp**

BA221 Production and Operations Management

3 class hrs/wk, 3 cr.

Overview of the functions an organization must perform to produce goods or services. Emphasis on the role operational policy plays in the overall strategy of an organization and how that policy affects other areas such as marketing, finance, accounting, personnel, and management information systems. **Offered as needed.**

BA222 Financial Management

3 class hrs/wk, 3 cr.

The principles of planning, acquiring, and using funds in an organization. Includes investment analysis, budgeting, ratio analysis, capital investments (using present value and internal rate of return), cost of capital, and cash and credit management. **Prerequisite:** BA212. **W, Sp**

BA223 Principles of Marketing

3 class hrs/wk, 3 cr.

Surveys all functions of marketing from research and product development to the sale of a product or service and feedback of consumer acceptance. Emphasizes marketing planning and strategy as dictated by the consumer through marketing research. **Prerequisite:** BA101 or consent of instructor. **F, W, Sp**

BA224 Personnel Management

3 class hrs/wk, 3 cr.

Principles and functions of a personnel department relating to supervision. Includes policy formulation, employee selection and placement, interviewing and counseling, discipline, labor-management relations, wage and salary administration, human resource development, and employee health and safety. **F, Sp**

BA226 Business Law I

3 class hrs/wk, 3 cr.

An introduction to the nature and function of the law in society and a study of the rights and obligations of contracts. **F, W, Sp, Su**

BA227 Business Law II

3 class hrs/wk, 3 cr.

Continuation of BA226. Covers legal aspects of personal property, sales, commercial paper, and bankruptcy. **Prerequisite:** BA226. **W, Sp**

BA228 Computer Accounting Applications

3 class hrs/wk, 3 cr.

Introduces computer-based accounting for small businesses and provides hands-on experience with business applications including general ledger, accounts receivable, accounts payable, payroll, inventory management processing, sales invoicing, check reconciliation, and financial statements. **Prerequisite:** CS125SS or equivalent microcomputer experience, and BA052 or BA212. Class fee \$12. **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. **Offered as needed.**

BA233 Marketing Research

3 class hrs/wk, 3 cr.

Research design and the development of information gathering systems as applied to marketing. Use of secondary and primary data and the interpretation of information gathered. **Prerequisite:** One term of psychology or sociology. **Offered as needed.**

BA234 International Business

3 class hrs/wk, 3 cr.

A managerial view of international marketing. Presents theories and trends in global marketing of goods and services. Analyzes cultural, legal, political, and monetary factors; development of an appropriate marketing mix; import management; and trade promotion. **Prerequisite:** BA101, BA223, or equivalent business background as determined by instructor. **Offered as needed.**

BA238 Sales and Persuasion

3 class hrs/wk, 3 cr.

Emphasizes behavioral sciences, sales psychology and techniques, and communication. How to sell ideas and attitudes within a firm, and products and services to customers. **F, Sp**

BA239 Principles of Advertising

3 class hrs/wk, 3 cr.

An examination of advertisements within each segment of media. Explores relative merits of several media. Practice in the planning and analysis of complete advertising campaigns and their coordination with other marketing strategies. **Prerequisite:** BA101. **Offered as needed.**

BA240 Governmental/Non-Profit Accounting I

3 class hrs/wk, 3 cr.

Comprehensive study of accounting for governmental and non-profit entities. Considers budgets, accounting for general funds, special revenue funds, revenue accounting, expenditure accounting, capital projects funds, debt-service funds, special assessment funds, enterprise funds, general fixed asset group of accounts, and summary of funds and groups. **Prerequisite:** BA212. **F**

BA241 Risk and Insurance

3 class hrs/wk, 3 cr.

Concepts of risk, probability and insurance; role of insurance in the management of risk. An examination of the underlying legal principles and common elements of most insurance contracts. Emphasizes the role of insurance from the viewpoint of the consumer. Covers business and personal applications of the major types of property and liability insurance, and life and health insurance, with emphasis on the underlying economic need each is designed to meet. **Offered as needed.**

BA242 Investments

3 class hrs/wk, 3 cr.

How investors may consolidate and coordinate previous experiences with basic information and data in order to survive in the marketplace. Explains the individual investment opportunities as part of an investor's portfolio. **Prerequisite:** BA101, BA211, or equivalent as determined by instructor. **F, W, Sp**

BA243 Introduction to Consumer Behavior

3 class hrs/wk, 3 cr.

How behavioral science concepts, theories, and research observations apply to various aspects of consumer behavior. A discussion of the influences of perception, personality, attitudes, culture, family life, and social class on how and why people buy and consume products. **Offered as needed.**

BA244 Records Management

3 class hrs/wk, 3 cr.

Principles and procedures for efficient organization and control of business records. Covers management of the creation, maintenance, storage, and disposition of records. Includes manual, mechanical, and automated records systems and micrographics in the study of information resource management. **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/wk, 3 cr.

Studies current supervisory processes, reviews supervisory responsibilities, provides practical instruction for new and current supervisors; and examines the role of supervision in business and industry. **Offered as needed.**

BA256 Income Tax Accounting I

4 class hrs/wk, 4 cr.

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

BA257 Income Tax Accounting II

4 class hrs/wk, 4 cr.

Second of two introductory courses in preparing federal and Oregon individual income tax returns. See BA256. **Prerequisite:** BA256 or consent of instructor. **F**

BA260 Real Estate Principles

3 class hrs/wk, 3 cr.

The nature, importance, and character of real property, real estate business, markets and brokerages; taxes and assessment; contracts; and ownership. **F, Sp**

BA262 Real Estate Practices

3 class hrs/wk, 3 cr.

Surveys the procedures involved in the listing, selling, and closing of residential property. Emphasizes agency relationships, Oregon real estate license law, listing and purchase agreements, client trust accounts, neutral escrows, co-op transactions, closing procedures, codes of ethics, professional organizations, and related real estate activities. **Prerequisite:** BA263 and BA264. **Sp**

BA263 Real Estate Law

3 class hrs/wk, 3 cr.

Surveys Oregon real estate law as it applies to the ownership, use, and transfer of real property.

Emphasizes basic real property law, legal descriptions, landlord/tenant relationships, title transfer, real estate contracts, encumbrances, title insurance, document recording, taxes, assessments, and land use controls. **Prerequisite:** BA260 or consent of instructor. **W**

BA264 Real Estate Finance

3 class hrs/wk, 3 cr.

Surveys the methods of financing acquisition of real property. Emphasizes lending laws, the mortgage market, financing documents, foreclosures, governmental and commercial loan programs, appraisals, mathematical calculations, taxation, and alternative methods of financing. **Prerequisite:** BA260 or consent of instructor. **W**

BA269 Principles of Banking

3 class hrs/wk, 3 cr.

Presents a comprehensive introduction to banking in today's economy including the language and documents of banking, check processing, teller functions, deposit functions, trust services, book-keeping, and loans and investments. Discusses the bank's role in the community. **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. **Prerequisite:** BA269 or consent of instructor. **Offered as needed.**

BA271 Analyzing Financial Statements

3 class hrs/wk, 3 cr.

Techniques necessary for evaluating financial conditions and the operation of business enterprises. Includes financial statement analysis and accounting, flow of business funds, and tools and techniques for analyzing financial statements. **Prerequisite:** BA212. **Offered as needed.**

BA272 Information Technology in Business

4 class hrs/wk, 4 cr.

Application of information technology in the business environment through the combined use of database, spreadsheet, word processing, presentation, groupware, and hypertext tools. **Prerequisite:** BA101, CS101 or equivalent, and CS125E. **F, W, Sp**

BA273 Marketing for Bankers

3 class hrs/wk, 3 cr.

Presents bank marketing relations, advertising, and personal selling. Covers concepts and philosophies of marketing specifically related to banking, including information research, target markets, the marketing mix, and methods of market planning. **Offered as needed.**

BA277 Business Ethics

3 class hrs/wk, 3 cr.

A comparative study of ethical and economic systems designed to increase decision-making capabilities. Emphasizes issues and policy formation in varied business settings. **W**

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. **Prerequisite:** BA269. **Offered as needed.**

BA280 Cooperative Work Experience

see AUM280.

BA281 Consumer Lending

3 class hrs/wk, 3 cr.

An overview of consumer lending, including the many types of credit arrangements in which a financial charge is paid for the privilege of repaying debts in delayed payments. Includes credit evaluation, consumer credit policy, the requirements of making credit decisions, and loan documentation and closing. **Prerequisite:** BA269 and current employment in a financial institution or enrollment in the Financial services program. **Offered as needed.**

BA282 The Trust Business

3 class hrs/wk, 3 cr.

The changing role of a trust department, the services it provides, and how it fits into the overall banking business. **Prerequisite:** BA269 or on-the-job banking experience. **Offered as needed.**

BA284 Law and Banking-Applications

3 class hrs/wk, 3 cr.

An introduction to laws pertaining to secured transactions, letters of credit, and bank collection processes. Discusses check losses and a broad range of legal issues related to processing checks. Includes up-to-date summaries of laws related to collateral, perfection, and default. Case studies illustrate important legal points related to banking practices. **Prerequisite:** BA269. **Offered as needed.**

BC and CTX**BUILDING CONSTRUCTION****BC051 Construction Print Reading**

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

Instruction in reading and understanding basic blueprints, terminology, symbols, and construction standards. **Prerequisite:** Consent of instructor. **F, W**

BC053 Construction Tools and Materials Application

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

An orientation to construction methods, standards, and safety practices common to all construction trades. The combination of lecture and laboratory provides a realistic overview of the construction trades and allows students to experience specific skill areas. Class fee \$30. **F**

BC055 Concrete Forming

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

Covers concrete forming and the terminology related to the various forming techniques. **Prerequisite:** Consent of instructor. Class fee \$40. **F, W**

BC061 Basic Construction Framing

3 class and 15 lab hrs/wk, 8 cr.

Covers construction framing with emphasis on walls, ceilings, and fasteners. **Prerequisite:**

BC053 or consent of instructor. Class fee \$40. **W, Sp**

BC063 Construction Estimating

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

An introduction to building trades skills, including plan reading, excavation, concrete, and framing. **W, Sp**

BC071 Advanced Construction Framing

3 class and 15 lab hrs/wk, 8 cr.

Provides advanced framing skills, including roof and stairs. **Prerequisite:** BC061 or consent of instructor. Class fee \$40. **Sp**

BC073 Basic Interior Finish

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

An introduction to terminology and skills related to finish work. **Sp**

BC280 Cooperative Work Experience

see AUM280.

CTX051 Orientation to Construction

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

An orientation to construction methods, standards, and safety practices common to all construction trades. The combination of lecture and laboratory provides an overview of the construction trades and allows students to experience specific skill areas. Information and assistance will be given to students in choosing a trade area for future employment and career development. **F**

CTX052 Advanced Construction Methods I

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

Covers methods, standards, safety practices, and tools common to residential foundation construction. The combination of lecture and laboratory provides an overview of the foundation construction and allows students to experience specific skill areas. **W**

CTX053 Advanced Construction Methods II

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

Presents knowledge and skills related to construction methods, standards, and safety practices common to residential construction. The combination of lecture and laboratory provides an overview of residential framing 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. **Sp**

BI

BIOLOGY

BI060 Basic Science Principles

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

Designed for dental assisting and hospitality systems management students. Presents introductory 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. **F**

BI071 Body Structure and Function I

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

Normal structure and function of the human body, chemical principles, characteristics of the cell as a basis for life, organization of tissues, organs and

systems; and structure and function of body systems. 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 BI071. **Prerequisite:** BI071. Class fee \$8. **Offered as needed.**

BI101 General Biology

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

Investigates the diversity of organisms, principles of ecology, and effects and consequences of ecosystem alteration by humans. This sequence need not be taken in order, although some carry-over from one term to the next does occur. Class fee \$12. **F, Sp**

BI102 General Biology

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

Covers basic principles of genetics, natural selection, evolution, origin of species, population genetics, and animal behavior. Class fee \$12. **F, W, offered summer as needed.**

BI103 General Biology

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

Covers principles of animal structure 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**

BI132 Environmental Science 2

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

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

BI133 Environmental Science 3

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

Examines environmental problems and issues related to environmental contamination such as air and water pollution, solid waste disposal, and pesticide use, and explores relationships between environmental problems and other aspects of society. **Prerequisite:** BI132. Class fee \$12. **Sp**

BI200 Principles of Ecology-Field Biology

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

Emphasizes the broad concepts of ecology using Western Oregon coniferous forests as a model. Concepts are first introduced in the classroom and then examined in detail using student-collected field data. **Prerequisite:** BI101, 102, or consent of instructor. Class fee \$12. **Su**

BI231 Human Anatomy and Physiology

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

In-depth examination of the structure and function of the human body. First of a three-term sequence. Includes a review of chemical principles and the study of cells, tissues and the integumentary, skeletal, and nervous systems. **Prerequisite:** CH110, CH104 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/wk, 4 cr.

Second of a three-term sequence providing an in-depth examination of the structure and function of the human body. Includes the study of the muscular, circulatory, and respiratory systems. **Prerequisite:** BI231 with a grade of C or higher; CH110 or CH105 and CH106 (CH106 must be taken concurrently with BI232 if not completed previously) or consent of instructor. Class fee \$12. **F, W, Sp, offered summer as needed.**

BI233 Human Anatomy and Physiology

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

Third of a three-term sequence providing an in-depth examination of the structure of the human body. Includes the study of the endocrine, digestive, urinary, and reproductive systems, as well as an examination of body fluids, electrolytes, pH balance, and medical genetics. **Prerequisite:** BI232 with a grade of C or higher; CH110 or CH104, CH105, and CH106; or consent of instructor. 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 or CH104, CH105, and CH106. Class fee \$12. **F, W, Sp, offered summer as needed.**

BI251 Principles of Wildlife Conservation

3 class hrs/wk, 3 cr.

Introduces the principles and practices of wildlife conservation and management. Covers the history of wildlife conservation, basic ecological concepts, human impact on wildlife and habitat, social and economic issues relating to wildlife management, and management objectives and strategies for fisheries and wildlife populations. **Sp**

BLD

BUILDING INSPECTION

BLD050 Introduction to Building Inspection

3 class hrs/wk, 3 cr.

Provides background information and legal basis of building codes. Explores and compares performance versus specification standards. Discusses Uniform Building Code, Uniform Plumbing Code, Uniform Housing Code, and National Electrical Code. **F**

BLD051 Building Codes 1

3 class hrs/wk, 3 cr.

Explores nonstructural standards of the Uniform Building Code. Includes occupancy classifica-

tions, building area, height and location limitations; types of construction; and exit and fire resistive standards. **F**

BLD052 Building Codes 2

3 class hrs/wk, 3 cr.

Additional building code study concerning areas that present hazards in building construction, including vertical shafts, exterior and interior surfaces, exit requirements, fire protection systems, public property, and weather protection. **Prerequisite:** BLD051. **W**

BLD053 Building Codes 3

3 class hrs/wk, 3 cr.

Provides for a final review of the Uniform Building Code, including a closer examination of pedestrian protection, permanent occupancy, prefabricated construction, fire systems, energy conservation, and architectural barriers. **Prerequisite:** BLD051 and BLD052. **Sp**

BLD054 Dwelling Construction under the UBC 3 class hrs/wk, 3 cr.

Relates the Uniform Building Code to residential buildings and miscellaneous structures. Includes administration, definitions, foundations, occupancy standards, wood framing systems, roof coverings, and wall coverings. **Sp**

BLD055 Building Department Administration 3 class hrs/wk, 3 cr.

A study of building department administration including the laws and principles that affect personnel and code compliance. **Sp**

BLD059 Materials of Construction 2 class hrs/wk, 2 cr.

Materials and processes regulated by the building code. Testing standards as a quality control of traditional and nontraditional building materials. Class fee \$10. **W**

BLD060 Fire Protection for Buildings 3 class hrs/wk, 3 cr.

Installation, functions, and requirements of sprinkler systems. **W**

BLD061 Structural Inspection Wood 3 class hrs/wk, 3 cr.

Introduces basic methods of wood framing. Deals with allowable stresses, loads, and fundamental design of wood products and construction systems. Class fee \$10. **W**

BLD062 Structural Inspection Masonry 3 class hrs/wk, 3 cr.

Specific code requirements for all types of masonry construction, both structural and non-structural. Includes an introduction to fireplace construction. Class fee \$10. **Sp**

BLD063 Structural Inspection Concrete 3 class hrs/wk, 3 cr.

Concrete as a construction material. Covers physical properties, including mix design, handling, storage, delivery, proper placement, and fire resistive qualities. Class fee \$10. **F**

BLD064 Structural Inspection Steel 3 class hrs/wk, 3 cr.

Steel as a construction material and its use in light, medium, and heavy steel frame construction; methods of connections; fire resistive qualities;

and manufacturing and fabrication processes. **Prerequisite:** BLD051 or consent of instructor. Class fee \$10. **W**

BLD066 Structural Plan Review 2 class and 3 lab hrs/wk, 3 cr.

The fundamentals of structural plan review, including the analysis and design of beams, columns, and connections. **Prerequisite:** BLD069. **W**

BLD067 Nonstructural Plan Review 2 class and 3 lab hrs/wk, 3 cr.

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

BLD068 Foundations, Excavation and Grading 3 class hrs/wk, 3 cr.

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

BLD069 Engineering for the Building Inspector 3 class hrs/wk, 3 cr.

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

BLD072 Plumbing Codes II 3 class hrs/wk, 3 cr.

A comprehensive study of plumbing code requirements relating to water and gas distribution systems, storm and sanitary sewer systems, water heater installations, and mobile home connections. **Prerequisite:** BLD071 or consent of instructor. **W**

BLD081 Mechanical Codes I 3 class hrs/wk, 3 cr.

Covers basic thermodynamics. Helps students gain a working knowledge of the Uniform Mechanical Code relative to size, location, and proper installation of heating and ventilation systems. **W**

BLD082 Mechanical Codes II 3 class hrs/wk, 3 cr.

Provides a working knowledge of Uniform Mechanical Code commercial kitchen equipment, fuel gas piping, and related testing standards. **Prerequisite:** BLD081. **Sp**

BLD083 Mechanical Codes III 3 class hrs/wk, 3 cr.

Provides a working knowledge of the Uniform Mechanical Codes and its provisions for exhaust systems, boilers, water heaters, hydronics heating

systems, and process piping. **Prerequisite:** BLD082. **Sp**

BLD091 One-and Two-Family Electrical Code 3 class hrs/wk, 3 cr.

Helps students understand wiring design, methods, and equipment for general use, as related to one- and two-family dwelling applications. **W**

BLD092 CABO One-and Two-Family Dwelling Code 3 class hrs/wk, 3 cr.

A study of the CABO One- and Two-Family Dwelling Code as it relates to residential construction and applicable codes. Includes administrative, structural, mechanical, plumbing, and electrical requirements. **Sp**

BLD093A-F Building Inspection Lab 4 lab hrs/wk, 1 cr. each

Examines working conditions typical to building inspection. Students will have an opportunity to apply knowledge gained in the classroom to actual field conditions. Class fee \$10 each. **F, W, Sp**

BLD280 Cooperative Work Experience see AUM280.

BOT

BOTANY

BOT201 General Botany 3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the study of plant ecology, generalized plant cells, photosynthesis, and respiration. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. **F**

BOT202 General Botany 3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the study of genetics, evolution of plant diversity, and the biology of non-vascular plants. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. **W**

BOT203 General Botany 3 class and 3 lab hrs/wk, 4 cr.

Introductory study of plant life emphasizing principles, theories, and applications of plant biology. Includes the growth, development, and structure of vascular plants, including the effects of light, hormones, water, and nutrients. Laboratory work emphasizes the classification of flowering plants. **Prerequisite:** High school biology and chemistry recommended. Class fee \$12. **Sp**

BT

BUSINESS TECHNOLOGY

BT061 Electronic Calculators 2 class hrs/wk, 2 cr.

Use of electronic printing calculators to solve simple business and mathematical problems. **Prerequisite:** MTH060. Class fee \$12. **F, W, Su**

BT061A Electronic Calculators A 2 lab hrs/wk, 1 cr.

Use of electronic calculators to solve mathematical problems. Includes development of speed and

accuracy in touch operation of the calculator. Class fee \$4. **F, W, Sp, Su**

BT061B Electronic Calculators B

2 lab hrs/wk, 1 cr.

Continuation of BT061A. 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:** BT061A and MTH060. Class fee \$4. **F, W, Sp, Su**

BT084 Business English 1

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. **F, W, Sp, Su**

BT085 Business English 2

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:** BT084 or consent of instructor based on proficiency exam.

F, W, Sp, Su

BT086 Personal and Professional Development

3 class hrs/wk, 3 cr.

Designed to assist students in identifying the personal and professional strengths sought by employers in hiring and promoting employees. Encourages students, through self-assessment, to compare those traits with their own personal and professional strengths and potential weaknesses. Offers opportunities to develop step-by-step approaches toward enhancing the marketability of their skills. **W, Sp**

BT090 Bookkeeping

3 class hrs/wk, 3 cr.

Basic accounting principles and procedures to provide familiarity with financial records and accounting terminology used in business today. Includes training in processing techniques for handling information: special journals, controlling accounts, and worksheets used in preparation of account statements, purchases, sales, and end-of-the-period procedures. **F, W, Sp**

BT099 Proofreading/Editing

3 class hrs/wk, 3 cr.

Effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** BT085. **F, W, Sp**

BT099A Proofreading/Editing A

1 class hr/wk, 1 cr.

Effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** CA121. **F, W, Sp**

BT099B Proofreading/Editing B

1 class hr/wk, 1 cr.

Effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** BT099A, CA121, or equivalent as determined by instructor. **F, W, Sp**

BT099C Proofreading/Editing C

1 class hr/wk, 1 cr.

Effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** BT099A; BT099B; CA121, or equivalent as determined by instructor. **F, W, Sp**

BT116 Office Procedures

3 class hrs/wk, 3 cr.

An introduction to administrative support activities. Includes using the telephone, practicing effective listening skills, employing mailing and shipping services, preparing financial records, planning meetings and conferences, making travel arrangements, scheduling appointments, meeting with the public, and developing supervision and leadership skills. Presents employment opportunities. **Prerequisite:** BT085 or concurrent enrollment. **F, W, Sp, Su**

BT120 Professional Communication Skills

4 class hrs/wk, 4 cr.

Introduces principles of written, 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, short oral reports); and preparation of written report with documentation. **Prerequisite:** BA066, BT085, or placement through the proficiency exam. **F, W, Sp**

BT128 Introduction to Records Management

3 class hrs/wk, 3 cr.

Principles and procedures for efficient organization and control of business records. Covers the creation, management, maintenance, storage, and disposition of records. Includes practice in alphabetic, numeric, subject, and geographic filing systems of correspondence and other papers. **F, W, Su**

BT128A Introduction to Records Management A

1 class hr/wk, 1 cr.

Basic principles used in the systematic planning of the classification, arrangement, and filing of alphabetic correspondence and the requisition, charge, and follow-up controls. **F, W, Sp, Su**

BT128B Introduction to Records Management B

1 class hr/wk, 1 cr.

Presentation of various other types of filing systems: color-coded, alphabetic, subject, numeric, and geographic. Emphasizes records control, transfer, storage, retrieval, and disposition of paper recorded and special records filing. **Prerequisite:** BT128A. **F, W, Sp, Su**

BT128C Introduction to Records Management C

1 class hr/wk, 1 cr.

Basic principles used in the systematic planning of the classification, arrangement, and filing of alphabetic correspondence and the requisition, charge, and follow-up controls. **Prerequisite:** BT128B. **Offered as needed.**

BT280 Cooperative Work Experience

see AUM280.

CA

COMPUTER APPLICATIONS

CA091 Computerized Bookkeeping

3 class hrs/wk, 3 cr.

An introduction to computerized accounting principles, including chart of accounts, journal, posting to ledger, trial balance, income statement, and balance sheet. Additional materials introduced on receivables, payables, comparative analysis, depreciation, payroll, and inventory. **Prerequisite:** BT090 or BA051 or BA211. Class fee \$12. **W, Sp**

CA092 Payroll Procedures

3 class hrs/wk, 3 cr.

An introduction to payroll recordkeeping in Oregon. Covers the use of both manual and computerized systems to compute and record gross wages, withholding amounts, and net wages; create and maintain employee earnings records and payroll registers; compute employers taxes and other payroll-related costs, make payroll tax deposits, complete payroll reports and W-2s, and make general journal entries for all payroll transactions; and compute deductions for both credit and child support wage garnishments. Also studies payroll systems and control procedures, reports to management, and methods of controlling costs. **Prerequisite:** BT090, and BA051 or BA211. Class fee \$12. **W, Sp**

CA092A,B,C Payroll Procedures 1,2,3

1 class hr/wk, 1 cr. each

An introduction to payroll recordkeeping in Oregon. Includes: Part A) computing and recording gross wages, withholding amounts, and net wages. Uses both manual and computerized systems to create and maintain employee earnings records and payroll registers; Part B) computing employers' taxes and other payroll-related costs, making payroll tax deposits, completing payroll reports and W-2s, and making general journal entries for all payroll transactions. Uses both manual and computerized systems; Part C) computing deductions for both credit and child support wage garnishments, and a study of payroll systems and control procedures, management reports, and cost-control methods. **Prerequisite:** BT090, BA051, or BA211. Class fee \$4 each. **Sp**

CA117A Microsoft Publisher 1

1 class hr/wk, 1 cr.

A hands-on introduction to the use of Microsoft Publisher desktop publishing software. Covers formatting and enhancing text; working with art, Design Gallery, and drawing tools; and using Page Wizard for creating publications. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability

of 25 words per minute. Class fee \$4. **Offered as needed.**

CA117B Microsoft Publisher 2

1 class hr/wk, 1 cr.

A continuation of CA117A. Covers developing styles, using columns and tables, enhancing text with special effects, working with multiple pages, and employing special features to create publications. **Prerequisite:** CA117A or equivalent, computer literacy (prior experience with computer and mouse device), and touch keyboarding ability of 25 words per minute. Class fee \$4. **Offered as needed.**

CA117C Microsoft Publisher 3

1 class hr/wk, 1 cr.

A continuation of CA117B. Includes a review of Microsoft Publisher features, an examination of publication design considerations, and practice in publication production and critiquing. **Prerequisite:** CA117B or equivalent, computer literacy (prior experience with computer and mouse device), and touch keyboarding ability of 25 words per minute. Class fee \$4. **Offered as needed.**

CA118A Current Office Software-Operating Systems/Utilities

1 class hr/wk, 1 cr.

A hands-on introduction to software currently used in business and industry. The brands of software in this class may change as industry standards evolve. Currently in use: Microsoft Windows 95. Includes the use of Program Manager, File Manager, Windows Accessories, and other features. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. Class fee \$4. **F, W, Sp, Su**

CA118B Current Office Software-Worksheets

1 class hr/wk, 1 cr.

A hands-on introduction to software currently used in business and industry. The brands of software in this class may change as industry standards evolve. Currently in use: Microsoft Excel 7.0 for Windows. Includes worksheet basics and an introduction to charting. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. Class fee \$4. **W, Sp**

CA118C Current Office Software-Database

1 class hr/wk, 1 cr.

A hands-on introduction to software currently used in business and industry. The brands of software in this class may change as industry standards evolve. Currently in use: MS Access 7.0 for Windows. Includes basics for forms design, data entry, queries, and reports. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. Class fee \$4. **W, Sp**

CA118D Current Office Software-Internet

1 class hr/wk, 1 cr.

An introduction to and demonstration of the Internet and how this resource may be used effectively in a modern office. Emphasizes search and retrieval of information most often needed by office professionals. **Prerequisite:** CA118A or CS101. Class fee \$4. **Offered as needed.**

CA118E Current Office Software-Electronic Messaging Systems

1 class hr/wk, 1 cr.

A hands-on introduction to office software currently used in business and industry. The brands of software in this class may change as industry standards evolve. Currently in use: Novell GroupWise 5 covers electronic messaging (e-mail management), use of the address book, calendaring and task management, discussions (chat sessions), and remote access. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. Class fee \$4. **W, Sp, offered as needed.**

CA119 Exploring Office Desktop Publishing

3 class hrs/wk, 3 cr.

An introduction to publication planning, typography, publication design principles, and desktop publishing for preparation of office publications. Also includes an overview of duplication methods and how to work with print shops. **Prerequisite:** Touch keyboarding ability. Class fee \$12. **W, Sp**

CA121 Keyboarding

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

Basic touch keyboarding skills on standard micro-computer or typewriter keyboard. Emphasizes speed and accuracy, understanding the basic vocabulary of entering or retrieving information, and formatting business letters and reports. Class fee \$12. **F, W, Sp, Su**

CA121A Keyboarding A

2 lab hrs/wk, 1 cr.

Covers basic touch keyboarding on standard microcomputers or typewriter keyboard. Class fee \$4. **F, W, Sp, Su**

CA121B Keyboarding B

2 lab hrs/wk, 1 cr.

Reviews alphabetic and numeric keyboarding and emphasizes the development of speed and accuracy in touch keyboarding. The course introduces number and symbol keys, and basic punctuation rules. **Prerequisite:** CA121A. Class fee \$4. **F, W, Sp, Su**

CA121C Keyboarding C

2 lab hrs/wk, 1 cr.

Emphasizes drills to increase speed and accuracy in touch keyboarding. Includes formatting different types of business letters and a short report. **Prerequisite:** CA121A and CA121B. Class fee \$4. **F, W, Sp, Su**

CA122 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. **F, W, Sp, Su**

CA122A,B,C Keyboard Skillbuilding

2 lab hrs/wk, 1 cr. each

Designed to improve keyboarding skill, including keyboard proficiency, speed, and accuracy. May be taken any time after one has learned the keyboard and is typing approximately 30 words per minute.

Prerequisite: CA121 or consent of instructor. Class fee \$4 each. **F, W, Sp**

CA123 Formatting

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

Formatting business documents, including letters, envelopes, tables, memorandums, reports, forms, financial statements, and manuscripts. **Prerequisite:** CA122 and touch keyboarding ability of 35 words per minute. Class fee \$12. **F, W, Sp, Su**

CA123A Formatting A

2 lab hrs/wk, 1 cr.

This course covers the first credit of formatting. Includes formatting business and personal letters, memos, and reports. **Prerequisite:** CA122A, and CA201D1 or CA201X1. Touch keyboarding skill is essential. Class fee \$4. **F, W, Sp, Su**

CA123B Formatting B

2 lab hrs/wk, 1 cr.

This course covers the second credit of formatting. Covers various format styles for business letters, tables, and reports. **Prerequisite:** CA123A, and CA201D1 and D2 or CA201X1 or X2. Touch keyboarding skill is essential. Class fee \$4. **F, W, Sp, Su**

CA123C Formatting C

2 lab hrs/wk, 1 cr.

This course covers the third credit of formatting. Presents additional format styles for tables, letters, and reports, including minutes and itineraries. **Prerequisite:** CA123B, and CA201D1 and D2 or CA201X1 or X2. Touch keyboarding skill is essential. Class fee \$4. **F, W, Sp, Su**

CA130 Introduction to the Law Office

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

An introduction to the law office, including the use of computers and specialized software for time and billing, legal trust accounting, calendaring and management, legal office reports (including statements), and other functions. Students will also be introduced to the court system, criteria for and functions of a notary public, legal terminology, and basic legal office procedures, including client relations. **Prerequisite:** Student must have taken prerequisite (Bridge) courses, as well as BT099, BT116, BT120, CA122, and CA201D or CA201X. Class fee \$12. **Sp**

CA131 Legal Office Procedures 1

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

An introduction to procedures and practices currently found in the law office, including maintaining professional relations, learning and using legal terminology, producing legal and business documents, maintaining financial and other office records setting priorities, making decisions, using the computer and software for basic legal office procedures and integrating previously-learned office skills. **Prerequisite:** BA214, BA226, CA130, and touch keyboarding speed of 50 words per minute. Class fee \$12. **F**

CA132 Legal Office Procedures 2

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

Continuation of CA131. Emphasizes court documents, probate, dissolution, criminal law, integration of computer skills with legal office procedures, legal terminology, and employability skills.

Prerequisite: CA131 and touch keyboarding ability of 50 words per minute. Class fee \$12. **W**

CA133 Legal Machine Transcription
2 class hrs and 2 lab hrs/wk, 3 cr.

Practice in keying various legal documents and forms from machine dictation, and continued practice in the use of court documents, legal terminology, and advanced integration of computer skills. Emphasizes professional standards for work habits and all documents. **Prerequisite:** CA132, CA202, CA203, and CA225A. Class fee \$12. **Sp**

CA201D Word Processing Procedures 1
3 class hrs/wk, 3 cr.

Basic training in Microsoft Word for Windows. **Prerequisite:** Touch keyboarding ability of 30 words per minute. Class fee \$12. **Offered as needed.**

CA201D1-D3 Word Processing Procedures-Parts 1, 2, 3

2 lab hrs/wk, 1 cr. each

Basic to intermediate training in Microsoft Word for Windows. **Prerequisite:** Touch keyboarding ability of 30 words per minute. Class fee \$4. **F, W, Sp, Su**

CA201X Word Processing Procedures 1
3 class hrs/wk, 3 cr.

Basic training in WordPerfect for Windows software on IBM-compatible equipment. **Prerequisite:** Touch keyboarding ability of 30 words per minute. Class fee \$12. **F, W, Sp, Su, offered as needed.**

CA201X1 Word Processing Procedures 1-Part 1
2 lab hrs/wk, 1 cr.

Basic training in WordPerfect for Windows software on IBM-compatible equipment. **Prerequisite:** Touch keyboarding ability of 30 words per minute. Class fee \$4. **F, W, Sp**

CA201X2 Word Processing Procedures 1-Part 2
2 lab hrs/wk, 1 cr.

Basic training in WordPerfect for Windows software on IBM-compatible equipment. **Prerequisite:** CA201X1. Class fee \$4. **F, W, Sp**

CA201X3 Word Processing Procedures 1-Part 3
2 lab hrs/wk, 1 cr.

Basic training in WordPerfect for Windows software on IBM-compatible equipment. **Prerequisite:** CA201X2. Class fee \$4. **F, W, Sp**

CA202D Word Processing Procedures 2
3 class hrs/wk, 3 cr.

Intermediate training using Microsoft Word software for persons with basic skills and knowledge of word processing. **Prerequisite:** CA201D or equivalent as determined by instructor, and touch keyboarding ability of 35 words per minute. Class fee \$12. **W, Sp**

CA202D1 Word Processing Procedures 2-Part 1
2 lab hrs/wk, 1 cr.

Intermediate training using Microsoft Word for persons with basic skills and knowledge of word processing. **Prerequisite:** CA201D and touch keyboarding ability of 35 words per minute. Class fee \$4. **W, Sp**

CA202D2 Word Processing Procedures 2-Part 2
2 lab hrs/wk, 1 cr.

Intermediate training using Microsoft Word for persons with basic skills and knowledge of word processing. **Prerequisite:** CA201D1. Class fee \$4. **W, Sp**

CA202D3 Word Processing Procedures 2-Part 3
2 lab hrs/wk, 1 cr.

Intermediate training using Microsoft Word for persons with basic skills and knowledge of word processing. **Prerequisite:** CA201D2. Class fee \$4. **W, Sp**

CA202X Word Processing Procedures 2
3 class hrs/wk, 3 cr.

Intermediate training for persons with basic skills and knowledge of WordPerfect for Windows on IBM-compatible equipment. **Prerequisite:** CA201X1 or equivalent as determined by instructor, and touch keyboarding ability of 35 words per minute. Class fee \$12. **W, Sp, offered as needed.**

CA202X1-X3 Word Processing Procedures 2-Parts 1, 2, 3

2 lab hrs/wk, 1 cr.

Intermediate training for persons with basic skills and knowledge of WordPerfect for Windows. **Prerequisite:** CA201X1. Class fee \$4 each. **Offered as needed.**

CA203 Advanced Formatting
1 class hr/wk, 1 cr.

Focuses on correct formats for personal and business letters, envelopes, tables, memoranda, reports, and business forms. **Prerequisite:** CA201 and touch keyboarding ability of 35 words per minute. Class fee \$4. **W, Sp**

CA204D Advanced Word Processing
3 class hrs/wk, 3 cr.

A review of Microsoft Word features, including draw, WordArt, charts, styles, macros, sort and select, tables, indexes, and lists. Emphasizes the production of documents requiring students to combine features in a project-oriented format. **Prerequisite:** CA202D, or proficiency in intermediate word processing skills and touch keyboarding ability of 35 words per minute. Class fee \$12. **W, Sp**

CA204P Advanced Word Processing
3 class hrs/wk, 3 cr.

Advanced WordPerfect training covering tables, graphics, styles, math, columns, merge, macros, and sort. **Prerequisite:** CA202P or proficiency in intermediate word processing skills, and touch keyboarding ability of 35 words per minute. Class fee \$12. **Offered as needed.**

CA204X Advanced Word Processing
3 class hrs/wk, 3 cr.

Advanced WordPerfect training covering tables, graphics, styles, math, columns, merge, macros, and sort. **Prerequisite:** CA202X or proficiency in intermediate word processing skills, and touch keyboarding ability of 35 words per minute. Class fee \$12. **Sp**

CA205 Desktop Publishing 1—PageMaker
3 class hrs/wk, 3 cr.

A hands-on microcomputer desktop publishing course using Aldus PageMaker. Includes microcomputer use, an overview of the printing process,

typography and basic design, and the use of PageMaker software. **Prerequisite:** Touch keyboarding ability of 25 words per minute and previous computer experience. Class fee \$12. **F, Sp**

CA206 Desktop Publishing 2—PageMaker
3 class hrs/wk, 3 cr.

An advanced hands-on microcomputer desktop publishing course using Aldus PageMaker. Includes a review of PageMaker software operation, additional basic design for desktop publishing, and the production of publications. **Prerequisite:** CA205 or equivalent as determined by instructor. Class fee \$12. **Offered as needed.**

CA208 Computer Presentations for the Workplace-MS PowerPoint
3 class hrs/wk, 3 cr.

An introduction to the preparation of computer presentations for the workplace using current presentation software. Includes an overview of software features, design and typography basics, and production techniques for slides, overheads, and screen shows. **Prerequisite:** CS101 or equivalent as determined by instructor, or consent of instructor. **Sp**

CA210 Office Micro-Macintosh
3 class hrs/wk, 3 cr.

Integrated software training using ClarisWorks. Includes training in the word processing, database, spreadsheet, graphics, and communications features of this software on the microcomputer. Application problems will consist of using the integrated programs in business-related projects. **Prerequisite:** CS101 and touch keyboarding ability. Class fee \$12. **F, W, Sp**

CA210W Office Micro-Windows
3 class hrs/wk, 3 cr.

Integrated software training using Microsoft Works for Windows 95. Includes training in the word processing, database, spreadsheet, graphics, and communications features of this software on the microcomputer. Application problems will consist of using the integrated program in business-related projects. **Prerequisite:** CS101 and touch keyboarding ability. Class fee \$12. **F, W, Sp, Su; Offered online only**

CA211 Advanced Office Microcomputer Applications
2 class and 2 lab hrs/wk, 3 cr.

Advanced applications applicable to all computer environments, currently offered in ClarisWorks 4.0 for the Macintosh. Includes word processing, database, spreadsheet, graphics, and presentation software. Introduces the use of clip art, quick-time movies, and the Internet, as well as exporting and importing files. **Prerequisite:** CA210. Class fee \$12. **Sp**

CA225A Machine Transcription 1-A
2 lab hrs/wk, 1 cr.

An introduction to transcribing from recorded dictation using a microcomputer, including operation of a transcribing machine and techniques of efficient transcribing. Stresses language arts skills and the development of accuracy. Students progress at their own rate of speed. **Prerequisite:** CA121A, B, C or equivalent as determined by instructor, and BT099 or BT099A. Class fee \$4. **F, Sp**

CA225B Machine Transcription 1-B

2 lab hrs/wk, 1 cr.

Continuation of CA225A. Covers techniques of efficient transcription on a transcribing machine. Language arts skills and the development of accuracy are stressed. Students progress at their own rate of speed. **Prerequisite:** CA225A. Class fee \$4. **F, Sp**

CA225C Machine Transcription 1-C

2 lab hrs/wk, 1 cr.

A continuation of CA225B. Covers techniques of efficient transcription on a transcribing machine. Stresses language arts skills and the development of accuracy. Students progress at their own rate of speed. **Prerequisite:** CA225B.

Class fee \$4. **F, Sp**

CA230 Executive Office Simulation

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

A work-flow simulation that gives students experience in working as team members with office co-workers. Includes practice in decision-making, prioritizing, and time management. This course brings together skills acquired in prerequisite courses. **Prerequisite:** BA214, BT116, CA123, and CA210. Class fee \$12. **W, Sp**

CA232 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. Students study and apply procedures for importing, exporting, linking, embedding, and merging. Students will also use electronic mail, peripheral equipment, and presentation software in the production of business documentation and oral reports. **Prerequisite:** CA202D, CA118ABC, CA210, and CS125SS or CS125Q. **Sp**

CA280 Cooperative Work Experience

see AUM280.

CH

CHEMISTRY

CH104 Chemistry for Allied Health

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

First course in a three-term sequence for nursing and allied health students taking a one-year survey course in Chemistry. The first term describes the applications of chemical principles to the life sciences and is a prerequisite to understanding the function of living organisms. Includes: matter, atomic structure, chemical bonds, reactions, molecules, and solutions. **Prerequisite:** MTH070. Class fee \$8. **F**

CH105 Chemistry for Allied Health

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

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

CH106 Chemistry for Allied Health

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

Continuation of CH105. Covers the chemistry and metabolism of carbohydrates, lipids, proteins, and

nucleic acids. **Prerequisite:** CH105. Class fee \$8. **Sp**

CH110 Foundations of General, Organic, and Biochemistry

4 class and 2 lab hrs/wk, 5 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:** 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:** MTH070. Class fee \$8. **Offered as needed.**

CH115 Consumer Chemistry

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

A general education approach to chemistry, emphasizing the meaning of science and how chemistry is connected to other disciplines and to the student's life. Covers science vs. technology, scientific method, atomic structure and theory, nuclear chemistry, chemical bonding, nomenclature, chemical reactions, acids and bases, oxidation and reduction, and chemistry of the earth. Class fee \$8. **F**

CH116 Consumer Chemistry

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

Second of a three-term sequence for the non-science major. Covers organic chemistry, polymers, energy and the future, air and its pollution, water and its pollution, agricultural chemistry, and 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 three-term sequence for the non-science student. Covers carbohydrates, fats, proteins, vitamins, brewing, baking, food additives, household chemicals, cosmetics, chemotherapy, drugs, sports medicine, and chemical toxicology. **Prerequisite:** CH116 or consent of instructor. Class fee \$8. **Sp**

CH121 College Chemistry

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

First of a three-term sequence. Introduction to the fundamentals of chemistry for students majoring in fields other than chemistry. Examines the interrelationships of chemistry to all disciplines of science. Covers scientific method, atomic theory, stoichiometry, energy, periodicity, atomic structure, and bonding. **Prerequisite:** MTH070 or equivalent as determined by instructor. Class fee \$12. **F, W**

CH122 College Chemistry

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

Second in a three-term sequence. Provides basic understanding of molecular compound formations, changes of state, solutions, and reaction rates. Covers quantitative composition; stoichiometry; the gaseous state; acids, bases, and salts; oxidation-reduction reactions; nuclear chemistry; chemical equilibrium; and introduction to organic chemistry. **Prerequisite:** CH121. Class fee \$12. **W, Sp**

CH123 College Chemistry

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

Third in a three-term sequence. Emphasizes organic chemistry, including aliphatics, aromatics, and functional groups. Includes organic reactions and biochemical applications. **Prerequisite:** CH122. Class fee \$12. **Sp**

CH201 Chemistry for Engineers

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

First of a three-term sequence. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, gas laws, and chemical thermodynamics: heat, work, and energy. **Prerequisite:** MTH095. Class fee \$12. **F**

CH202 Chemistry for Engineers

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

Second of a three-term sequence. Covers liquids, phase changes, solutions, colloids, water pollution, distillation, chemical equilibrium, spontaneous changes, free energy, heat engines, acids and bases, atomic structure, quantum theory, stimulated emission, and laser light. **Prerequisite:** CH201. Class fee \$12. **W**

CH203 Chemistry for Engineers

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

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

CH221 General Chemistry

4 class and 3 lab hrs/wk, 5 cr.

First of a three-term sequence for students majoring in science and related professional fields. Covers matter and measurement; atoms, molecules, and ions; chemical formulas and equations; atomic structure; periodic table; the gas laws; metals; and thermochemistry. **Prerequisite:** MTH111 or consent of instructor. Class fee \$12. **F**

CH222 General Chemistry

4 class and 3 lab hrs/wk, 5 cr.

Second of a three-term sequence designed 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:** CH221. Class fee \$12. **W**

CH223 General Chemistry

4 class and 3 lab hrs/wk, 5 cr.

Third of a three-term sequence designed for students majoring in science and related professional fields. An in-depth study of acids and bases, ionic reactions, complex ions, oxidation and reduction, electrochemistry, quantitative analysis, and thermodynamics. **Prerequisite:** CH222. Class fee \$12. **Sp**

CH241 Organic Chemistry

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

The first of a three-term sequence of organic chemistry for students majoring in physical or life sciences. Emphasizes structure, nomenclature, physical properties, and chemical reactivities of organic molecules. Stresses bonding, functional groups, alkanes and cycloalkanes, conformational analysis, stereochemistry, and alkenes and alkynes. Microscale laboratory will reinforce concepts. **Prerequisite:** CH123 or CH223. Class fee \$12. **F**

CH242 Organic Chemistry

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

The second of a three-term sequence of organic chemistry for students majoring in physical or life 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. The microscale laboratory will use modern techniques to reinforce concepts. **Prerequisite:** CH241. Class fee \$12. **W**

CH243 Organic Chemistry

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

The third in a three-term sequence of organic chemistry for students majoring in physical or life sciences. Emphasizes the structure, nomenclature, physical properties and chemical reactivities of organic molecules. Stresses carboxylic acids and their derivatives, amines, condensation reactions, carbohydrates, lipids, amino acids, proteins, and nucleic acids. The microscale laboratory will use modern techniques to reinforce concepts. **Prerequisite:** CH242 or consent of instructor. Class fee \$12. **Sp**

CIS

COMPUTER INFORMATION SCIENCE

CIS120 Computer Information Science I

4 class hrs/wk, 4 cr.

First in a three-course sequence. Introduction to terminology and overview of the historical development of computer and information science. Focuses on the basic concepts of computer hardware and software systems, the science of information representation, and the fundamental elements of program design and computer language. Concepts are reinforced in a laboratory environment. **Prerequisite:** MTH070 and RD115, or equivalent level of skill as demonstrated by satisfactory score on placement test. Class fee \$12. **F, W, Sp**

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 algo-

rithms for processing information typified by management information systems. Concepts are reinforced in a laboratory environment. **Prerequisite:** CIS120 or concurrent enrollment, or consent of instructor. Class fee \$12. **F, W, Sp**

CIS122 Computer Information Science III

4 class hrs/wk, 4 cr.

Third in a three-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 spreadsheet 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. **Sp**

CJ

CRIMINAL JUSTICE

CJ050 Criminal Justice Foundation

3 class hrs/wk, 3 cr.

Provides the basic knowledge and skills needed to succeed in the Criminal Justice program. Includes the integration of reading, writing, technology, interpersonal communication, reasoning, and study skills as they pertain to the criminal justice profession. Designed for students who have not completed the Certificate of Advanced Mastery in Human Resources. **Prerequisite:** Designated placement procedure. **Offered as needed**

CJ100 Survey of the Criminal Justice System

3 class hrs/wk, 3 cr.

A review of court systems and procedures from criminal violation to final disposition. Covers six primary functional areas of administration of justice and reviews principles of federal, state, criminal, and civil laws as they apply to and affect law enforcement. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ101 Criminology

3 class hrs/wk, 3 cr.

Development and conceptualization of crime, including historical perspective, social and legal definitions, and classifications. Presents an overview of criminology, research, data gathering, and analysis. Introduces theoretical perspectives on the nature of crime, criminals, and victimization and identifies current trends and patterns of crime. **Offered as needed.**

CJ110 Introduction to Law Enforcement

3 class hrs/wk, 3 cr.

An introduction to the history and philosophy of law enforcement and the administration of justice. Provides a preview of law enforcement as a career and examines how an agency functions in relation to the community. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ112 Field Operations and Patrol Procedures

3 class hrs/wk, 3 cr.

Introduces the nature and purpose of patrol activities, including routine and emergency procedures, types of patrol, arrest procedures, and field interviews. Covers equipment, technology, and vehicle operation. Emphasizes report documentation, courtroom testimony, and police tactical communications. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. Students are urged to have taken CJ110. **Offered as needed.**

CJ130 Introduction to Corrections Process

3 class hrs/wk, 3 cr.

An overview of the corrections process, including historical development through contemporary issues. Examines variations in correctional institutions, levels of custody, administration practices, correctional staff roles and responsibilities, institutional policies, procedures, and programs. Covers inmate demographics, special-needs inmates, safety and security concerns, and current issues. **Offered as needed.**

CJ132 Introduction to Parole and Probation

3 class hrs/wk, 3 cr.

Introduction to the basic philosophies, principles, and functions of parole, probation, and community corrections. Focuses on the role of community corrections in the administration of justice, community corrections options, techniques and training issues, and current challenges affecting these options. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ150 Unarmed Private Security Operations and Procedures

3 class hrs/wk, 3 cr.

Provides the training required by the Board of Public Safety Standards and Training (BPSST) for certification as an unarmed private security officer in the State of Oregon. Includes department and ethics; legal powers and limitations; fire detection, reporting, and safety procedures; criteria and procedures for notifying public authorities; observation and reporting techniques; and patrol fundamentals. **Prerequisite:** Enrollment limited to students and professionals who desire B.P.S.S.T. certification and licensing as unarmed private security officers in Oregon. Students are required to complete criminal history disclosure and PS-2 Private Security fingerprinting packet. **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. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ203 Crisis Intervention Seminar

1 class hr/wk, 1 cr.

An overview of the techniques and approaches to crisis intervention for entry-level criminal justice

professionals. Presents strategies for initial intervention, defusion and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening, and mediation. **Prerequisite:** Current enrollment in the Juvenile Corrections program or the Criminal Justice program with personal history clearance, consent of instructor, or current employment in the criminal justice field. **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. Introduces key concepts affecting juvenile victimization and theoretical perspectives and their application in the study of juvenile delinquency. **Offered as needed.**

CJ207 Seminar in Criminal Justice

3 class hrs/wk, 3 cr.

Analysis of current and ongoing issues in criminal justice. Stresses creative thinking and problem solving through team discussion and classroom presentation. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ210 Introduction to Criminal Investigations I: Crimes vs. Persons

3 class hrs/wk, 3 cr.

Covers historical development of criminalistics. Introduces basic techniques and components involved in processing and investigating person-related crime scenes. Identifies specialized procedures and technology used to identify, profile, locate and apprehend offenders. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ211 Introduction to Criminal Investigations II: Crimes vs. Property

3 class hrs, wk, 3 cr.

Introduces basic techniques and components involved in processing and investigating property-related crime scenes. Identifies specialized procedures and technology used to identify, locate, and recover stolen property. Covers methods to identify and apprehend individuals. Emphasizes correlation between property crimes and drug use. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. Students are urged to have taken CJ210. **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. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor, or current employment in the criminal justice field. **Offered as needed.**

CJ220 Introduction to Substantive Law and Oregon Criminal Code

3 class hrs/wk, 3 cr.

Origin and structure of common-law crimes and procedures, and statutory crimes. Definitions and distinctions between criminal and civil law, criminal court procedures, criminal law case reading, federal and state law, and Oregon criminal code sections. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ226 Introduction to Constitutional Law

3 class hrs/wk, 3 cr.

An intensive study and analysis of the United States Constitution and court decisions which determine the admissibility of evidence in criminal cases and which affect the role of law enforcement in police procedures. Includes criminal procedures processes. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ230 Introduction to Juvenile Corrections

3 class hrs/wk, 3 cr.

Surveys the historical and contemporary aspects of juvenile corrections. Identifies and explores the philosophy, functions, and goals of the juvenile justice system. Emphasizes the role of law enforcement, the courts, community-based corrections, and custodial facilities, and includes an overview of the ongoing debate concerning rehabilitation vs. punishment philosophies in the juvenile justice system. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ232 Introduction to Corrections Casework

3 class hrs/wk, 3 cr.

An introduction to casework in corrections settings. Includes introduction to behavior-modification theories and methods, contemporary counseling techniques, assessment processes, and the development of officer-client relations. Emphasizes observation skills, perception issues, information gathering, interpersonal communication skills, and interviewing strategies and techniques. **Prerequisite:**

Current enrollment in the Juvenile Corrections program or the Criminal Justice program with personal history clearance, consent of instructor, or current employment in the criminal justice field. **Offered as needed.**

CJ235 Youth, Drugs and Corrections

3 class hrs/wk, 3 cr.

The study of current trends, programs and philosophies regarding addiction, assessment processes, treatment options and related behavioral issues for youth offenders specifically in correctional institutions and post-conviction supervision. **Prerequisite:** Current enrollment in the Juvenile Corrections program or the Criminal Justice program with personal history clearance, consent of instructor, or current employment in the criminal justice field. **Offered as needed.**

CJ253 Introduction to Penology

Includes a historical overview of punishment, the development of prisons, and the role of imprisonment as a correctional tool. Examines prison conditions, administrative practices, classification and custody, as well as corrections staff responsibilities, recruitment, training, and retention. Focuses on inmate demographics, special-needs inmates, basic prison programs, visitation, prisoners' rights, and legal issues. **Prerequisite:** Current enrollment in the Criminal Justice program with personal history clearance or consent of instructor. **Offered as needed.**

CJ280 Cooperative Work Experience

see AUM280.

COM

COMMUNICATION SKILLS

see also Human Development, Reading, Skills Development, Writing

COM051 Communication Skills I

3 class hrs/wk, 3 cr.

Designed to improve the students writing skills. Students work on writing projects intended to replicate projects in occupational and technical fields. Class fee \$2. **F, W, Sp, Su**

COM052 Communication Skills II

3 class hrs/wk, 3 cr.

Designed to improve a student's reading, writing, speaking, and listening skills using a variety of oral and written formats. **Prerequisite:** COM051 or equivalent as determined by instructor. **F, W, Sp**

COM053 Technical Report Writing

3 class hrs/wk, 3 cr.

For those following a vocational (non-transfer) track of study. Prepares students to write reports in a variety of styles, emphasizing clarity, coherence, conciseness, and accuracy. **Prerequisite:** COM051 or consent of instructor. Class fee \$2. **Sp**

CPL

CREDIT FOR PRIOR LEARNING

CPL120 Prior Learning Resume

3 class hrs/wk, 3 cr.

How to obtain credit hours for prior learning. Focuses on identifying career and educational goals; defining college level learning; identifying, documenting, and describing prior learning; writing competency statements; and preparing a resume for credit evaluation. Class fee \$5. **Offered as needed.**

CS

COMPUTER SCIENCE

CS050 Data Communications Lab

4 lab hrs/wk, 2 cr.

This class is the laboratory portion of CS279. Local Area Networks (LANS), specifically Novell, are designed, constructed, and then 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. **Offered as needed.**

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. **Offered as needed.**

CS100 Beginning Microcomputer Use

1 class hr/wk, 1 cr.

An introduction to the use of microcomputers in an office. A brief overview of necessary hardware and software, proper use of the equipment, operation of a microcomputer, use of purchased programs, and maintenance of computer files. Class fee \$8. **Offered as needed.**

CS101 Introduction to Microcomputer Applications

3 class hrs/wk, 3 cr.

Introduces the basic microcomputer hardware/software system. Covers operating system concepts and beginning commands; word processing, spreadsheet, database applications; and introduction to Internet. **Prerequisite:** Touch typing ability and current enrollment in RD090 or equivalent. Class fee \$12. **F, W, Sp, Su**

CS103 Microcomputer Skills Problem Solving

3 class hrs/wk, 3 cr.

Use of microcomputers as a tool to solve information processing problems. Presents skills necessary to keep up with the rapidly changing developments in computer hardware and software. Includes critical thinking, logical analysis, discovery learning, and other problem-solving techniques. **Prerequisite:** CS101 or CIS120, or consent of instructor. Class fee \$12. **Offered as needed.**

CS105 Introduction to MS Windows

3 class hrs/wk, 3 cr.

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

CS125A1, A2, A3 Micro Database Software-Access

5 class hrs/ 3 wks, 1 cr. each

This microcomputer database software course using Microsoft Access is divided into three one-credit hours. CS125A1: Navigation through Windows and Access menus, PC relational database concepts, creation and updating of a relational database. CS125A2: Simple queries, reports, and forms. CS125A3: Complex queries, reporting, and forms. **Prerequisite:** CS125A1: CS101 or consent of instructor; CS125A2: CS125A1; CS125A3: CS125A2. Class fee \$4 each. **F, W**

CS125E Worksheets-Excel

4 class hrs/wk, 4 cr.

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

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:** CS101 or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS125SS Lotus I-Worksheets

4 class hrs/wk, 4 cr.

Use of electronic spread sheets in a multi-worksheet environment. Electronic spread sheet software may vary from term to term. **Prerequisite:** CS101 or equivalent as determined by instructor. Class fee \$12. **W**

CS131 Introduction to Data Processing

3 class hrs/wk, 3 cr.

Concepts, elements, and structure of business data processing systems. Includes classifying, calculating and reporting functions, programming, and computer fundamentals. **Prerequisite:** RD090 or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS133C COBOL I

4 class hrs/wk, 4 cr.

An introduction to ANS COBOL programming. Coding, debugging, and documenting simple business-oriented programs. Emphasizes language structure and problem solving by applying top-down structured programming techniques. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee \$12. **W**

CS133E EASYTRIEVE PLUS

3 class hrs/wk, 3 cr.

How to code simple business-oriented programs. Emphasizes language structure and rules, file management, and retrieval. **Prerequisite:** CS233C or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS133F FORTRAN IV

4 class hrs/wk, 4 cr.

An introduction to language structure, manipulation of arrays, input and output formats, coding techniques, function, subroutines, disk files, and memory-dump debugging. Program assignments involve simple management and science problems. **Prerequisite:** MTH095 or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS133R RPG for Programmers

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

Basic features of the RPG III language. Students write several RPG programs that print reports and build and maintain files. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS133U C++ Language

4 class hrs/wk, 4 cr.

An introduction to the C++ programming language. Covers the structure of the language, the manipulation of data and arrays, and how to handle input and output functions. **Prerequisite:** CIS121. Class fee \$12. **W**

CS133VB Visual Basic—Event-Driven Programming

4 class hrs/wk, 4 cr.

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

CS135AC Advanced Micro Computer Database Software Using Access

3 class hrs/wk, 3 cr.

Advanced course in the development of an application system using Access software emphasizing forms and macros executed by the forms. Students will create a system which includes a startup menu form, an update form with a subform where the two forms interact with at least two tables, and inquiry and reporting options on the forms. **Prerequisite:** CS125A1, CS125A2, CS125A3, or consent of instructor. **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/VS1 operating system. Includes an introduction to IBM OS job-control language. Students run exercises on the IBM system located in the college computer center. **Prerequisite:** CS133C. Class fee \$12. **W**

CS140B Microcomputer Operating Systems

3 class hrs/wk, 3 cr.

Studies operating systems currently used on microcomputers. 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. **F, W, Sp**

CS140M MS/DOS Operating Systems

1 class hr/wk, 1 cr.

A study of the MS/DOS operating system used on IBM-PC type microcomputers. Includes practice in using MS/DOS to run a microcomputer and access files. **Prerequisite:** CS101 or equivalent as determined by the instructor. 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 instructor. Class fee \$12. **Offered as needed.**

CS145 Microcomputer Hardware/Software Evaluation

3 class and 2 lab hours/wk, 4 cr.

A study of the hardware concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and hardware. **Prerequisite:** CS240, or CS140B, or ELT252. 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 Internet facilities, and network basics. Computer science transfer students should co-enroll in CS161. **Prerequisite:** CS101 or consent of instructor. **F**

CS161 Computer Science I

4 class hrs/wk, 4 cr.

Provides a foundation in programming concepts for computer science majors and other students. **Prerequisite:** Grade of C or higher in MTH111 or equivalent, and concurrent enrollment in CS160. Class fee \$12. **F**

CS162 Computer Science II

4 class hrs/wk, 4 cr.

The second term of computer science concepts emphasizing the appropriate use of style and algorithms. Includes searching and sorting algorithms, stacks, queues, linked lists, dynamic memory allocation, and file I/O. **Prerequisite:** Grade of C or higher in CS161 or equivalent as determined by instructor. **W**

CS171 Principles of Computer Organization

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

An introduction to the organization of a digital computer. Covers historical development, number systems, data encoding, Boolean and digital logic fundamentals, processor components, instruction execution and addressing. Presents an introduction to Assembler language programming and the Assembler process, RISC machines, and parallel architectures. **Prerequisite:** MTH111; fourth term standing in the Microcomputer Support Specialist program. Class fee \$12. **W**

CS178I Introduction to the Internet/World Wide Web

3 class hrs/wk, 3 cr.

Introduces the use and history of the global computer network known as the Internet or information superhighway. Explores the philosophy of the Internet, as well as its use as a tool for research, communication, and entertainment. Students will develop and publish a simple web page on the World Wide Web. **Prerequisite:** CS101. Class fee \$40. **F, W, Sp**

CS179 Introduction to Networks

3 class hrs/wk, 3 cr.

An introduction to computer networks from an end-user prospective. Provides hands-on experience installing network software and managing user accounts and network resources. **Prerequisite:** CS140B, and previous experience with Windows. **Offered as needed.**

CS233B BASIC for Programmers

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

Features and instructions of BASIC language. How to write computer programs using BASIC that print reports and build and maintain files. Students develop reports and file contents. **Prerequisite:** CS133B or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CS233C COBOL II

4 class hrs/wk, 4 cr.

Continuation of CS133C. Business-oriented programs are coded, debugged, and documented using top-down structured programming techniques. Emphasizes coding techniques to make program coding, debugging, and documentation, as well as program maintenance, easier. **Prerequisite:** CS133C. Class fee \$12. **Sp**

CS233U Advanced C

4 class hrs/wk, 4 cr.

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

CS234C COBOL/CICS Programming Techniques

4 class hrs/wk, 4 cr.

Advanced course in ANS COBOL. Complete business application packages are coded and documented. Emphasis on efficiency coding, file backup and restoration procedures, systems planning, modular programming, VSAM files, systems documentation, data management techniques, independent research, and problem solving. **Prerequisite:** CS234L and CS246. Class fee \$12. **Sp**

CS234L On-Line Programming Techniques

4 class hrs/wk, 4 cr.

Study of CICS on-line application programming using the COBOL language. **Prerequisite:** CS233C or consent of instructor. Class fee \$12. **F**

CS237 Software Design

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

Coding and documentation of microcomputer programs as well as the special considerations and requirements of interactive programs. **Prerequisite:** Consent of instructor. Class fee \$12. **Offered as needed.**

CS240 Advanced Operating Systems

3 class hrs/wk, 3 cr.

Study of advanced operating systems. Incorporates the use of third-party utility programs, hard disk management concepts, MS/DOS in a network environment, and MS/DOS-OS-AIX migration considerations. **Prerequisite:** CS140B or consent of instructor. Class fee \$12. **F**

CS244 Systems Analysis I

3 class hrs/wk, 3 cr.

Basic administrative procedures. Principles of organizing, planning, and administering a procedure program. Methods of carrying out individual systems and procedures studies. Procedures analysis and improvement techniques, the role of systems and procedures in business management, systems charting, work simplification, and measurement. **Prerequisite:** Second-year standing in the Computer Programming or Business Administration programs. **F**

CS246 Systems Analysis II

3 class hrs/wk, 3 cr.

Fundamentals of automated systems and procedures. Techniques and principles of top-down systems analysis and design, data gathering, feasibility studies, problem analysis, systems economics, forms design and control, procedure writing, and the planning involved in the installation of electronic data processing systems. **Prerequisite:** CS244. **F**

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 structures. **Prerequisite:** Grade of C or higher in CS162 or equivalent as determined by the instructor. Class fee \$12. **Sp**

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 models. 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, communicating 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:** CS140B, CS145, CS278, and concurrent enrollment in CS050. **Sp**

CS280 Cooperative Work Experience
see AUM280.

CS285 Fourth-Generation Language-SQL
3 class hrs/wk, 3 cr.

Use of standard SQL commands and syntax forms to perform typical query commands. **Prerequisite:** CIS121 or equivalent as determined by the instructor. Class fee \$12. **Offered as needed.**

CVL

CIVIL STRUCTURAL TECHNOLOGY

CVL060A Plane Surveying I-Lecture
3 class hrs/wk, 3 cr.

An introduction to surveying techniques, including fundamentals of taping and leveling, care and handling of surveying instruments, and human relation skills. **Prerequisite:** MTH081 and concurrent enrollment in CVL060B, or consent of instructor. **W**

CVL060B Plane Surveying I-Lab
6 lab hrs/wk, 2 cr.

An introduction to basic survey field techniques, the care and handling of survey equipment, and working effectively in teams. **Prerequisite:** Concurrent enrollment in CVL060A or consent of instructor. Class fee \$10. **W**

CVL061A Plane Surveying II-Lecture
3 class hrs/wk, 3 cr.

A continuation of CVL060A. Study of distance and direction measurement using theodolites, steel tapes, traversing and associated office computations, areas, stadia, circular curves, as well as a brief outline of public land surveys. This course also studies skills necessary to work as part of a team and perform leadership functions. **Prerequisite:** CVL060A; concurrent enrollment in MTH082 and CVL061B. **W**

CVL061B Plane Survey II-Lab
6 lab hrs/wk, 2 cr.

Continuation of CVL060B. Students use theodolites to traverse and locate various engineering and topographic features. **Prerequisite:** Concurrent enrollment in CVL061A or consent of instructor. Class fee \$10. **Sp**

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:** CVL061B, MTH082, and CVL064B or consent of instructor. **Sp**

CVL064B Construction and Route Surveying-Lab
6 lab hrs/wk, 2 cr.

Course will review practical applications of all surveying practices. Students stake right-of-way, grades, curbs, water lines, and buildings. **Prerequisite:** Concurrent enrollment in CVL064A or consent of instructor. Class fee \$10. **Sp**

CVL066A Surveying for Drafters-Lecture
2 class hrs/wk, 2 cr.

Basics of surveying terminology and practices. Calculations are made to balance a traverse, solve curves, and determine volume. **Prerequisite:** MTH052. **Offered as needed.**

CVL066B Surveying for Drafters-Lab
6 lab hrs/wk, 2 cr.

Basics of taking measurements using levels and rods. Distance and direction measurements are made with theodolite, stadia, and steel tape. Simple procedures for the care and adjustment of survey equipment is covered. Class fee \$10. **Offered as needed.**

CVL069 Survey Equipment Operation Review
3 lab hrs/wk, 1 cr.

A sixth-term course for Civil-Structural Engineering Technology students. Reviews and practices the operation of surveying equipment and surveying/drafting-oriented computer software. **Prerequisite:** CVL064. Class fee \$10. **Offered as needed.**

CVL074 Construction Estimating, Contracts and Specifications

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

Study of construction estimating, specifications, and contracts. Instruction in determining how much material will be required to build a specific project. **Offered as needed.**

CVL076 Soils Testing Laboratory
3 lab hrs/wk, 1 cr.

Designed to acquaint the entry-level soils technician with the tests and test procedures used most often. **Prerequisite:** MTH052. Class fee \$10. **Offered as needed.**

CVL078 Concrete and Concrete Testing
2 class and 3 lab hrs/wk, 3 cr.

Includes concrete mix design and testing practices. Designed to enable the student to take the American Concrete Institute Concrete Field Technician Certification Exam. Includes construction site visits and field testing of concrete in order to relate structural design to field inspection for quality control. Class fee \$10. **Offered as needed.**

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. **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 systems, characteristics, and reports, and problems concerning use of soil in

construction. Studies various types of foundations and their requirements. **Prerequisite:** Concurrent enrollment in CVL082; MTH081. **Offered as needed.**

CVL087 Hydraulics
4 class hrs/wk, 4 cr.

Application of principles of fluid mechanics related to static and dynamic forces of liquids. Covers pipe and open channel flow, including siphons, weirs, flumes, and dams. **Prerequisite:** CVL080 and MTH082, or consent of instructor. **Offered as needed.**

CVL088 Environmental and Sanitary Engineering

2 class and 6 lab hrs/wk, 4 cr.

Develop storm and sanitary sewer layout using Softdesk computer software and size and locate retention ponds. **Prerequisite:** MTH082 and DRF245. Class fee \$10. **Sp**

CVL280 Cooperative Work Experience
see AUM280.

DANCE

see Physical Education

DEN

DENTAL ASSISTING

DEN050 Dental Sciences I
3 class hrs/wk, 3 cr.

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

DEN051 Introductory Concepts in Dental Assisting

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

A basic study of the dental assistant's role with emphasis on terminology, instruments and equipment, personal regimen, chairside techniques, and patient communication. Emphasis is placed on the qualifications necessary for success in the dental assistant field. **Prerequisite:** Enrollment in Dental Assisting program or consent of instructor. **F**

DEN052 Dental Anatomy and Physiology
2 class and 2 lab hrs/wk, 3 cr.

Designed to introduce the student to basic general and oral anatomy. Particular attention is directed toward physiological processes of the body, the oral cavity and its associated structures, and anatomical terminology. Discussion will include the skeletal system, organ systems, head and neck anatomy, musculature, nervous and circulatory systems and their innervation, and anatomical and functional structures of the oral cavity. **Prerequisite:** Enrollment in the Dental Assisting program or consent of instructor. Class fee \$5. **F**

DEN053 Dental Materials I
2 class and 4 lab hrs/wk, 4 cr.

Designed to introduce the student to the various materials and laboratory equipment used in the

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

DEN054 Preventive Dentistry

1 class hr/wk, 1 cr.

Introduces the student 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. **F**

DEN060 Dental Sciences II

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

A study of the various fields of specialized dentistry recognized by the American Dental Association, and the sciences associated with them. Includes operative dentistry, orthodontics, and public health dentistry. Applied psychology through role playing and clinical experience in the specialties will be introduced in the laboratory. **Prerequisite:** Second-term standing in the Dental Assisting program. **W**

DEN061 Dental Assisting Practicum I

1 class and 7 lab hrs/wk, 3 cr.

Course designed to provide supervised clinical experience in basic chairside assisting procedures, including material manipulation, oral evacuation, instrument transfer, charting and patient management at the Oregon Health Sciences University School of Dentistry. **Prerequisite:** Second-term standing in Dental Assisting program and proof of current Level C CPR card.

DEN062 Expanded Functions I

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

A presentation of the theory and practice of new procedural responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration, and practical application of the following: topical anesthetic application, rubber dam placement and removal, alginate impressions, and bite registration. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. **W**

DEN063 Dental Materials II

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

Designed to introduce the student to the principles of laboratory procedures related to fixed and removable prosthetics. The use of appropriate laboratory equipment by the student will be supplemented by instructional demonstration of additional laboratory techniques and materials. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. **W**

DEN064 Dental Radiology I

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

Provides information pertinent to the principles of dental radiology, and legal aspects regarding the use of radiation. Includes the history of dental radiology; terminology; radiation physics; machine

operation and equipment use; biological effects of x-rays; principles of radiation health, safety, and protection; anatomical landmarks; and dental films, and darkroom processing techniques. Students use x-ray manikins to practice film placement and exposure techniques. Exposed films are processed and evaluated. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. **W**

DEN070 Dental Office Management

2 class hrs/wk, 2 cr.

Designed to prepare the student for management of the dental office, including the study of business office procedures and techniques, written communications, computer use, dental insurance, inventory control, accounts receivable, recall systems, and staff and patient management. **Prerequisite:** CS101. **F**

DEN071 Dental Assisting Practicum II

1 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:** Third-term standing in the Dental Assisting program. Class fee \$10. **Sp**

DEN072 Expanded Functions II

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

A continuation of DEN062. Includes discussion, demonstration, and practical application of the following: preventive dentistry, coronal polish, topical fluoride, amalgam polish, instrument sharpening, cement removal, and periodontal dressing removal. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$15. **Sp**

DEN074 Dental Radiology II

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

A continuation of DEN064. Course allows students to take one manikin full-mouth series using low dose technique. Students then develop skills in patient management and perfect radiographic techniques by completing three full-mouth patient x-ray series. Lectures include information to assist the student in taking pedodontic films, films in edentulous areas, films taken while the patient is in a supine position, endodontic films, occlusal films, and extra-oral films. Students learn utilization of automatic film processors. Students process and evaluate all exposed films and are eligible to take the State x-ray examination upon successful completion of DEN064 and DEN074. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$15. **Sp**

DEN080 Dental Assistant Seminar

2 class hrs/wk, 2 cr.

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

DRF

DRAFTING TECHNOLOGY

DRF051 Technical Graphics

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

Covers fundamentals of graphics communication. Includes multiview and pictorial representation, dimensioning, and section and auxiliary views. **Prerequisite:** DRF072 or consent of instructor. 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 construction, selection of views, sectional auxiliary views, and standard dimensioning practices, including metrics. Class fee \$5. **Offered as needed.**

DRF056A,B,C Architectural Drafting-A, B, C

3 lab hrs/wk, 1 cr. each

Basic architectural drafting techniques and methods. Includes architectural lettering, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. **Prerequisite:** DRF056A: DRF051, DRF054, or consent of instructor. DRF056B: DRF056A. DRF056C: DRF056B. **Offered as needed.**

DRF072 Introduction to AutoCAD

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

Incorporates hands-on experience with AutoCAD, a PC-based computer-aided drafting program. Includes standard graphics commands for two-dimensional drawings. Class fee \$5. **F, W, Sp, Su**

DRF095A,B,C Special Projects in Drafting and Design

Variable hours/1-3 credits

Student and instructor identify drafting project or problem and jointly draw up a contract. The contract sets forth a proposal to complete the project or solve the problem. Identifies objectives, procedures, and equipment needed, together with key checkpoints for student-instructor conferences. This course is intended for, but not limited to, second-year drafting or mechanical design students as an elective. Potential areas of consideration include community development projects, computer programming and applications, machine design, mapping, civil engineering drafting, or any drafting-related field. Provides consideration and encouragement to an interdisciplinary team of students working on a common problem. **Prerequisite:** Second-year standing in the Drafting Technology program or consent of instructor. **F, W, Sp**

DRF101 Basic CAD for Electronics

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

Covers the use of AutoCAD, schematic drawings, wiring diagrams, block diagrams, and packaging drawings, in addition to basic CAD operations in the field of electronic drafting. Class fee \$5. **F, W**

DRF102 Print Reading

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

Students study various drawings of residential and commercial construction. Includes symbol design-

nations used in construction. Emphasizes construction methods, terminology, and reference sources. **W**

DRF103 Advanced Print Reading

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

Develops the student's ability to read and interpret architectural drawings and specifications for complex building construction using the Uniform Building Code (UBC) as a basis for plan review. **Prerequisite:** DRF102 or consent of instructor. **Sp**

DRF110 Introduction to HP48 Calculators

2 class hrs/wk, 2 cr.

Computation and presentation of technical data using the HP48 engineering calculator to solve typical problems in mechanical, civil, and tool design and related areas. **Prerequisite:** Concurrent enrollment in an algebra course or consent of instructor. **F, W**

DRF112 Sketching

3 labs/wk, 1 cr.

Development of basic freehand technical sketching skills and techniques used in drafting and practical pictorial communication. **F**

DRF136 Advanced AutoCAD

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

Incorporates hands-on experience with AutoCAD software. Includes standard graphics commands for two-dimensional drawings. **Prerequisite:** DRF072. Class fee \$5. **F, W, Sp, Su**

DRF137 AutoCAD 3-D

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

Uses 3-D capabilities to generate three-dimensional models of mechanical parts. Covers Advanced Modeling Extension (AME) and generation of 2-D projections using Profile operations. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **W, Sp**

DRF140 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:** DRF136, MTH081, or consent of instructor. Class fee \$5. **Sp**

DRF150 Architectural Drafting

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

Covers basic architectural drafting techniques and methods. Includes architectural lettering, dimensioning, layout, arrangement, symbols, and conventional construction methods used in residential or light commercial buildings. Uses AutoCAD to draft a set of construction drawings. **Prerequisite:** DRF072 or consent of instructor. Class fee \$5. **W**

DRF155 Mapping and Platting

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

Covers map components, legal descriptions, plot plans and contours. Introduces Geographic Information Systems (GIS) and Global Positioning Systems (GPS). **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **Sp**

DRF160 Technical Software Applications

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

Engineering applications of purchased software packages. Includes the use of spreadsheets to

design structural members and as an aide in statistical analysis and parametric design. **Prerequisite:** CS101, MTH081 and concurrent enrollment in DRF136. **Sp**

DRF165 CAD System Administration

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

Covers techniques for enhancing performance of AutoCAD software; selecting hardware components; using conventional, system, expanded, and extended memory; customizing operating systems; and installing ADI drivers. Includes use of local area network. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **Sp**

DRF201 CMOS I

2 class and 6 lab hrs/wk, 4 cr.

Entry-level integrated circuit design in Complementary Metal Oxide Silicone (CMOS) technology. Covers layout and drafting of logic, schematic and stick diagrams. **Prerequisite:** DRF136, MT110, ELT151 or consent of instructor. Class fee \$5. **W**

DRF202 CMOS II

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

Advanced concepts of integrated circuit mask design. Uses specialized CAD tools to produce major team integrated circuit layout project. **Prerequisite:** DRF201 or consent of instructor. Class fee \$5. **Sp**

DRF210 Assembly and Detail Drafting

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

Production of detail and assembly drawings for a simple machine. Applies precision dimensioning and tolerancing to current manufacturing standards. **Prerequisite:** DRF137 or consent of instructor. Class fee \$5. **F**

DRF220 GIS ArcView

1 lecture, 3 lab hrs/wk, 2 cr.

Uses ArcView software to view geographic relationships. Study of GIS basic concepts. Covers physical, climatic, and social attributes of various regions of the world. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **F**

DRF221 GIS ArcCAD

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

Uses ArcCAD and R13 AutoCAD software in GIS applications. Studies advanced GIS concepts and covers ArcCAD commands and operations. **Prerequisite:** DRF137 or consent of instructor. Class fee \$5. **W**

DRF230 Introduction to MicroStation PC

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

Introduces the MicroStation PC drafting software. Covers the basic drawing, editing, and display commands. Contrasts operations to AutoCAD. **Prerequisite:** DRF072. Class fee \$5. **W, Su**

DRF231 CAD Pipe Systems

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

Uses Integraph Microstation PC software. Covers schematic diagrams and pictorial layouts, orthographic projection with double-line drawings, proper use of piping catalogs, and the development of a menu. **Prerequisite:** DRF230. Class fee \$5. **Sp**

DRF241 Structural Drafting

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

Uses AutoCAD software to produce working drawings. Covers drafting practices applied to the use of steel and concrete as building materials. This steel manual will be used as a reference. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **F**

DRF242 3-D Studio

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

Students will produce objects and scenes as 3-D computer images, incorporating various materials and lights. **Prerequisite:** DRF137 or consent of instructor. Class fee \$5. **W**

DRF243 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:** DRF137 or consent of instructor. Class fee \$5. **Sp**

DRF245 Civil Drafting-Softdesk

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

Introduces projects that would be drawn in a civil engineering office using computers and civil engineering software. Stresses mathematics, survey skills, and the use of a calculator. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **W**

DRF246 Project Development

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

Brings together methods of applying mathematics, survey knowledge, and drafting skills. Covers subdivision designing, location of structures on plots, construction of contour lines, and building setback lines. Students obtain data from the field and relate that data to the design of the project. **Prerequisite:** DRF072 and DRF245 or consent of instructor. **Sp**

DRF251 Power Transmission Design

3 class hrs/wk, 3 cr.

Covers power transmission systems. Includes hydraulics, pneumatics, electric motors, chains, sprockets, V-belts, bearings, and speed reducers. Emphasizes analysis of system requirements, sizing of machine elements, and selection of components from industrial catalogs. **Prerequisite:** MTH082, PH081, or CVL080, or consent of instructor. **W**

DRF252 Flexible Manufacturing Systems

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

Application of hydraulic, pneumatic, and electronic circuits for automated control of industrial systems. Includes digital design, Boolean algebra, combinational logic, and sequential logic. Lab exercises cover programming of industrial robots and programmable logic controllers. **Prerequisite:** MT100 or consent of instructor. **Sp**

DRF255 Technical Illustration

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

Presents methods of pictorial drawing, exploded view drawing, computer rendering, and printing. Introduces AcuRender and Photoshop software for use in color rendering. **Prerequisite:** DRF137 or consent of instructor. Class fee \$5. **Sp**

DRF256 AutoLISP Programming

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

Introduction to AutoLISP functions. Focuses on development of programs to increase AutoCAD productivity. **Prerequisite:** DRF136. **F**

DRF260 Tool Design

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

Introduces the principles of tool design, focusing on gauging, locating, clamping, and figure design. Incorporates high production techniques and tooling. **Prerequisite:** DRF137 or consent of instructor. Class fee \$5. **W**

DRF262 Machine Design

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

Practical design situations related to the drafting room. Selected design project(s) demonstrate a comprehensive study of parts relationships, materials application, and product design. **Prerequisite:** DRF210. Class fee \$5. **Sp**

DRF280 Cooperative Work Experience

see AUM280.

EC

ECONOMICS

EC200 Introduction to Economics

3 class hrs/wk, 3 cr.

A study of the concepts involving scarcity and choice, supply and demand, government spending and taxation, national income accounting, business cycles, unemployment, inflation, financial markets, and the evolution of economic thought. **Prerequisite:** MTH070. **F, W**

EC201 Introduction to Microeconomics

3 class hrs/wk, 3 cr.

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

EC202 Introduction to Macroeconomics

3 class hrs/wk, 3 cr.

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

EC203 Applications to Economic Issues

3 class hrs/wk, 3 cr.

Emphasizes such global issues as economic growth, environmental protection, rent, interest and profit, international trade and finance, international development, and the collapse of communism. **Prerequisite:** EC201 and 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 instructor. Course may be repeated for a maximum of two credits. **F**

ECE068B Observing Preschool Experiences

1 class hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on child guidance. **Prerequisite:** Consent of instructor. Course may be repeated for a maximum of two credits. **W**

ECE068C Observing Preschool Experiences

1 class hr/wk, 1 cr.

Students observe various aspects of a preschool with emphasis on the classroom environment and curriculum. **Prerequisite:** Consent of instructor. Course may be repeated for a maximum of two credits. **Sp**

ECE070A-D Infant/Toddler Training

1 class hr/wk, 1 cr. each

Four infant/toddler training modules. A: Social-emotional growth and socialization; B: Group care; C: Cognitive learning and developing; D: Culture and families. Class fee \$15 each. Offered as needed.

ECE086 Family Day Care I (Basic)

1 class hr/wk, 1 cr.

Provides the caregiver with basic information on managing a family day care home. Includes practical suggestions for working with parents, keeping business records, providing healthy and safe environments for children, and establishing a home business. **F, W, Sp, Su**

ECE087 Family Day Care II (Advanced)

1 class hr/wk, 1 cr.

Continues information on managing a family day care home. Focuses on environments and activities and how children grow and learn. Covers children of different ages, cultures, and abilities. **Offered as needed.**

ECE150 Introduction and Observation in Early Childhood Education

3 class hrs/wk, 3 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. **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.

Focuses on understanding and implementing a developmental approach to creative activities for the young child. Involves hands-on experience with a wide variety of activities, discussion of presentation, and methods of evaluation. Includes art activities, use of natural materials, cooking experiences, puppet-making, and the development of new art. Class fee \$10. **W**

ECE153 Music and Movement for Young Children

3 class hrs/wk, 3 cr.

How to make music a pleasurable medium of expression. Why and how to provide music and movement activities for young children. Covers

the value of music for preschool children, simple music theory and terminology, roles of teachers, and use of spontaneous and planned activities. Class fee \$5. **Sp**

ECE154 Children's Literature and Literacy

3 class hrs/wk, 3 cr.

Surveys children's literature along with presenting methods for using and evaluating such literature. Students will read children's books, evaluate these, and have story groups with children. Explores how children develop literacy. **Sp**

ECE155 Child Nutrition

2 class hrs/wk, 2 cr.

Introductory course in human nutrition and health with emphasis on the nutritional needs of the young child. Includes practical application in the day care setting and planning snacks and meals for preschool children. **W**

ECE161 Infant/Toddler Practicum

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

Experience in working with infants and toddlers in a laboratory and seminar setting and assisting with supervision of the various daily activities. **Prerequisite:** HDFS249. Class fee \$5. **F, W, Sp**

ECE162 Early Childhood Educator Orientation

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

Roles and responsibilities of the early childhood educator. Experience in working with young children in an organized setting and assisting with supervision of the various daily activities in a preschool program. **Prerequisite:** ECE151. Class fee \$5. **F, W, Sp**

ECE163 Preschool Practicum

2 class and 6 lab hrs/wk, 4 cr.

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 curriculum 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 hrs/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. **F**

ECE261 Student Teaching I, Early Childhood Education

2 class and 12 lab hrs/wk, 6 cr.

Supervised teaching of young children in a laboratory setting. **Prerequisite:** Grade C or higher in ECE163, second-year standing in the Early Childhood Education program, and consent of instructor. Class fee \$10. **F, W, Sp**

ECE262 Student Teaching II, Early Childhood Education

2 class and 12 lab hrs/wk, 6 cr.

Supervised teaching of young children in a preschool laboratory. **Prerequisite:** Grade C or

higher in ECE261, 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, parent/community 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

EDUCATION

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. **F**

ED102 Practicum

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

Field experience in a variety of classroom activities directly related to assisting and supervising children in school settings. Allows students to apply knowledge, methods, and skills gained from education courses. Seminars cover classroom experience, problem-solving techniques, and materials. **Prerequisite:** ED101 or equivalent experience, and current First Aid Card. Class fee \$5. **F, W, Sp, offered 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 duties regularly assigned to instructional assistants in a school. Allows students to apply in-depth knowledge, methods, and skills gained from education courses. Seminars cover classroom experience and problem-solving techniques. **Prerequisite:** ED102 and current First Aid Card. See advisor for writing, math, and computer science prerequisites. Class fee \$5. **F, W, Sp**

ED110 Psychology of Learning

3 class hrs/wk, 3 cr.

Modern theories of behavior, motivation, and human development as applied to the classroom and techniques derived from these theories. **F**

ED123 Classroom Techniques in Reading and Language

3 class hrs/wk, 3 cr.

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

ED124 Classroom Techniques in Mathematics and Science

3 class hrs/wk, 3 cr.

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

ED125 Techniques for Tutoring Adults

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

Prepares tutors to work with students primarily in professional and technical areas. **Offered as needed.**

ED131 Teaching Techniques

3 class hrs/wk, 3 cr.

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

ED133 Instructional Media and Materials

3 class hrs/wk, 3 cr.

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

ED179 Literature for Preschool Children: Jump Over the Moon

3 class hrs/wk, 3 cr.

A telecourse about the history and diversity of children's literature. Each program includes a variety of recommended works to be read and suggests criteria for selecting and evaluating other books. In addition to viewing the television programs, students will read pertinent articles and complete related assignments, with guidance from an instructor. **F, W, Sp**

ED205A Tutoring Principles and Practices

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

Principles and practices of tutoring basic reading, writing, and English as a Second Language skills to adult learners. Following completion of course basics, additional options provide instruction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers learning styles and tutoring with the aid of a computer. **Offered as needed.**

ED205B Tutoring Principles and Practices

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

Principles and practices of tutoring basic reading, writing, and English as a Second Language skills to adult learners. Following completion of course basics, additional options provide instruction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers learning styles and tutoring with the aid of a computer. **Offered as needed.**

ED209B Practicum: Introductory Observation and Experience (LDC)

3 class hrs/wk, 3 cr.

A one-term introduction to education for students exploring education as a career. **Sp, 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. **Prerequisite:** ED209B. **Offered as needed.**

ED209D Professional Technical Practicum II

2 class and 7 lab hrs/wk, 9 cr.

Prepares students for full teaching responsibility in a public school setting. Students will assess, plan, and implement all instructional programs for a period of four weeks (four periods a day) at the practicum placement site. Seminar experiences will support full-time teaching experience. **Prerequisite:** 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 instructor. **Offered as needed.**

ED212 Schools and Society

3 class hrs/wk, 3 cr.

Public education in the United States today. Examines contemporary purposes and practices in relation to historical trends and philosophical issues. Discusses organization, financing, and operation of local school districts. **Sp**

ED213 Advanced Instructional Techniques in Reading

3 class hrs/wk, 3 cr.

Designed to prepare students to use a variety of instructional strategies which build upon the foundations of reading developed in ED123. Compares and contrasts current instructional strategies and explores the interactive nature of language, reading, writing, and spelling. **Prerequisite:** ED123. **Offered as needed.**

ED214 Advanced Instructional Techniques in Mathematics and Science

3 class hrs/wk, 3 cr.

Designed to prepare students to use a variety of instructional strategies built upon the foundations of mathematics taught in ED124. Explores manipulative mathematics across the curriculum as well as additional areas of math instruction including operations with rational numbers, probability,

geometry, measurement, time, and money. **Prerequisite:** ED124. **Offered as needed.**

ED217 Comprehensive Classroom Management 3 class hrs/wk, 3 cr.

Provides current theory and methodology for managing small and large groups of students effectively. Covers understanding students personal/psychological and learning needs, establishing positive teacher-student relationships, implementing instructional methods that facilitate optimal learning, and using organizational and group management methods that maximize on-task student behavior. **W, offered as needed.**

ED235 Instructional Technology 3 class hrs/wk, 3 cr.

Introduces students to current technology available in education. Presents the tools to evaluate, select, and implement appropriate technology in the instructional setting. **Offered as needed.**

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 will perform routine duties to maintain the collection and provide service to library/media patrons. **Offered as needed.**

ED251 Overview of Students with Special Needs 3 class hrs/wk, 3 cr.

Introductory course covering disabilities and medical conditions that teachers in the public and private sector must be able to recognize and understand including learning disabilities, mental retardation, severe emotional disturbances, speech and language impairments, visual impairments, hearing impairments, physical disabilities and other health impairments, autism, traumatic brain injuries, Tourette's 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. **Offered as needed.**

ED257 Second Language Teaching Techniques 3 class hrs/wk, 3 cr.

Covers philosophy, activities, materials, and various techniques used to teach English as a Second Language. **Offered as needed.**

ED258 Multicultural Education 3 class hrs/wk, 3 cr.

Covers philosophy, activities, and materials used in developing a culturally-sensitive multicultural classroom and curriculum. **F**

ED259 Bilingual Methodology 3 class hrs/wk, 3 cr.

Covers philosophy, techniques, activities, and materials used in bilingual/bicultural education

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

ED268 Educating the Mildly and Severely Handicapped 3 class hrs/wk, 3 cr.

Covers theories and techniques for working with students with disabilities. Studies services and funding provided for students with mild and severe disabilities. **Prerequisite:** ED251 or consent of instructor. **Offered as needed.**

ED291 Natural Resource Institute 5 class hrs and 35 lab hrs, 2 cr.

The study of natural resource education for teachers interested in establishing a natural resource program at their high schools. Involves instruction in ecosystem-based management and sustainability in natural resource education. Field experiences are provided by experts in natural resource management and connections made towards program development at schools. **Su**

ED292 Occupational Analysis, Curriculum, and Evaluation 3 class hrs/wk, 3 cr.

Course provides students with the opportunity to analyze their professional-technical specialty area in order to develop curriculum and evaluation strategies for professional-technical programs. Includes community surveys, occupational advisory committees, occupational analysis, program goals and objectives, and evaluation. **Prerequisite:** ED209B. **Offered as needed.**

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. **Offered as needed.**

ELE and ELT

ELECTRONICS

see also Microelectronics/Industrial and Integrated Circuit Mask Design

ELE056 Concepts of Electronics 4 class and 4 lab hrs/wk, 6 cr.

Includes DC and AC theories, troubleshooting concepts, use of test equipment, and safety. **Prerequisite:** MTH070 or equivalent as determined by the instructor. **Offered as needed.**

ELT111 Electronics Orientation 2 lab hrs/wk, 1 cr.

Introductory course in the field of electronics. Covers career opportunities, basic vocabulary, soldering, static awareness, tool identification, safety, first aid, hardware, and chemicals used in electronics. Class fee \$4. **F, W**

ELT113 Electronic Problems I 2 lab hrs/wk, 1 cr.

Introduction to electronic problem solving. Emphasizes the use of MSDOS/Windows, 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**

ELT114 Electronic Problems II 2 lab hrs/wk, 1 cr.

Covers the presentation of technical data and computations using electronic spreadsheets. Includes procedures for dimensional analysis, recognition and use of unit systems, and preparation and use of graphs, vectors, and logarithms/Db. Covers problems that are representative and applicable throughout the electronic curriculum. **Prerequisite:** ELT113. **W, Sp**

ELT121 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**

ELT122 Programming Concepts II 3 class and 2 lab hrs/wk, 4 cr.

Surveys various professional software applications. Students will learn and demonstrate one major software application. **Prerequisite:** ELT121 or any high-level programming class. Class fee \$8. **Sp**

ELT123 Computer Operating Systems 3 class hrs/wk, 3 cr.

A study of the fundamentals of microcomputer and minicomputer operating systems. **Prerequisite:** CS101, or consent of instructor. **Offered as needed.**

ELT131 Electronic Concepts I 3 class and 4 lab hrs/wk, 4 cr.

First in a three-term sequence. Covers electrical and atomic theory applicable to the field of electronics. Introduces DC and AC theory, test equipment use, schematic reading, and circuit construction. **Prerequisite:** High school algebra, MTH070, or consent of instructor. Class fee \$16. **F, W**

ELT132 Electronic Concepts II 3 class and 4 lab hrs/wk, 4 cr.

Second 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:** ELT131 or consent of instructor, and concurrent enrollment in a trigonometry class. Class fee \$16. **W, Sp**

ELT133 Electronic Concepts III 3 class and 3 lab hrs/wk, 4 cr.

Last in a three-term sequence. Covers electric circuit analysis and atomic theory applicable to passive circuits used in electronics. Applies the fundamental concepts learned in ELT131 and ELT132. **Prerequisite:** ELT132. Class fee \$12. **Sp, Su**

ELT141 Transistor Fundamentals 3 class and 6 lab hrs/wk, 5 cr.

Provides an introduction to semiconductor physics and covers the fundamental principles of diodes and bipolar transistors, and field effect transistors. Introduces the diode as a switching device, with emphasis on forward and reverse operating char-

acteristics. Presents bipolar transistors as switching devices and as linear amplifiers, using six standard methods of biasing. The field effect transistor (JFET and MOSFET) is introduced and compared with the operating characteristics and biasing methods of the bipolar transistor. **Prerequisite:** Concurrent enrollment in ELT132. Class fee \$16. **W, Sp**

ELT142 Semiconductor Devices 2 class and 3 lab hrs/wk, 3 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-state devices such as unijunction transistors, special purpose diodes, thyristors (SCR s, TRIAC s, etc.) and photoelectric devices. **Prerequisite:** ELT141 or consent of instructor. Class fee \$12. **Sp, Su**

ELT143 Pulse Circuit Fundamentals 2 class and 3 lab hrs/wk, 3 cr.

An introduction to basic pulse generating circuits. Covers the discrete transistors and components used in the design of these circuits, including the astable, monostable, and bistable multivibrators; the Schmitt Trigger circuit; and the constant current and constant voltage ramp generators. **Prerequisite:** ELT141 or consent of instructor. Class fee \$12. **Sp, Su**

ELT151 Digital Fundamentals 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 algebra, simplification theorems, combinational logic, and an introduction to arithmetic circuits. **Prerequisite:** ELT131 or consent of instructor. Class fee \$8. **W, Sp**

ELT161 Linear IC Fundamentals 3 class and 3 lab hrs/wk, 4 cr.

Introduces linear integrated circuit amplifiers. Emphasizes device parameters and basic circuit operating characteristics. Various linear integrated circuit amplifying devices are compared and evaluated through laboratory experiments. **Co-requisite:** ELT133 and ELT142. **Prerequisite:** ELT132 and ELT141. Class fee \$12. **Sp, Su**

ELT181 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:** ELT244 and ELT252. **W**

ELT182 Telecommunications 2 class and 3 lab hrs/wk, 3 cr.

Studies communications theory and systems. Laboratory experiments help develop practical knowledge and reinforce theoretical concepts. **Prerequisite:** Concurrent enrollment in ELT181. Class fee \$12. **W**

ELT183 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:** ELT244 and ELT262, or equivalent as determined by instructor. Class fee \$24. **Sp**

ELT191 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 controllers (PCLs). **Prerequisite:** ELT141, ELT142, ELT262, or consent of instructor. Class fee \$12. **Sp**

ELT244 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, FET circuits, oscillators, and power amplifiers. Circuits are analyzed using P-Spice and Electronic Workbench simulation software while other circuits are constructed and analyzed using laboratory test equipment. **Prerequisite:** ELT141 and ELE133, or consent of instructor. Class fee \$16. **F**

ELT252 Digital Circuit Applications 2 class and 3 lab hrs/wk, 3 cr.

A continuation of ELT151. The course is laboratory-oriented to give students hands-on experience with sequential logic circuits such as flip-flops, counters, registers, combinations circuits, and arithmetic logic units. **Prerequisite:** ELT151. Class fee \$12. **F**

ELT253 Microcomputer Systems 3 class and 6 lab hrs/wk, 5 cr.

Covers hardware and software concepts used by microprocessors. Covers interfacing criteria and techniques and stresses hardware and software troubleshooting techniques. **Prerequisite:** ELT151, ELT252, and a high-level programming language, or consent of instructor. Class fee \$24. **W**

ELT254 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:** Fourth-term standing in the Electronics program. **W**

ELT255 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 communica-

tion network systems. Multiple network hardware configurations are constructed and tested using Novell's Netware operating system. **Prerequisite:** ELT0253, CS278, DOS, and a high-level programming language, or consent of instructor. Class fee \$12. **Sp**

ELT256 Advanced Computer Architecture 3 class and 3 lab hrs/wk, 4 cr.

For students with a solid foundation in digital logic, microprocessors, and programming. Explains advanced computer system theory. Lab sessions emphasize system installation and troubleshooting of both hardware and software. **Prerequisite:** Second-year standing in Electronics or consent of instructor. Class fee \$24. **Sp**

ELT262 Linear IC Applications 2 class and 3 lab hrs/wk, 3 cr.

A design and applications course using the integrated circuit amplifier and special function IC devices to study circuits related to industrial applications. Applies and evaluates selected circuit designs in the laboratory. **Prerequisite:** ELT244 and ELT161. Class fee \$12. **W**

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 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:** Concurrent enrollment in BLS Health Care Provider CPR. Must meet standards as set by the Oregon State Health Division for certification, including health, driving, and criminal record. Class fee \$7. **F**

EMT052 Emergency Medical Technician Basic, Part 2

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

This course is 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 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 EMT051 and concurrent enrollment in EMT280A. Class fee \$5. **W**

EMT061, 062, 063 Health Care Skills

2 lab hrs/wk, 1 cr. each

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

EMT065 Emergency Medical Technician Intermediate, Part 1

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

Discussion, demonstration, and practical application of EMT roles and responsibilities, patient assessment, airway management, oxygen and ventilation therapy, shock treatment, intravenous therapy, intraosseous therapy, ECG monitoring, defibrillation, pharmacology, and field protocols. **Prerequisite:** Current Oregon EMT Basic certification and a score of 75% or better on pretest. Class fee \$25. **Offered as needed.**

EMT066 Emergency Medical Technician Intermediate, Part 2

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

A continuation of EMT065. Students successfully completing Part 2 will be recommended to the Oregon Health Division for the certification process. **Prerequisite:** EMT065. Class fee \$25. **Offered as needed.**

EMT069 EMT Rescue

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

Elementary procedures of rescue practices, systems, components, support, and control of rescue operations including ladder procedures and basic rescue tools. Introduction to techniques and tools of patient extrication, emphasizing application to traffic accidents, as required for paramedic certification. **Prerequisite:** EMT051 and EMT052, or current Oregon EMT Basic certification. **Sp**

EMT070 Emergency Communication and Patient Transportation

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

Ambulance operation, laws, maintenance, and safety; emergency response driving and route planning; communication systems, radio types, HEAR system, codes, and correct techniques. Class fee \$5. **Sp**

EMT075 Introduction to Emergency Medical Service

3 class hrs/wk, 3 cr.

Covers roles and responsibilities of the paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, and stress management. **F**

EMT096 EMT Paramedic, Part 1

11 class and 3 lab hrs/wk, 14 cr.

First term of a two-term course. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; respiratory, cardiovascular, neurologic, and endocrine systems; and acute abdomen. Students will apply knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. **Prerequisite:** Fourth-term standing in the Emergency Medical Technology program. Class fee \$91. **F, Sp**

EMT097 EMT Paramedic, Part 2

6 class and 8 lab hrs/wk, 14 cr.

Second term of a two-term course. Focuses on anaphylactic, toxicologic, environmental, geriatric, pediatric, obstetric, gynecologic, neonatal, and behavioral emergencies; infectious diseases; and trauma care. Students will apply knowledge to campus-based laboratory skills practice and clinical

patient care in the hospital setting. **Prerequisite:** EMT096. Class fee \$45. **W, Su**

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 terminology. **F, W, Sp, Su**

ENG105 Introduction to Dramatic Literature

3 class hrs/wk, 3 cr.

Features drama by an international 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 works by major poets from various cultural backgrounds. Introduces poetic concepts, principles, and terminology, and explores a variety of structures and types of this art form. **F, W, Sp, Su**

ENG107 Introduction to World Literature

3 class hrs/wk, 3 cr.

Features discussion and analysis of histories, stories, poems, and plays of the Western and non-Western world between 2000 B.C.E. and 1450. **F**

ENG108 Introduction to World Literature

3 class hrs/wk, 3 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 nineteenth and twentieth centuries. **Sp**

ENG201 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

A study of selected Shakespearean tragedies emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to explore these plays and to provide background on the nature of tragedy. **F**

ENG202 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

A survey of selected Shakespearean comedies, emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to provide background on the nature of comedy. **W**

ENG203 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

A survey of selected Shakespearean history plays, emphasizing dramatic structure, characterization, imagery, and theme. Critical essays will be used to

provide background on the nature of historical drama. **Sp**

ENG204 Introduction to English Literature

3 class hrs/wk, 3 cr.

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

ENG205 Introduction to English Literature

3 class hrs/wk, 3 cr.

Covers the development of English literature from the time of Shakespeare (c. 1600) to the end of the 18th century. Focuses on literary works as products of a historical period and on the analysis and interpretation of works. **W**

ENG206 Introduction to English Literature

3 class hrs/wk, 3 cr.

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

ENG214 Literature of the Northwest

3 class hrs/wk, 3 cr.

Studies fictional and non-fictional works by Northwest writers from the time of early exploration of the territory. Emphasizes the relationship between Northwest writing and the unique Northwest social, cultural, and physical environments. **Offered as needed.**

ENG222 Images of Women in Literature

3 class hrs/wk, 3 cr.

Focuses on the portrayal of the feminine in mythology, conventional images in Western literature, literature of non-Western cultures or that of other groups within the Western world in relation to specific themes, or a combination of any of these. Students analyze and interpret images of women in the works of literature assigned. **Offered as needed.**

ENG250 Introduction to Mythology and Folklore

3 class hrs/wk, 3 cr.

Introduces folklore and some of its various forms: myths, legends, and folktales. Explores the nature and functions of folklore through examples from the classical world, from the native cultures of the Americas, and from at least one other area of the world. Also examines folklore in contemporary life. **Offered as needed.**

ENG253 Introduction to American Literature

3 class hrs/wk, 3 cr.

Focuses on the literature of the Native Americans, European explorers, settlers, chroniclers, missionaries, and American contributors to the character of a new nation, the United States of America from 1492-1800. Genres include story, chant, journal, letter, report, biography, autobiography, chronicle, narrative, dictionary, satire, poetry, song, sermon, novel, drama, essay, and political document. **F**

ENG254 Introduction to American Literature

3 class hrs/wk, 3 cr.

Focuses on the literature of the 19th Century, with attention given to the themes and issues of slavery,

abolition, Native American and women's rights, the Civil War, westward expansion, and industrial and urban growth. Genres studied include journal, narrative, speech, poetry, short story, novel, and essay. **W**

ENG255 Introduction to American Literature
3 class hrs/wk, 3 cr.

Focuses on the literature of the 20th Century, with attention given to the eras and events of the World Wars, American-European interconnections, modernism, the decade of the twenties (including the Harlem Renaissance), the Depression, post-World War II issues and realities, the Cold War with the Soviet Union, the civil rights movement, the Vietnam War, the Sixties, environmentalism, post-modern and contemporary life, multiculturalism, and global perspectives. Genres studied are poetry, short story, novel, drama, essay, and lyrics. **Sp**

ENG256 African-American Literature
3 class hrs/wk, 3 cr.

A historical survey of the literature of the African-American people, including the influence of African origins, oral tradition, the diaspora, slavery, the post-Civil War era, the Harlem Renaissance, the civil rights movement, and recent and contemporary periods. Focuses on oral and written texts representing interests, aspirations, and experiences of African-Americans. Includes a selection of works taken from slave narratives, early literary publications, novels, short stories, poems, autobiographies, and plays. **F**

ENG260 Introduction to Women Writers
3 class hrs/wk, 3 cr.

Focuses on the achievements and perspectives of women writers through analysis of their literary works and strategies. **W**

ENG261 Introduction to Science Fiction
3 class hrs/wk, 3 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 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. **W**

ENG263 Introduction to Detective Fiction
3 class hrs/wk, 3 cr.

Focuses on the genre of detective fiction, its history and its conventions through analysis of representative works and authors. **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, including voltage and current relationships, and circuit parameters of resistance, inductance, and capacitance. Covers basic DC, AC, and natural responses of circuits. **Prerequisite:** MTH252. Class fee \$10. **F**

ENGR202 Electrical Fundamentals II
3 class and 2 lab hrs/wk, 4 cr.

Studies the Fourier-Series representation of periodic time-varying functions, sinusoidal steady-state analysis, basic operation of three-phase circuits, electric circuits which contain mutually coupled coils, functions of transformers in circuits, characteristics of resonant circuits, and use of operational amplifiers to perform various functions in circuits with periodic inputs. **Prerequisite:** MTH252 and ENGR201. Class fee \$10. **W**

ENGR203 Electric Control Fundamentals
3 class and 2 lab hrs/wk, 4 cr.

Studies LaPlace Transform and its use in electrical control theory including the bode diagram. Includes analysis of two-port circuits, Boolean algebra, and basic logic gates. **Prerequisite:** MTH252, ENGR201, and concurrent enrollment in MTH256. 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:** MTH252. **F**

ENGR212 Dynamics

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

Kinematics, Newton's laws of motion, work energy, and impulse-momentum relationships applied to engineering systems. **Prerequisite:** ENGR211, MTH252, and PH211. **W**

ENGR213 Strength of Materials

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

Covers properties of structural materials and analysis of stress and deformation in axially loaded members, circular shafts, and beams, and in statically indeterminate systems containing these components. **Prerequisite:** ENGR211 and MTH252. **Sp**

ENL

ENGLISH AS A NON-NATIVE LANGUAGE

ENL040A TOEFL Test Preparation-Listening
1 class hr/wk, 1 cr.

Designed to help prepare students to take the listening portion of the TOEFL Test. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40, and oral proficiency score of 30. Class fee \$2. **Offered as needed.**

ENL040B TOEFL Test Preparation-Reading
1 class hr/wk, 1 cr.

Designed to help prepare students to take the reading portion of the TOEFL Test. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40,

and oral proficiency score of 30. Class fee \$2. **Offered as needed.**

ENL040C TOEFL Test Preparation-Grammar
1 class hr/wk, 1 cr.

Designed to help prepare students to take the grammar portion of the TOEFL Test. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40, and oral proficiency score of 30. Class fee \$2. **Offered as needed.**

ENL053 Listening and Speaking A
3 class hrs/wk, 3 cr. each

Focuses on improving interpersonal and small-group speaking and listening skills needed for success in academic and professional settings. This course covers a portion of the content of ENL055. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50 and oral proficiency score of 30+. SPL level 5. Class fee \$2. **F, Sp**

ENL054 Listening and Speaking B
3 class hrs/wk, 3 cr. each

Focuses on improving interpersonal and small-group speaking and listening skills needed for success in academic and professional settings. This course covers a portion of the content of ENL055. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50 and oral proficiency score of 30+. SPL level 5. Class fee \$2. **W**

ENL055 Listening and Speaking
5 class hrs/wk, 5 cr.

Focuses on improving interpersonal and small-group speaking and listening skills needed for success in academic and professional settings. This course covers a portion of the content of ENL053 and ENL054. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50 and oral proficiency score of 30+. SPL level 5. Class fee \$2. **F, W, Sp**

ENL057 Reading
5 class hrs/wk, 5 cr.

Focuses on developing reading skills in preparation for academic and professional purposes. Improves reading strategies, vocabulary, and basic library research skills, and reinforces reading skills through the use of extended reading selections as a basis for writing assignments. This course covers a portion of the content of ENL059 and ENL060. Designed for non-native speakers of English preparing for college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50 and oral proficiency score of 30+ and a writing sample. SPL level 5. Class fee \$2. **F, W, Sp**

ENL058 Reading and Vocabulary
5 class hrs/wk, 5 cr.

Focuses on improving basic reading skills, paragraph comprehension, and vocabulary skills (using the dictionary, identifying word parts, and finding the meaning of a word based on context clues). Designed for non-native speakers of English preparing for college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-

50, and oral proficiency of 30+. SPL level 5. Class fee \$2. **F, Sp**

ENL059 Reading and Writing A 6 class hrs/wk, 6 cr.

Focuses on developing reading and writing skills in preparation for academic and professional purposes. Improves reading strategies and vocabulary, and reinforces reading skills through the use of extended reading selections as a basis for writing assignments. This course covers a portion of the content of ENL057 and ENL067. Designed for non-native speakers of English preparing to take college classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50, oral proficiency score of 30+ and a writing sample. SPL level 5. Class fee \$2. **F, Sp**

ENL060 Reading and Writing B 6 class hrs/wk, 6 cr.

Focuses on developing reading and writing skills in preparation for academic and professional purposes. Emphasizes sentence structure, appropriate grammar, essay writing, and bibliographic sources. This course covers a portion of the content of ENL057 and ENL067. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50, oral proficiency score of 30+ and writing samples. SPL level 5. Class fee \$2. **W**

ENL061 American Grammar and Reading 5 class hrs/wk, 5 cr.

Reviews basic English grammar and applies this knowledge to the reading and understanding of short stories, poems, and/or short novels written by contemporary American authors who represent a variety of cultural and ethnic groups. Designed for non-native speakers of English preparing to take college classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50, oral proficiency score of 30+ and writing sample. SPL level 5. Class fee \$2. **Offered as needed.**

ENL067 Writing 5 class hrs/wk, 5 cr.

Focuses on sentence structure, appropriate grammar, and essay writing. This course content covers a portion of the content of ENL059 and ENL060. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50, oral proficiency score of 30+ and writing sample. SPL level 5. Class fee \$2. **F, W, Sp**

ENL068 Introduction to College Language Skills 6 class and 2 lab hrs/wk, 7 cr.

Designed to improve basic language skills in writing, spelling, and vocabulary. Through integrated work in all three areas, students will prepare for college course work. Designed for non-native speakers of English. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-50, oral proficiency of 30+ and a writing sample. SPL level 5. Class fee \$2. **F, Sp**

ENL102 Accent Reduction 4 class hrs/wk, 4 cr.

Focuses on listening and production skills of English speech patterns, intonation, and pronunciation

for the purpose of improved comprehensibility. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** Completion of ESL level 4 or CELSA score of 45+, oral proficiency score of 30+. SPL level 6. **F, W, Sp**

ENL104 Academic Listening and Speaking 4 class hrs/wk, 4 cr.

An introduction to the effective listening and speaking skills needed for success in academic and professional settings, including interpersonal, small-group communication, and intercultural communication. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** Completion of ESL level 4 or CELSA score of 50 and oral proficiency assessment of 30+. SPL level 6. **W, Sp**

ENL106 American Business Language 4 class hrs/wk, 4 cr.

Develop communication skills, including reading, writing, vocabulary, idioms, grammar for business and employment. Prepares students who plan to enter college programs or immediate employment in the fields of accounting, financial services, business administration, business technology, economics, marketing, real estate, computer science, or small business management. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** Completion of ESL level 4 or CELSA score of 50+, oral proficiency score of 30+ and writing sample. SPL level 7. **F, W**

ENL109 Academic Reading and Writing 4 class hrs/wk, 4 cr.

Presents strategies for improving specific reading skills in order to increase comprehension and analyze and summarize reading content. Source documentation and test-taking skills are included. Designed for non-native speakers of English who wish to improve their academic skills in preparation for taking college credit classes. **Prerequisite:** Completion of ESL level 4 or CELSA test score of 50+, oral proficiency score of 30+. SPL level 7. **F, W, Sp**

ENL113 Advanced Grammar I 4 class hrs/wk, 4 cr.

Focuses on advanced English grammar, with a contextual emphasis on American culture and current topics of interest. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** Completion of ESL level 4 or CELSA score of 50+, and oral proficiency score of 30+ and writing sample. SPL level 7. Class fee \$2. **F, Sp**

ENL114 Advanced Grammar II 4 class hrs/wk, 4 cr.

Focuses on advanced English grammar, with a contextual focus on American culture and current topics of interest. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** ENL111 or ENL113 or CELSA score of 60+, oral proficiency score of 30+, and writing sample. SPL level 7. **W**

ENL116 Writing for College 4 class hrs/wk, 4 cr.

A comprehensive writing course which introduces the concepts of WR121, English Composition. Focuses on the writing process, organization, and a variety of expository writing techniques and styles. Reading selections model effective writing, enhance vocabulary, and reinforce the ability to read for understanding and information. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** ENL111 or ENL113 or CELSA score of 55+, oral proficiency score of 30+ and writing sample. SPL level 7. Class fee \$2. **F, W, Sp**

ENL118 Introduction to Technical Writing and Research for International Students 4 class hrs/wk, 4 cr.

Prepares students to successfully complete research and report writing in technical and academic courses leading to degrees. Includes use of appropriate format, organization, and bibliographic references, and emphasizes American source citation conventions, the consideration of writing purposes, audience, and objective presentation. Designed for non-native speakers of English who wish to improve their academic skills. **Prerequisite:** ENL116 or CELSA score of 60+, oral proficiency score of 30+ and writing sample. SPL level 7+. Class fee \$2. **W**

ES

EMERGENCY SERVICES

ES071 Work Place Safety Skills 4 class and 12 lab hrs, 1 cr.

Combines first aid, CPR, and hazardous materials awareness to meet minimum federal and state occupational safety requirements. Students completing the course will receive American Red Cross first aid certification. Meets OSHA requirements. Class fee \$7. **F, W, Sp, Su**

ES072 Introduction to Emergency Services 4 class hrs/wk, 4 cr.

Presents philosophy, history, roles, and responsibilities of emergency services within a community. Includes a survey of professional career opportunities and requirements, and presents techniques for developing a resume. **Offered as needed.**

FA

FILM ARTS

FA255 Understanding Movies 3 class hrs/wk, 3 cr.

Designed as an introduction to the ways in which a person can come to understand the meaning of a movie. Emphasizes the feature-length movie. Class fee \$20. **F**

FA256 Understanding Movies: The Great Film Directors 3 class hrs/wk, 3 cr.

An analysis of films from the standpoint of the director-creator. Studies works of one or two directors in an effort to understand and critique individual films as the works of artists, especially within the context of a body of work expressing a particular and unique view of the world. Course may be

repeated for a maximum of 9 credits. Class fee \$20. W

FA257 Understanding Movies: Themes and Genres

3 class hrs/wk, 3 cr.

Explores the meanings a film conveys within the context of a specific film genre, nationality, or the thematic topic. Course may be repeated for a maximum of 9 credits. Class fee \$20. Sp

FE

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. F, W, Sp, 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, Sp, Su

FE280 Cooperative Work Experience

see AUM280.

FIN

FINANCIAL SERVICES

see also Business Administration

FIN051 Lending: Introductory

15 class hrs/1 cr.

Provides a basic understanding of lending and associated career opportunities in the financial services field. Offered as needed.

FIN052 Accounting Basics/AIB

3 class hrs/wk, 3 cr.

Designed for students interested in employment in financial institutions. Provides a foundation in basic accounting procedures for students with minimal or no college accounting or business background, or those desiring a refresher course or preparation for further accounting study. Offered as needed.

FIN053 Accounting/AIB

3 class hrs/wk, 3 cr.

Accounting for students interested in financial institution accounting. Emphasizes current accounting procedures, including the latest principles set by the Financial Accounting Standards Board. Offered as needed.

FIN055 Introduction to Spanish for Bankers

15 class hrs/1 cr.

Basics of Spanish in relation to specific financial services/business-related terminology. Offered as needed.

FIN056 Commercial Lending

3 class hrs/wk, 3 cr.

An overview of a bank's commercial lending division and its functions. Includes four aspects of commercial lending: the economic process, the lending process, the management of the loan portfolio, and the influences of regulation and business development on commercial lending. **Prerequisite:** Current employment in financial services, background in financial education or training, or consent of instructor. Offered as needed.

FIN057 Loan and Discount Series-AIB

3 class hrs/wk, 3 cr.

Presents essential information about promissory notes, supporting documents, and concepts of secure transactions. Includes calculating interests and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by bonds, stocks, and savings accounts; and the concepts of attachment, perfections, priority, defaults, and foreclosure. Specifically useful for note tellers and commercial lending clerks. **Prerequisite:** Employment in financial services, education or training related to the financial industry, or consent of instructor. Offered as needed.

FIN064 Personnel and the Law

15 class hrs/1 cr.

Concentrates on numerous laws that shape the financial industries' 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.

FIN064A Understanding and Selling Bank Products

3 class hrs/wk, 3 cr.

Provides the skills needed to sell financial industry services and meet customer needs. Cultivates a positive attitude towards selling and develops specific selling techniques. Offered as needed.

FIN066 Supervisory Training-AIB

3 class hrs/wk, 3 cr.

Develops the skills needed for successful supervision by incorporating managerial concepts with practical experience examples. Covers the management role and responsibilities, management teamwork, task analysis, job performance techniques, employee orientation, and delegation. **Prerequisite:** Financial industry experience preferable. Offered as needed.

FIN067 Teller Training: Advanced

15 class hrs/1 cr.

Designed to develop and improve the knowledge and abilities deemed essential in the performance of teller duties. Emphasizes dealing with customers and performing normal financial procedures. Offered as needed.

FIN068 Teller Training: Basic

15 class hrs/1 cr.

Focuses on the skills new tellers need in today's financial industry. Reflects the changing responsibility of today's teller and includes the most recent compliance information. F, offered as needed.

FIN070 Economics for Bankers

3 class hrs/wk, 3 cr.

An introduction to the principles of economics as they pertain to financial industry. Special emphasis on macroeconomics. Offered as needed.

FIN078 Customer Service

15 class hrs/1 cr.

Emphasizes the development of better communications skills in working with financial service customers. Covers effective ways of establishing contact, exploring customer needs, defining and resolving problems, and closing the encounter. **Prerequisite:** BA269 or employment in financial fields. Offered as needed.

FIN080 Deposit Operations

3 class hrs/wk, 3 cr.

Examines the deposit operations of banks in the context of the U.S. payments system. Explores how banks operate relative to their deposit-taking activities and management of deposited funds. Emphasizes the system rather than the product.

Prerequisite: BA269. Offered as needed.

FIN081 Trust Operations

3 class hrs/wk, 3 cr.

Discusses the concepts and ideas that comprise the various trust functions and translates them into workable procedures. **Prerequisite:** BA269. Offered as needed.

FIN085 Fundamentals of Analyzing Financial Statements

15 class hrs/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 financial fields. Offered as needed.

FIN280 Cooperative Work Experience

see AUM280.

FN

FOODS/NUTRITION

see also Hospitality and Tourism Management

FN225 Nutrition

4 class hrs/wk, 4 cr.

The study of nutrients and their ingestion, digestion, absorption, transport, metabolism, interaction, storage, and excretion. Course includes the study of the environment and human behavior as it relates to these processes. F, W, Sp

FR

FRENCH

FR101, 102, 103 First Year French, Terms I, II, III

4 class hrs/wk, 4 cr. each

Introduction to the French language (including listening, speaking, reading and writing) and Fran-

cophone culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. **Prerequisite:** These classes are to be taken sequentially. **FR101:** None; **FR102:** FR101, one year of high school French, or consent of instructor; **FR103:** FR102, two years of high school French, or consent of instructor. Class fee \$2 each. FR101: F; FR102: W; FR103: Sp

FR150, 151 First Year French, Accelerated, Terms I, II

6 class hrs/wk, 6 cr. each

Introduction to the French language (including listening, speaking, reading and writing) and Francophone culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. This two-quarter sequence is equivalent to the three quarters of FR101, 102, 103. **Prerequisite:** These classes are to be taken sequentially. **FR150:** None. It is recommended that the student have had some experience studying a foreign language; **FR151:** FR150, one year of high school French, or consent of instructor. Class fee \$3 each. FR150: W; FR151: Sp

FR201, 202, 203 Second Year French, Terms I, II, III

4 class hrs/wk, 4 cr. each

Extensive practice in all four language skills (reading, writing, speaking, and listening). Included are cultural and literary readings and an in-depth review and expansion of basic French grammar and vocabulary, as well as a broadening of the student's understanding of Francophone culture. **Prerequisite:** These classes are to be taken sequentially. **FR201:** FR103, three years of high school French, or consent of instructor; **FR202:** FR201 consent of instructor; **FR203:** FR202 or consent of instructor. Class fee \$2 each. FR201: F; FR202 W; FR203: Sp

FRP

FIRE PROTECTION

FRP050 Introduction to Fire Protection

3 class hrs/wk, 3 cr.

Philosophy and history of fire protection. History of loss of life and property by fire, responsibilities of fire departments in a community, organization and function of fire protection agencies and allied organizations, sources of professional literature, survey of professional career opportunities and requirements, and development of resume. **Offered as needed.**

FRP051 Fire Incident Related Experience

9 lab hrs/wk, 3 cr.

Orientation to fire-incident-related experience, which fulfills 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 lab hrs/wk, 3 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 bottle refilling procedure, cascade systems use, live-fire attack practices, salvage operations, overhaul practices, fire cause investigation, firefighter 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 comprehensive officer selection assessment center, single company evolutions, drafting and tender operations, and flammable and combustible liquids operations. **Prerequisite:** FRP052. Class fee \$15. **Offered as needed.**

FRP054 Water Supply Operations

3 class hrs/wk, 3 cr.

Covers water supply operations in fire service, including pre-fire planning operations, water quantity calculations, water source options, delivery systems and options, and hydraulic calculations. Designed to meet the competencies as set forth by the Fire Standards and Accreditation Board in Firefighter II, Apparatus Operator I and II. **Prerequisite:** MTH070, FRP052, or consent of instructor. **Offered as needed.**

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, FRP052, or consent of instructor. Class fee \$5. **Offered as needed.**

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. **Offered as needed.**

FRP059 Major Emergency Strategy and Tactics

3 class hrs/wk, 3 cr.

Studies several types of major emergencies and principles relating to incident priorities, resource management, and tactical operations. **Prerequisite:** FRP050, FRP051, FRP052, FRP053, FRP070, or consent of instructor. **Offered as needed.**

FRP060 Fundamentals of Fire Prevention

3 class hrs/wk, 3 cr.

History and philosophy of fire protection, through review of life and property loss statistics, case

studies of fire protection agencies, current and future fire protection problems, and fire prevention laws and regulations. Students develop an awareness of and positive attitude toward fire prevention as a method of accomplishing the fire department mission. **Offered as needed.**

FRP061H, 062H, 063H Fire Incident Related Experience Honors

9 lab hrs/wk, 3 cr. each

Provides the student officer with practice in supervision of a shift of firefighters during a 24-hour period. Covers assisting staff with training cadet firefighters and apparatus operators during drill sessions and supervising and directing cadet crews during emergency responses and operations. Students taking this course will act as a liaison to staff in regard to Fire Incident Related Experience and complete special projects and assignments given by staff. **Prerequisite:** FRP053 and consent of instructor. Class fee \$15 each. **Offered as needed.**

FRP061 Fire Incident Related Experience

9 lab hrs/wk, 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.**

FRP062 Fire Incident Related Experience

9 lab hrs/wk, 3 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

9 lab hrs/wk, 3 cr.

Prepares the student for entering the job market and assists them in becoming more successful in fire service entry processes. Continues progress towards the standard Firefighter I from the Board on Public Safety Standards and Training, and provides practicum for Driver and Apparatus Operator I and II status. **Prerequisite:** FRP062. Class fee \$15. **Offered as needed.**

FRP064 Hazardous Materials Operations

3 class hrs/wk, 3 cr.

Provides knowledge and skills necessary to safely respond to and manage the defensive operations involved in a chemical emergency. **Prerequisite:** Concurrent enrollment in FRP050. **Offered as needed.**

FRP065 Interface Fire Prevention and Mitigation

2 class hrs/wk, 2 cr.

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

FRP066 Building Construction for Fire Suppression

3 class hrs/wk, 3 cr.

Fire problems inherent in structural elements of buildings. How knowledge gathered through interpretation of blueprints and inspection of various building types provides a basis for applying effective extinguishment practices, with adequate safeguards for personnel. **Offered as needed**

FRP067 Hazardous Materials Regulations

3 class hrs/wk, 3 cr.

Provides an overview of the numerous federal, state, and local laws, codes, and regulations governing hazardous materials. This course is confined to the storage, handling, and release of hazardous materials. Describes the legal limitations and liabilities of responders, as well as business owners. Gives an in-depth profile of dealing 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 hrs/wk, 3 cr.

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

FRP069 Fire Department Leadership

3 class hrs/wk, 3 cr.

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, attitudes, 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 Extinguishers

3 class hrs/wk, 3 cr.

Covers types and uses of portable fire extinguishers, as well as care, inspection, and recharging procedures. Includes various types of sprinklers and special extinguishing systems, standpipe systems, and systems designed to detect and report fires. **Offered as needed.**

FRP072 Fire Codes and Ordinances 1

3 class hrs/wk, 3 cr.

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

FRP073 Law for Emergency Services

3 class hrs/wk, 3 cr.

Presents firefighters' and emergency medical technicians' legal responsibilities in driving, inspecting, emergency operations, communications, fire prevention, ambulance services, and areas of other activities. Covers employee and member's rights, duties, liabilities, and participation in the preparation for presentation in court. **Offered as needed.**

FRP074 Fire Investigation

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

Stresses importance of fire-cause determination. Covers the burn characteristics of combustibles and effects of fire on materials; the interpretation of burn patterns and isolation of the area 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 instructor. **Offered as needed.**

FRP075 Aircraft Crash/Fire Rescue

1 class and 3 lab hrs/for 4 weeks, 1 cr.

Pre-planning activities for on- and off-airport emergencies. Approach, positioning, rescue procedures, and application of control techniques. **Offered as needed.**

FRP077 Fire Service Instructor Training 1

12 class and 10 lab hrs/for 1 week, 2 cr.

The fire service instructor and the job, including learning principles, teaching procedures (preparing course outlines and lesson plans, managing a classroom, and evaluation techniques), and training aids and devices. **Offered as needed.**

FRP078 Fire Service Instructor Training 2

16 class and 6 lab hrs/1 wk, 2 cr.

Designed for fire science instructors, covers preparing class outlines, basic instructional materials, and teaching formalized classes. **Prerequisite:** FRP077. **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 fire-fighting orders, urban 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 hrs/wk, 3 cr.

Methods of contemporary fire prevention inspection practices. Includes preparation, pre-approach information, written inspection notices, relations with owners and occupants, and compliances. **Prerequisite:** FRP060, FRP066, FRP072, or consent of instructor. **Offered as needed.**

FRP083 Incident Report Writing

2 class hrs/wk, 2 cr.

Methods of contemporary fire prevention inspection practices, including preparation, pre-approach

information, written inspection notices, relations with owners and occupants, and compliances. **Prerequisite:** FRP073, FRP074, WR121, or consent of instructor. **Offered as needed.**

FRP084 Public Information for the Fire Service

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

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

FRP086 Advanced Detection and Protection Systems

3 class hrs/wk, 3 cr.

Provides training in the design of fire protection systems and the evaluation of existing systems with regard to fire codes, fire code standards, and National Fire Protection Standards. **Prerequisite:** FRP071 or consent of instructor. **Offered as needed.**

FRP087 Fire Insurance Fundamentals

3 class hrs/wk, 3 cr.

The relationship of fire defenses and fire losses to insurance rates, basic insurance principles, fire loss experience and loss ratio applying the ISO grading schedule and state regulations of fire insurance. **Prerequisite:** FRP060 or consent of instructor. **Offered as needed.**

FRP088 Fire Prevention Education Programs

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

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

FRP089 Fire Codes and Ordinances 2

3 class hrs/wk, 3 cr.

Study of the Uniform Fire Code, State Fire Marshal Fire Safety Regulations and related Oregon revised statutes, N.F.P.A., and other codes relating to fire prevention and life safety. **Offered as needed.**

FRP280 Cooperative Work Experience see AUM280.

ES

FOOD SERVICE

see Hospitality and Tourism Management

FT

FOREST RESOURCES TECHNOLOGY

FT051 Introduction to Forest Resources

2 class and 6 hrs/wk, 4 cr.

A broad-based introduction to the functions, structure, and management of America's forests. Multiple field labs focus on landowner goals and objectives in the forests of northwest Oregon. Class fee \$10. **F**

FT052 Forest Seminar

1 class hr/wk, 1 cr.

A forum for students to share elements of their career-work experience in an audio/visual presentation. **Prerequisite:** Cooperative Work Experience and CS101. **W**

FT053 Crew Leader Training

2 class hrs/wk, 2 cr.

This course is designed for people interested in supervising Oregon Youth Conservation Corps (OYCC) participants. Course covers team building, job skills, tool safety, integrating learning into work, motivation techniques, maintaining cohesiveness and productivity, how to define success, and crew leader as a role model. **Prerequisite:** For students recommended by Oregon Youth Conservation Corps. **Su**

FT055 Forest Surveying I

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

Basic forest surveying techniques, including fundamentals of horizontal and vertical measurements. Field and office procedures used for forest mapping. **Prerequisite:** MTH070 or concurrent enrollment. Class fee \$10. **W**

FT056 Forest Surveying II

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

A continuation of FT055. A study of distance and direction measurement, employing transit, theodolites, electronic distance measuring (EDM), and Global Positioning Systems (GPS). **Prerequisite:** FT055 and MTH082. Class fee \$10. **F**

FT061 Oregon Tree and Shrub Identification I

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

Identification of 29 species of evergreen trees and 12 species of evergreen shrubs that are native to Western Oregon. Use of the Dichotomous Genus Key to identify species during frequent field trips. Students will learn both common and scientific names of species. Class fee \$10. **F**

FT062 Oregon Tree and Shrub Identification II

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

Identification of 11 species of hardwood trees, 27 species of deciduous shrubs, and 12 species of forbs and grasses. Covers both common and scientific names of species. Class fee \$10. **Sp**

FT063 Forest Photo Interpretation

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

Introduces the basic principles of photogrammetry and photo interpretation, with particular emphasis on the uses of vertical aerial photographs in forest resource management. **Prerequisite:** MTH070 or concurrent enrollment. Class fee \$5. **W**

FT065 Forest Insect and Disease Management

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

A study of pathogens and insects, their role in forest ecology, and the damage they cause in the forested lands of the northwest. **Prerequisite:** FT051, FT062, and BI132. Class fee \$10. **W**

FT071 Forest Inventory

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

Introduces the basic principles of forest sampling. **Prerequisite:** FT055, FT062, FT063, and MTH082 or concurrent enrollment. Class fee \$10. **Sp**

FT072 Timber Cruising/Log Scaling

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

Introduces measurement and appraisal of individual trees, stands, and forest sites for volume and value. Covers the theory and principles of log scaling. **Prerequisite:** FT056 or concurrent enrollment, FT071, and CS101. Class fee \$10. **F**

FT075 Forest Contracts

3 class hrs/wk, 3 cr.

Presents the principles and specifics of preparing a forest contract, from providing the specifications to the actual writing of a legal contract. **Prerequisite:** FT072 and WR227. **Sp**

FT081 Introduction to Silviculture

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

A study of trees, forest ecology, and silvicultural practices in the management of forest lands in the Pacific Northwest. **Prerequisite:** FT071, FT062, and WR227, or concurrent enrollment. Class fee \$10. **F**

FT086 Principles of Supervision

3 class hrs/wk, 3 cr.

An introduction to the techniques of supervision, including leadership, planning, communication, motivation, organization, problem solving, work methods, training, and problem areas. Examines managerial practices which promote an understanding of the work environment. **W**

FT088 Forest Policy

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

A study of the acts, regulations, orders, and court decisions that define and constrain natural resource management plans. **Prerequisite:** FT051 and FT062. Class fee \$10. **Sp**

FT095 Forest Management Problem Solving

2 class and 6 lab hrs/wk, 4 cr.

Designed to build problem-solving skills through the use of real-world forest management problems. Students will use management skills presented in previous classes. **Prerequisite:** FT072, FT081, FT086, and WR227. Class fee \$10. **Sp**

FT280 Cooperative Work Experience

see AUM280.

G**GEOLOGY****G142 The Geology of Pacific Northwest****Volcanoes, Mountains, and Glaciers**

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

Studies the nature and origin of Northwest mountains and mountain ranges. Includes volcanoes, mountain building, and glacial sculpture. Includes lecture, laboratory, and field trip. Class fee \$8. **Offered as needed.**

G143 Pacific Northwest Rocks and Minerals

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

Studies identification, occurrence, and origin of common Northwest rocks and minerals and properties of precious, semiprecious, and ornamental stones, 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 evening orientation session prior to a weekend of field study with a follow-up evening seminar. Trip worksheets, field diary, and topic term paper may be required. A: Crater Lake Story B: Oregon Coastal Landforms C: The John Day Country and Thundereggs/Agates D: Origin of the Columbia Gorge E: Oregon Moon Country-Bend area. Class fee \$16 each. **Offered as needed.**

G201 Geology

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

A systematic study of the nature and origin of common rocks and minerals. Identification techniques applied in laboratory and on field trips. Class fee \$12. **F**

G202 Geology

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

A broad non-quantitative, descriptive survey of geologic landforms. Map interpretation activities applied in laboratory and on field trips. Class fee \$12. **W**

G203 Geology

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

A geophysical study of earth history, interpreted through geophysics and plate tectonics, coupled with laboratory field study of paleontology. Class fee \$12. **Sp**

GE**GENERAL ENGINEERING**

see also Engineering

GE101 Engineering Orientation

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

An introduction to the engineering profession and engineering problem-solving strategies. **Prerequisite:** MTH111. **F**

GE102 Engineering Computations

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

Acquaints engineering students with the use and operation of the microcomputer. Routines will be developed and used by students to solve typical engineering problems. Emphasizes problem-solving techniques. **Prerequisite:** MTH111. **W**

GE103 Engineering Computations

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

Systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing, and database operations using spreadsheet software. **Prerequisite:** GE102, CS101, or consent of instructor. **Sp**

GE115 Engineering Graphics

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

Graphic communication, multiview and pictorial representation, graphical analysis and solutions, and computer-aided drafting. **F**

GEOG

GEOGRAPHY

GEOG105 Introductory Geography

3 class hrs/wk, 3 cr.

An introduction to the physical elements of geography and the environment in which we live. Focuses on the planet Earth's geodesy, hydrography, landforms, atmosphere, vegetation, and soils. **F**

GEOG106 Introductory Geography

3 class hrs/wk, 3 cr.

An introduction to the cultural 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 hrs/wk, 3 cr.

An introduction to economic geography, including the study of development and underdevelopment, agriculture, industry, settlement, urban landscapes, and natural resource problems. **Sp**

GEOG201 World Regional Geography: The Developed World

3 class hrs/wk, 3 cr.

An introduction to the human elements of geography in technically-advanced societies, including regional populations, environments, ways-of-life, and a place-name location study of Europe, North America, the former Soviet Union, Japan, and modern Oceania.

GEOG202 World Regional Geography: The Developing World

3 class hrs/wk, 3 cr.

Introduces the human elements of geography in emerging countries. Discusses regional populations, environments, ways-of-life, and place-name location studies in Latin America, China, Monsoon Asia, the Middle East, and Africa. **Offered as needed.**

GEOG206 Geography of Oregon

3 class hrs/wk, 3 cr.

Examines the geography of Oregon, including its settlement by Europeans, various geographic regions, diverse physical environments, important natural resources, and varied population and economy. **Offered as needed.**

GER

GERMAN

GER101, 102, 103 First Year German, Terms I, II, III

4 class hrs/wk, 4 cr. each

Introduction to the German language (including listening, speaking, reading and writing) and Germanic culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and

guided conversation. **Prerequisite:** These classes are to be taken sequentially. **GER101:** None; **GER102:** GER101, one year of high school German, or consent of instructor; **GER103:** GER102, two years of high school German, or consent of instructor. Class fee \$2 each. **GER101: F;** **GER102: W;** **GER103: Sp**

GER201, 202, 203 Second Year German, Terms I, II, III

4 class hrs/wk, 4 cr. each

Extensive practice in all four language skills (reading, writing, speaking, and listening). Included are cultural and literary readings and an in-depth review and expansion of basic German grammar and vocabulary, as well as a broadening of the student's understanding of Germanic culture. **Prerequisite:** These classes are to be taken sequentially. **GER201:** GER103, three years of high school German, or consent of instructor; **GER202:** GER201 or consent of instructor; **GER203:** GER202 or consent of instructor. Class fee \$2 each. **GER201: F;** **GER202: W;** **GER203: Sp**

GS

GENERAL SCIENCES

GS104 Physical Science

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

An integrated study of forces and motions in the physical world. Class fee \$12. **F**

GS105 Physical Science

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

A broad, nonquantitative, descriptive survey of chemical principles which are relevant to everyday life. Class fee \$12. **W**

GS106 Physical Science

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

Introduces various branches of earth sciences. Includes basic terminology, fundamental processes, and respective interrelations. Class fee \$12. **Sp**

GS107 Introduction to Astronomy

3 class and 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 precipitation types, weather instruments, thunderstorms, cyclones, hurricanes, air masses, fronts, and weather forecasting. **Offered as needed.**

GS141 Earth, Our Planet

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

A telecourse which investigates geoscience topics by introducing students to internationally recognized experts who share their theories, models, and opinions. On-location film footage will take students to places and events they might not otherwise see. Includes video viewing, written worksheet lessons, at-home quizzes, topical outside

reading summaries, and an on-campus exam. Class fee \$8. **F**

GS142 Earth Revealed

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

An introductory telecourse or modem geology course. This Geoscience course studies Earth as a system. A textbook, study packet, and lab component are closely integrated with video components. Class fee \$8. **W**

GS143 The Earth's Oceans

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

A telecourse which focuses on the marine environment as a unique feature of Planet Earth. Includes video viewing, journal writing, class projects, and site-based labs. Class fee \$8. **Sp**

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 cr. each

Designed to develop students' leadership qualities, and present opportunities for student-community participation. Provides a setting for self-improvement in conjunction with health 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 \$12. **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 information, 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**

H113 Medical Insurance Billing

3 class hrs/wk, 3 cr.

Designed to provide the skills needed in insurance billing. Presents a practical approach to processing medical insurance billing and understanding insurance programs. **Prerequisite:** H120 and H121, or consent of instructor. Class fee \$15. **F**

H114 CPT-IV Coding/Reimbursement

3 class hrs/wk, 3 cr.

Introduces the use of Current Procedural Terminology (CPT) coding system, insurance terminology and abbreviations, and basic health insurance systems. **Prerequisite:** H120, concurrent enrollment in H121, or consent of instructor. **W**

H115 ICD-9-CM Coding/Reimbursement

3 class hrs/wk, 3 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:** H120, H121, or consent of instructor. **Sp**

H116 Introduction to Allied Health Data

3 class hrs/wk, 3 cr.

Introduces the basic data sets and statistics used every day in health care organizations. Emphasizes the case-based and experiential learning process to facilitate familiarity with occupancy and discharge rates, disease 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 health care professions and specialties, 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 H120. 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 terms using a variety of case-based and experiential learning techniques. **Prerequisite:** H120 or consent of instructor. **F, W, Sp, Su**

H122 Advanced Topics in the Language of Medicine

3 class hrs/wk, 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:** H120 and H121 or consent of instructor. **Sp**

H130 Health Information Systems Office Practice

16 lab hrs/wk, 5 cr.

Practice in clinical situations of health information methods and techniques. **Prerequisite:** Third-term

standing in the Health Information Technician program with a grade C or higher in all required courses in the first two terms of the program. Class fee \$20. **Sp**

H131 Health Information Systems Seminar

1 class hr/wk, 1 cr.

Study of the relationship of practicum in a health care setting with theoretical course content, as well as its application to career and personal goals. **Prerequisite:** H130. **Sp**

H140 Medical Transcription

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

An introduction to the techniques of transcribing from the recorded voice to the computer, and operation of the transcriber. Includes transcribing letters, case histories, pathological reports, and other medical reports. **Prerequisite:** 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 fields of medicine. Spelling, grammar, punctuation, and formatting will be emphasized. Production goals will be set and assessed regularly with timed tests. **Prerequisite:** H140, H120, concurrent enrollment in H121, or consent of instructor. Class fee \$10. **W, 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:** H120, H121, H140, H141, enrollment in the Medical Transcription program, touch typing ability of 55 words per minute, or equivalent as determined by instructor. Class fee \$10. **F**

H143 Advanced Medical Transcription 3

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

Continuation of H142. Includes transcription of 20 advanced tapes in all fields. **Prerequisite:** H120, H121, H140, H141, H142, enrollment in the Medical Transcription program, and touch typing ability of 65 words per minute or proficiency in Word-Perfect at an intermediate level. Class fee \$25. **W**

H144 Medical Transcription Seminar

1 class hr/wk, 1 cr.

Designed to assist the student in relating classroom theory to practical experience and to discuss self-evaluations of work environment experiences. **Prerequisite:** Concurrent enrollment in H280. **Sp**

H210 Introduction to Health Services

3 class hrs/wk, 3 cr.

Provides an overview of the nation's health system. Includes use of health services, history of the health care system, and hospitals and other health service providers and their relationship to the system as a whole. Explores the financial, legal, political, and ethical aspects of the health care system in the United States. **F**

H216 Health Care Data and Statistics

3 class hrs/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-learning to facilitate the learning process. **Prerequisite:** MTH095 or BA211, and H116 or consent of instructor. **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:** H210, H250 and H251, or consent of instructor, and concurrent enrollment 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 enrollment in H230, 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 health services organization and the health services delivery system. **F**

H251 Health Services Management II

3 class hrs/wk, 3 cr.

Continuation of H250. Emphasizes the area of human resource management in health services organizations. Explores the concepts of motivation, leadership, communication, dynamics of change, personnel administration, labor relations, and new trends within the context of the health service organization and delivery system in the United States. **Prerequisite:** H250. **W**

H280 Cooperative Work Experience

see AUM280.

HD

HUMAN DEVELOPMENT

HD090 Peer Assistance Training

3 class hrs/wk, 3 cr.

Presents structured training in refining and effectively implementing communication skills and referral techniques, and provides familiarization with college and community-based resources and services. Students will serve as resource personnel to assist and/or refer other students with personal, social, or academic concerns. **Offered as needed.**

HD100 Preparing for College

1 class hrs/wk for 1 wk, 1 cr.

Introduces the techniques, strategies, and information fundamental to the acquisition of the skills needed for success in the college environment. **F, W, Sp, Su**

HD101 Creating College Success

3 class hrs/wk, 3 cr.

Presents strategies which contribute to success at Chemeketa Community College. Students will create a personal and academic plan and learn how

to maintain motivation, form a support system, and manage time. **F, W, Sp, Su**

HD110 Career and Life Planning

1 class hr/wk, 1 cr.

An introduction to the strategies and procedures fundamental to career development. Provides an assessment of individual personality traits, interests, skills, and values. Students will be exposed to career-related materials, methods, and activities. Class fee \$8. **F, W, Sp**

HD112 Study Skills

3 class hrs/wk, 3 cr.

Designed to develop practical and efficient study strategies in order to succeed in college. Includes note-taking, listening, textbook study reading, time management, improving objective and essay test-taking skills, reducing test anxiety, increasing concentration, and improving memory. An orientation to campus resources and a discussion of different learning styles also included. **Prerequisite:** Reading placement test score of 34 or consent of instructor. **F, W, Sp, Su**

HD200 Applied Learning Strategies

3 class hrs/wk, 3 cr.

In conjunction with a linked course, helps students strengthen their study, reading, and vocabulary skills. Emphasizes the development of higher-level critical thinking skills. **Prerequisite:** Enrollment in linked course or consent of instructor. **Offered as needed.**

HD220 Life Skills Seminar I

3 class hrs/wk, 3 cr.

Seminar includes personal development, career planning, skills and strategies for learning, support systems and networking, and exploration of non-traditional training. **F, W, Sp, Su**

HD221 Life Skills Seminar II

3 class hrs/wk, 3 cr.

Seminar includes personal development, resource management, job search techniques, placement strategies, understanding the working world, resolving work/school/family conflicts, goal setting, and action plan development. **F, W, Sp, Su**

HD225 Understanding the Four-Year College Transition

3 class hrs/wk, 3 cr.

Introduces students to four-year college systems and provides strategies and information critical to academic transition, adjustment, and development. **F, W, Sp**

HDF and HDFS

HUMAN DEVELOPMENT AND FAMILY STUDIES

HDF045 Parenting for Family Literacy

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

Presents information on a variety of parenting topics including child development, health and nutrition, family communication, child guidance and problem solving, school-family relationships, family crisis coping skills, and others. Course may be repeated each term parent and child are jointly enrolled. **F, W, Sp**

HDF050 Parent/Infant

1 class hr/wk, 1 cr.

Covers infants growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with infants. Parents and children attend class together. Course may be repeated for a maximum of six credits. **F, W, S**

HDF051 Parent/Toddler

1 class hr/wk, 1 cr.

Covers toddlers growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with toddlers. Parents and children attend class together. Course may be repeated for a maximum of six credits. **F, W, Sp**

HDF052 Parent/Preschooler

1 class hr/wk, 1 cr.

Covers preschoolers growth, learning, behavior, guidance, health, and nutrition; expectations of parenthood; and activities with preschoolers. Parents and children attend class together. Course may be repeated for a maximum of six credits. **F, W, Sp**

HDF065 Parenting and Cooperative Child Care

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

Emphasizes working with young children by active participation in the campus Cooperative Child Care Center. Covers child development and basic guidance techniques by working with and observing children. Selected topics related to parent education will be presented at required parent seminars. Course may be repeated without limitation of credits. **F, W, Sp**

HDFS222 Family Relationships

3 class hrs/wk, 3 cr.

Examines communication patterns and relationships between adults, adults and children, and within intimate personal relations (marriage, families, and couple relations). Emphasis is placed on understanding the role of the family and its consequent role in the development of the individual. **F**

HDFS225 Prenatal, Infant and Toddler Development

3 class hrs/wk, 3 cr.

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

HDFS226 A Time to Grow

3 class hrs/wk, 3 cr.

Designed to look at children, ages birth through adolescence, from a developmental perspective, reflecting how children change as a result of age and experience. Looks at the interplay of biology and experience as well as the child's current stage of development. **F, Sp**

HDFS229 Development in Middle Childhood

3 class hrs/wk, 3 cr.

Study of growth and development in six- through 12-year-old children. Emphasis placed on physical, intellectual, emotional, and social growth of the school-aged child. **Sp**

HDFS242 Balancing School, Work, and Family

1 class hr/wk, 1 cr.

Presents information on balancing the demands of school, work, and family. Covers the work-family

lifestyle, handling stress, communication skills, and time and money management. **F, W, Sp**

HDFS247 Preschool Child Development

3 class hrs/wk, 3 cr.

Covers the principles of development as they apply to the young child, primarily ages 2-1/2 through five. Emphasizes physical, intellectual, emotional, and social growth in children. **W**

HDFS248 Learning Experiences for Young Children

4 class hrs/wk, 4 cr.

Focuses on planning and implementing preschool curriculum based on development theory. Involves weekly lectures and experiences covering presentation, development, analysis, and evaluation of materials and concepts which facilitate development of the whole child (physical, social, emotional, and cognitive development). **Prerequisite:** HDFS225 and HDFS247. Class fee \$5. **Sp**

HDFS249 Introduction to Working with Infants and Toddlers

3 class hrs/wk, 3 cr.

Assists practitioners in child development centers and home settings working with infants and toddlers. Focuses on understanding, facilitating, and respecting the development of children. Appropriate environmental planning, activities, and observation skills will be discussed, demonstrated, and practiced. **F**

HDFS250 The Developmental Kindergarten

3 class hrs/wk, 3 cr.

How kindergarten children learn. Covers development, planning, and implementation of curricula, evaluation of materials and methods, study of current educational issues, and ways to help children make a transition to elementary school. **Prerequisite:** HDFS225, HDFS247, and second-year standing in Early Childhood Education program, or consent of instructor. **Offered as needed.**

HDFS257 Home, School and Community

3 class hrs/wk, 3 cr.

Designed to help future teachers and child care workers recognize and understand their unique position as resource coordinator and facilitator for parents. In addition to lectures and reading, the course requires active participation in discussion, oral and written exercises, parent interviews and simulated conferences, parent education programs, community resources, and other activities designed to help the student integrate skills to become more effective in working with families. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. **W**

HDFS260 Child Abuse and Neglect

3 class hrs/wk, 3 cr.

Problems of child abuse. For persons interested in child care, teaching, and other areas. Includes causes of abuse, the abused child, abusive parents, the role of teachers, areas of treatment, education, and local organizations that assist abused children and abusive parents. **F, Sp**

HDFS285 Professional Issues in Early Childhood Education

3 class hrs/wk, 3 cr.

Prepares early childhood educators to fill many professional roles that require knowledge of ethics, conflict resolution, and advocacy. Also covers how to influence governmental processes and develop an anti-biased professional attitude. Includes historical perspectives relating to early childhood education. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. **F**

HE

HEALTH EDUCATION

see also Health Services Management

HE151 Alcohol and Other Drugs

3 class hrs/wk, 3 cr.

Presents basic information concerning alcohol and other drugs. Covers mental, physical, emotional, and environmental aspects of alcohol and other drugs. Focuses on a decision-making approach to drug use and abuse. **F, W, Sp, Su**

HE204 Nutrition, Weight Control, and Physical Fitness

3 class hrs/wk, 3 cr.

Methods of maintaining or improving fitness by considering diets and dieting, obesity, types of exercise, physical testing, cardiovascular fitness, and nutritional concepts. **F, W, Sp**

HE209 Human Sexuality

3 class hrs/wk, 3 cr.

Covers mental, physical, and social aspects of human sexuality. Emphasizes development of a decision-making model that enables a person to make personal choices. Class discussion will be a vital part of the course. **F, W, Sp**

HE210 H.I.V., A.I.D.S. and other S.T.D.'s (Human Immunodeficiency Virus, Acquired Immunodeficiency Syndrome and other Sexually Transmitted Diseases/Infections)

1 class hrs/wk, 1 cr.

Presents basic information 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**

HE222 Consumer's Guide to Health

3 class hrs/wk, 3 cr.

Looks at health resources available to consumers: medical doctors, naturopaths, chiropractors, types of insurance, drugs, hospitals, nutrition, and other alternatives. Explores how to choose and use a care provider, and how to stay as healthy as possible. **Sp**

HE250 Personal Health

3 class hrs/wk, 3 cr.

Presents basic information concerning the social, emotional, intellectual, physical, spiritual, and environmental aspects of personal health and wellness. Emphasizes health enhancing 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 recertification by the Oregon Heart Association. **Prerequisite:** Certification in CPR by the Oregon Heart Association. Class fee \$5. **W**

HPE

HEALTH AND PHYSICAL EDUCATION

see also Physical Education

HPE295 Health and Fitness for Life

3 class hrs/wk, 3 cr.

Provides information on the effects of exercise on the human body. **F, W, Sp, Su**

HIGH SCHOOL COMPLETION

see Page 27

HR

HUMAN RESOURCES

HR050 Human Resources Foundation

6 class hrs/wk, 6 cr.

Designed for students who have not completed the Certificate of Advanced Mastery in Human Resources, this course surveys human resource careers and the necessary knowledge and skills needed to succeed in human resource programs. Includes the integration of reading, writing, technology, interpersonal communication, reasoning, and study skills as they pertain to the human resource professions: Fire Science, Criminal Justice, Early Childhood Education, Education, and Human Services. **Prerequisite:** Designated placement procedure. **F, Sp, Su**

HS

HUMAN SERVICES

HS101 Addiction Pharmacology and Physiology

4 class hrs/wk, 4 cr.

How alcohol and other drugs are processed in the body and the brain (pharmacology). Includes information on the physiological effects of alcohol and other drugs (AOD) on the human body and the possible implications for the treatment and prevention of problems that arise from their use. **F, W, Sp, Su**

HS103 Ethics for Human Service Workers

2 class hrs/wk, 2 cr.

Introduces professional issues associated with the helping relationship. Examines how personal characteristics and values affect the helping relationship and the issues faced by helpers-in-training. Explores the issues of client rights, confidentiality competence, and dual relationships. Emphasizes development of an intercultural helping perspective. **Prerequisite:** Enrollment in the Human Services program. **Offered as needed.**

HS104 Terminology for Human Services Workers

1 class hr/wk, 1 cr.

Familiarizes students with case management terminology. Emphasizes communications with service providers, including a demonstration of knowledge and an understanding of specific terminology. **Prerequisite:** Enrollment in the Human Services program. **Offered as needed.**

HS120 Alzheimer's Disease: Coping and Caring

3 class hrs/wk, 3 cr.

This telecourse presents information about the physical disease process and stages in persons with Alzheimer's and other dementias. Explores creative and compassionate approaches to a variety of problem behaviors. Identifies underlying needs which can precipitate certain behaviors. Describes communication techniques and legal and financial planning strategies for families, care givers, and case managers. Class fee \$15. **W**

HS140 Handling the Violent Client

1 class hr/wk, 1 cr.

An introduction to the recognition, prevention, and control of aggressive behavior. Stresses prevention of violence through early intervention and includes information on pre-aggression warning signs, as well as practice in defusing aggression and the use of physical defense responses. **F, W, Sp, Su**

HS150 Personal Effectiveness for Human Service Workers

3 class hrs/wk, 3 cr.

An introduction to the elements of personal effectiveness. Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, problem solving, learning strategies, and conflict management. **Prerequisite:** Admission to Human Services program and concurrent enrollment in HS154, HS170. **F, W**

HS151 Human Potential Seminar

3 class hrs/wk, 3 cr.

Assists participants in becoming more self-determining, self-motivating, self-affirming, and empathetic toward others. How to identify personal strengths and explore their use in meeting life goals. **F, W, Sp**

HS152 Stress Management

1 class hr/wk, 1 cr.

Introduces stress management, relaxation techniques, and their impact on health and well-being. Covers a variety of major relaxation techniques and emphasizes the development of a personalized stress management plan. Class fee \$2. **F, W, Sp**

HS153 Introduction to Residential Youth Care

3 class hrs/wk, 3 cr.

Training for child care workers, foster parents, and persons interested in working in residential child care facilities. Includes developmental planning, developmental needs, separation, the cottage, discipline, groups, and job settings. **Sp**

HS154 Community Resources

3 class hrs/wk, 3 cr.

Explores the history and values of community resources for people with specific disadvantages or disabilities. Acquaints students with local social service agencies and organizations and how to refer clients to them. **Prerequisite:** Admission to

Human Services program and concurrent enrollment in HS150 and HS170. **F, W**

HS155 Interviewing Theory and Techniques

3 class hrs/wk, 3 cr.

Theoretical background and specific interviewing techniques. Practice in interviewing situations and peer and professional observation and feedback. **Prerequisite:** HS150. **Sp**

HS165 Activity Director Training/ Long-Term Care

3 class hrs/wk, 3 cr.

Meets training requirements of activity directors in long-term care facilities. Focuses on therapeutic activities and appropriate use of people and material resources in meeting patient needs and to promote continual growth and development of long-term care residents. **F, Sp**

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 concurrent enrollment in HS150 and HS154. **F, W**

HS201 Family Addiction

3 class hrs/wk, 3 cr.

Chemical dependency and how it affects a family. Focuses on family dynamics and treatment for alcoholic/addictive families. **Prerequisite:** HS101. **Sp**

HS202 Foundations for Addiction Professionals

4 class hrs/wk, 4 cr.

First in a three-course sequence. Presents the basic skills needed to provide services to clients in addiction treatment. Includes basic counseling theories, clinical evaluation techniques, criteria for treatment placement, and effective counselor characteristics, ethics, and self-care. **Prerequisite:** HS101, HS150, and HS155, or consent of instructor. Students should be currently enrolled in Human Services program practicum seminar or have practicum experience prior to enrolling in this class. **F**

HS203 Practice of Addiction Treatment

4 class hrs/wk, 4 cr.

Second in a three-course sequence. Presents skills needed to successfully complete clinical evaluations, identify client problems, and develop individualized treatment plans. Includes case management skills and group facilitation techniques. **Prerequisite:** HS101, HS150, HS155, and HS202 or consent of instructor. Students should be currently enrolled in Human Services program practicum seminar or have practicum experience prior to enrolling in HS203. **W**

HS204 Readiness for Addiction Professionals

4 class hrs/wk, 4 cr

Third in a three-course sequence. Presents expanded skills necessary for working with an addicted population. Explains various treatment techniques used in working with families, teens, the elderly, homeless, and abused. Continues the development of case management skills as they

relate to discharge planning, recovery/aftercare plans, and relapse prevention. **Prerequisite:** HS101, HS150, HS155, HS202, and HS203, or consent of instructor. Students should be currently enrolled in Human Services program practicum seminar or have practicum experience prior to enrolling in HS204. **Sp**

HS205 Youth Addiction

3 class hrs/wk, 3 cr.

Assists students in working with chemically-dependent youth. Includes prevention, intervention, assessment, and continuing recovery techniques for individuals and groups. **Prerequisite:** HS101. **Sp**

HS206 The Addicted Criminal

3 class hrs/wk, 3 cr.

Assists students in developing skills with chemically-dependent clients who are convicted criminals. Includes information on recognizing, confronting, and surviving an addicted criminal. **Prerequisite:** HS101. **Offered as needed.**

HS207 Adult Children of Alcoholics/Addicts

1 class hr/wk, 1 cr.

Explores the relationship between growing up in a chemically-dependent or dysfunctional family and problems which surface in adulthood. Includes discussion of family dynamics, denial, relationships, work, social skills, and feelings. **Su, F, W, Sp**

HS208 Alcoholic, 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 Resolution

3 class hrs/wk, 3 cr.

Explores the sources and dynamics of conflict in interpersonal, family, and work settings. Participants will develop an awareness of their own style in conflict situations and learn effective strategies for resolving conflict. **Offered as needed.**

HS220 Aging and Society

3 class hrs/wk, 3 cr.

Introduces the field of social gerontology and explores the 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 field of gerontology. Class fee \$15. **F**

HS221 Physical Aging

3 class hrs/wk, 3 cr.

Surveys the physical aspects and theories of aging, changes in body systems, and effects of lifestyle on the aging process. Second of a three-course sequence emphasizing the social, biological, and psychological aspects of aging. **W**

HS222 Aging and Behavior

3 class hrs/wk, 3 cr.

Presents information about behavioral responses in the normal aging process, including coping, cognition and memory, personality, and adjustment. Emphasizes healthy adaptation to aging and promotion of ego integrity in old age. Also covers the description, diagnosis, assessment, and treatment of common organic and functional mental disorders. Third of a three-course sequence emphasizing the social, biological, and psychological aspects of aging. **Sp**

HS230 Physical, Sexual and Emotional Abuse

3 class hrs/wk, 3 cr.

An overview of the effects of physical, sexual, and emotional abuse on individuals and families. Explores cultural and political implications of abuse and provides a basic working knowledge of the issues related to abuse. **W**

HS231 Treatment of Sexual Abuse Victims and Offenders

3 class hrs/wk, 3 cr.

Provides basic understanding of sexual abuse dynamics, responses, and treatment intervention techniques for the victim as well as the offender. Presents a basic working knowledge of the issues involved in treating abuse victims and offenders. **Sp**

HS260 Group Dynamics

3 class hrs/wk, 3 cr.

Provides students with theory and skills applicable to small group dynamics. Focuses on group formation, development of norms, conflicts and controversy, and leadership. **Prerequisite:** HS150. **W, Sp**

HS262 Misuse and Abuse of Alcohol and Drugs Among the Elderly

1 class hr/wk, 1 cr.

Addresses problems of drug and alcohol misuse and abuse among older adults. Focuses on prescription drugs, over-the-counter drugs, and alcohol used either alone or in combination. **Prerequisite:** HS101. **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 enrollment. **F**

HS266 Case Management

3 class hrs/wk, 3 cr.

Provides theory and practice in human services casework and interviewing. Includes interviewing for treatment, problem solving, and crisis intervention. Presents information on prevention, cultural diversity, and case management. **Prerequisite:** HS150, HS155, HS265, HS284-288 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, and HS265 or HS202. **Sp**

HS284-288A,G,S Practicum-Human Services
12-24 lab hrs/wk, 4-8 cr.

On-site experience working in a human service agency. Seminars assist students in the integration of field and classroom experiences. Students will have two different practicum sites, each two terms in length, during the two years. The second year practicum will be more comprehensive and will provide an opportunity to develop more advanced skills. **Prerequisite:** HS150 and HS170. Class fee varies, \$3 each. **F, W, Sp (Su as needed)**

HSM and HTM

**HOSPITALITY AND TOURISM
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 market and sell travel effectively. Covers developing and marketing a travel product, identifying target audiences, using effective advertising techniques, and converting marketing strategies into sales techniques. Emphasis placed on customer service training. **F, W, Sp**

HSM072 Travel Agency Management
3 class hrs/wk, 3 cr.

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

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 and DATAS II) systems in a microcomputer laboratory, to train students with the skills necessary for successful employment in a travel agency. Identifies the distinguishing features of each CRS. Students will learn to display available flights, auto rentals, lodging and accommodations, and other related travel information necessary for client satisfaction. Emphasis will be placed on solving practical problems that travel agents encounter in the workplace. Class fee \$12. **F, W, Sp**

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 heritage and eco-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. **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, decision-making 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 attorneys 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 strategies. **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 diverse elements that comprise the travel and tourism industry and the factors that influence growth and development. **F**

HTM105 Introduction to the Food Beverage Industry

3 class hrs/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 journals 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 career opportunities and a view of real-world 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 procedures and explores career opportunities. **Sp**

HTM107 Sanitation and Safety for Managers
3 class hrs/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 recent 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 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 marriages, 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/wk, 3 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, room 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. Current computerized reservations systems will be featured. **F**

HTM110 Hotel Operations/Guest Service
3 class hrs/wk, 3 cr.

Surveys the scope of the lodging industry, including history, organizational structure, and career opportunities. Introduces traditional front office functions, including reservations, registration, room and rate assignment, guest services, room status, account maintenance, cash handling, and methods of settlement. Also covers housekeeping operations, security, safety and sanitation guidelines as well as OSHA regulations. Current computerized reservation and property management systems will be featured. Local area hotels will be used for field trips. **Offered as needed.**

HTM111 Cultural Heritage Tourism
3 class hrs/wk, 3 cr.

Surveys the subject of cultural heritage tourism and the value of this niche market. **W**

HTM112 Bed and Breakfast Operations
3 class hrs/wk, 3 cr.

An overview of the bed and breakfast and innkeeping industry. Discusses the realities of purchasing, owning, and operating a successful inn. Explores financing, operations, food service and sanitation, marketing, and governmental regulations. Class fee \$25. **F**

HTM114 Travel Destination Geography 1 3 class hrs/wk, 3 cr.

Provides in-depth geographical, political, and cultural data on the countries of the world and encourages thoughtful planning of travel itineraries incorporating this information. Uses a combination of workbook exercises, maps, and reference materials highlighting location, climate, currency, ports of entry, and forms of government in countries around the world. **F, W, Sp**

HTM115 Travel Destination Geography 2 3 class hrs/wk, 3 cr.

Focuses on the geography of Europe with emphasis on the United Kingdom and Ireland. Provides in-depth geographical, political, and cultural data on the countries emphasized. Class fee \$25. **Sp**

HTM116 Travel Destination Geography 3 3 class hrs/wk, 3 cr.

Focuses on the geography of Africa, the Middle East, India, and the South Pacific. Provides in-depth geographical, political, and cultural data on the countries emphasized. Class fee \$25. **Sp**

HTM117 Travel Agency Basics 3 class hrs/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 their client. Presents critical information on travel products and destinations, important business issues, and the technical and personal skills necessary to begin a successful travel industry career. 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**

HTM120 Coaching Skills for Casino Supervisors 4 class hrs/wk, 4 cr.

Examines the practical aspects of supervision in the casino environment, and helps students identify their strengths and weaknesses as supervisors. Covers customer service, the casino environment, leadership, teamwork, on-the-job training, employee relations, performance improvement, and other organizational issues. **Offered as needed.**

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**

HTM280A-L Cooperative Work Experience see AUM280.

HST

HISTORY

HST110, 111, 112 History of World Civilization 3 class hrs/wk, 3 cr.

Cultural, social, economic, and political development of world civilizations. HST110: from ancient times to 1500 A.D.; HST111: from 1500 to 1914; HST112: the Twentieth Century. HST110: **F, W**; HST111: **W**; HST112: **Sp**

HST157 History of the Middle East and North Africa 3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in the Middle East and Africa. **Offered as needed.**

HST158 History of Latin America 3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in Latin America. **Offered as needed.**

HST159 History of Asia 3 class hrs/wk, 3 cr.

A survey of cultural, social, economic, and political development in Asia. **Offered as needed.**

HST201, 202, 203 History of the United States 3 class hrs/wk, 3 cr. each

A study of the cultural, economic, social, and political development of the United States. HST201: 1492 to 1840; HST202: 1840 to 1899; HST203: 1899 to the present. HST201: **F, W**; 202: **W**; 203: **Sp**

HST257 Introduction to Ethnic History-Native American 3 class hrs/wk, 3 cr.

Focuses on the Native American as a minority group in United States history. Studies Native American culture, heritage, humor, self-consciousness, and outlook. An understanding of the history of the Native Americans will enable the student to be more aware of the Native American's role in American history. **Offered as needed.**

HST258 Introduction to Ethnic History-African American 3 class hrs/wk, 3 cr.

Examines the history of African Americans and the struggle of America's largest minority group to secure meaningful first-class citizenship. The story of African Americans is an integral part of the American past, and must be examined within the context of that past. The course, therefore, focuses on the decisions 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 devel-

opment of the Hispanic American. **Offered as needed.**

HUM

HUMANITIES

HUM251 The Art of Discovery 3 class hrs/wk, 3 cr.

Focuses on classical Greek culture, including its science, philosophy, religion, art, and architecture. Considers their impact upon life patterns and scientific and humanistic thoughts of the day. **F**

HUM252 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**

HUM253 The Art of Discovery 3 class hrs/wk, 3 cr.

An exploration of early Twentieth Century Europe its troubled history, literature, philosophy, and art with a goal of gaining an understanding of the common, shared experience of people who lived in that era. **Sp**

HUM259 Death and Dying 3 class hrs/wk, 3 cr.

An introduction to the study of death and dying. Students will compare and contrast historical and modern attitudes toward death and dying found in literature, rituals, religion, philosophy, film, medico-legal issues, and in the process clarify their attitudes and values. **Offered as needed.**

J

JOURNALISM

J198 Independent Study: Editorial Writing 1 class hr/wk, 1 cr.

Emphasizes writing 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:** J216 or consent of instructor. Ability to type and a basic understanding of English grammar and syntax are essential. **F, W, Sp**

J215 Publications Lab 4 lab hrs/wk, 2 cr.

Practical application of reporting skills, photojournalism, and production principles through work on the student newspaper. **Prerequisite:** J224 or consent of instructor. Course may be repeated for a maximum of 12 credits. **F, W, Sp**

J216 Newswriting 3 class hrs/wk, 3 cr.

Gathering and processing news. Includes lead format, straight news style, and some feature writing. Considerable time devoted to writing. **Prerequisite:** Knowledge of typing. **F**

J217 Feature Writing

3 class hrs/wk, 3 cr.

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

J224 Introduction to Journalism

3 class hrs/wk, 3 cr.

Survey of communication media with emphasis on historical, social, technological, and economic considerations in mass media in the United States. Examines important current legal and ethical dilemmas facing journalists. Recommended for journalism majors; open to others. **F, Sp**

J225 Advertising/Public Relations

3 class hrs/wk, 3 cr.

Communications and production aspects of advertising and public relations. Criticism and analysis combined with assignments in copywriting, design, and marketing strategy. **W**

J226 Editing/Design

3 class hrs/wk, 3 cr.

Provides a working example of newspaper management in relation to editing, production, and design procedures. Surveys printing processes, typography, page design, style, photo editing, and headline writing. **Prerequisite:** J224 or consent of instructor. The ability to type and a basic understanding of English grammar and syntax also are strongly recommended. **Sp**

J227 Journalism Ethics

3 class hrs/wk, 3 cr.

Provides an introduction to journalism ethics, emphasizing the First Amendment, the philosophical framework, corporate social responsibility, 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 journalists, using real-life examples of legal challenges to the system by the courts and various state and federal law-making bodies, and the changing standards of the public at large. **W**

J298A-E Independent Studies

22-110 hours/1-5 cr

Uses learning contract to provide student and instructor with a vehicle to allow independent study in an area of student interest.

JPN

JAPANESE

JPN101, 102, 103 First Year Japanese, Terms I, II, III

4 class hrs/wk, 4 cr. each

Introduction to the Japanese language (including listening, speaking, reading and writing) and Japanese culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. **Prerequisite:** These classes are to be taken sequentially. **JPN101:** None; **JPN102:** JPN101, one year of high school Japanese, or consent of instructor; **JPN103:** JPN102, two years of high school Japanese, or consent of

instructor. Class fee \$2 each. **JPN101:** F; **JPN102:** W; **JPN103:** Sp

JOB SEARCH

see Field Experience

LITERATURE

see English

MANAGEMENT

see Business Administration

MECHANICAL DESIGN

see Drafting Technology

MED

MEDICAL OFFICE ASSISTING

see also Allied Health and Health Services Management

MED054 Medical Office Procedures

4 class and 3 lab hrs/wk, 5 cr.

Procedures and principles used in medical clinics and offices in administrative and front office duties, including patient reception, appointment scheduling, telephone techniques, correspondence and mail processing, medical records management, dictation and transcription, medicine and the law, professional fees and credits, health and accident insurance, and editorial duties. Class fee \$10. **F**

MED056 Medical Assisting, Basic Procedures

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

Survey of requirements and qualities for success as a medical assistant. Techniques, methods, and procedures include assisting physician with examinations, medical and surgical aseptic procedures, observing vital signs, care of equipment, supplies, patient teaching principles and considerations, and legal and ethical implications in a medical caregiving setting. **Prerequisite:** Admission to the Medical Office Assisting program. Class fee \$20. **F**

MED057 Medical Assisting, Advanced Procedures

4 class and 4 lab hrs/wk, 6 cr.

A survey of advanced clinical/laboratory 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 hrs/wk, 3 cr.

A survey of the disease processes that lead to specific impairments of the human body. **Prerequisite:** H120, H121. **F, Sp**

MED088 Medical Assisting Certification Exam Review

2 class hrs/wk, 2 cr.

Reviews essential components of the Medical Assistant curriculum in preparation for the Medical Assistant Certification examination. Covers knowledge and skills in the clinical and administrative area, law and ethics, terminology, anatomy and physiology, pathology, and human relations. **Prerequisite:** Completion of accredited Medical Office Assisting program, or two years' part-time experience or one year full-time experience as a medical office assistant. **Su**

MED130 Medical Assisting Practice

16 lab hrs/wk, 5 cr.

Students are assigned to health care agencies to apply learned medical assisting methods, procedures, and techniques in a health care setting. **Prerequisite:** Successful completion of term one and term two of the Medical Assisting program with a grade C or higher in all required courses. Current Standard First Aid card and Healthcare Provider CPR card on file with the instructor. Class fee \$27. **Sp**

MED131 Medical Assisting Seminar

1 class hr/wk, 1 cr.

Study of the relationship of practicum in a health care setting with theoretical course content, as well as its application to career and personal goals. **Prerequisite:** Concurrent enrollment in MED130. **Sp**

MED280 Cooperative Work Experience

see AUM280.

MFG

MANUFACTURING TECHNOLOGIES

MFG053 Manufacturing Processes

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

Provides basic knowledge of various manufacturing processes and materials. Includes processes involving machine tools, tooling, work holding, measuring, inspection, fabrication, forging, casting and manufacturing procedures. Class fee \$16. **W**

MFG054 Geometric Dimensioning/Tolerancing

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

Practical application of geometric concepts and practices related to surface plate and coordinates measuring machine technology. Emphasis placed on the correct interpretation of geometric dimensioned engineering drawings and recognition of the correct setup method and procedure necessary to manufacture and inspect parts according to functional requirements. **F**

MFG058 Machining Fundamentals

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

Presents benchmark process fundamentals, including the use of basic hand tools, drill presses, power saws, grinders, arbor presses, basic layout, and benchwork tools. Includes use of appropriate charts and tables including decimal equivalent and drill and tap selection with speed and feed calcula-

tions. Provides orientation to machine shop manufacturing. Class fee \$20. **F**

MFG059 Industrial Safety Seminar 10 hours/1 cr.

Details the joint responsibility of the company and employee in complying with federal and state regulations pertaining to business and industry. Class fee \$6. **F**

MFG061A Lab Practice-A 3 lab hrs/wk, 1 cr.

Provides students enrolled in MFG058 with independent lab practice. Students work singly or in small groups on projects related to class assignments. Emphasizes benchwork-related projects, but is not necessarily restricted to these operations. **Prerequisite:** Concurrent enrollment in MFG058. Class fee \$10. **F**

MFG061B Lab Practice-B 6 lab hrs/wk, 2 cr.

Provides students with advanced lab practice to hone skills required for manufacturing technology. Students work singly or in small groups on projects agreed upon by the student and instructor. **Prerequisite:** Second-year standing in the Manufacturing Technology program and consent of instructor. Class fee \$10. **Sp**

MFG062A,B Practical Applications A, B 3 lab hrs/wk, 1 cr. for A and 6 lab hrs/wk, 2 cr. for B.

An open lab course designed for the Manufacturing Technology program student who wishes additional time to work in the shop or on lab equipment to refine previously-learned skills. Projects or exercises to be determined by student and instructor. **Prerequisite:** Consent of instructor. Class fee \$10 each. **F, W, Sp, Su**

MFG063 Interpreting Engineering Drawings 3 class and 2 lab hrs/wk, 4 cr.

Instruction and skill development in blueprint reading, sketching, basic drawing techniques, and geometric constructions. Class fee \$5. **F**

MFG063A Print Reading and Introduction to Geometric Dimensioning and Tolerancing 12 class hrs/wk, 1 cr.

A blueprint reading course for people currently working in industry. Although mostly generic in nature, this course is specifically customized for employees of Hanard Machine. Examples and exercises reference engineering prints used in their shop. **Prerequisite:** Working knowledge of machine shop applications and procedures. **Offered as needed.**

MFG064 Milling Machine Processes 2 class and 3 lab hrs/wk, 3 cr.

Introduces basic milling processes, including work holding methods; cutter identification, selection, and use; speeds and feeds; adapters; tool holders; and application. The student will operate vertical as well as horizontal milling machines, applying related operational theory. Class fee \$20. **W**

MFG065 Lathe Fundamentals 2 class and 3 lab hrs/wk, 3 cr.

Introduces turning operations with emphasis on work and tool holding methods. Related hole making processes, facing, tapping, knurling, grooving and parting are also covered. Class fee \$20. **W**

MFG066 Lathe Processes 2 class and 3 lab hrs/wk, 3 cr.

Designed to provide students with advanced lathe theory and operation skills. Covers lathe settings, boring, single-point threading, calculations, controls, taper attachments, follower rests, steady rests, and advanced tooling and work holding applications. **Prerequisite:** MFG065 or consent of instructor. Class fee \$20. **Sp**

MFG068 Metrology 2 class and 3 lab hrs/wk, 3 cr.

Instruction and skill development in the selection and application of linear English and metric measuring and inspection tools and equipment. Class fee \$20. **F**

MFG069 CMM Operations/QA Applications 3 class and 3 lab hrs/wk, 4 cr.

Practical applications and use of quality assurance tools such as X-bar and R-charts, pareto charts, histograms, and cause-and-effect diagrams. Process capability studies will be conducted using real parts manufactured by the students in this class. Emphasizes hands-on operation of the coordinate measuring machine and how it is applied in meeting the demands of quality in today's manufacturing environment. Class fee \$10. **W**

MFG070 Total Quality Manufacturing (TQM) 2 class and 3 lab hrs/wk, 3 cr.

Total quality manufacturing's (TQM) origin, function, and application in today's working environment. Explores quality planning and systems, problem solving, management systems, data collection, continuous quality improvement, people, and teams. Statistical Process Control (SPC) concepts and practical applications are applied to give the student a working knowledge of TQM tools. **Prerequisite:** DRF210 or MFG068 or MFG069 or consent of instructor. Class fee \$5. **Sp**

MFG071 CAD for CAM 2 class and 3 lab hrs/wk, 3 cr.

Incorporates hands-on experience with the AutoCAD PC-based computer-aided drafting program. Includes necessary factors for successful CAD/CAM integration to meet CNC manufacturing requirements. Class fee \$5. **F**

MFG076 Manufacturing Materials and Cutting Tools 2 class and 3 lab hrs/wk, 3 cr.

Provides knowledge and skill development in the selection and application of product materials, tool coatings, and cutting tool materials used in manufacturing. Class fee \$20. **Sp**

MFG079 Industrial Systems 2 class and 3 lab hrs/wk, 3 cr.

An introduction to the methods and application of transmitting power used in the manufacturing industry. Class fee \$20. **F**

MFG081A Manufacturing Process Planning 2 class hrs/wk, 2 cr.

Emphasizes planning of manufacturing processes, including safety considerations, materials, blueprints, tooling, machining software programs, machine capability, capacity and operational readiness, production requirements, scheduling considerations, in-process inspection, customer expectations, and other criteria influencing the quality of

the finished product. **Prerequisite:** MFG066 or consent of instructor. **F**

MFG081B Manufacturing Process Planning-Lab 6 lab hrs/wk, 2 cr.

Uses computers and manufacturing equipment to plan for and carry out assigned projects. Provides advanced instruction in the setup, care, and use of manufacturing equipment, such as lathes, mills, grinders, inspection equipment, and peripherals. **Prerequisite:** Concurrent enrollment in MFG081A or consent of instructor. Class fee \$30. **F**

MFG083A Production/Assembly/Control Methods 2 class hrs/wk, 2 cr.

Emphasizes basic skills in computerized shop floor data collection. Incorporates advanced grinding theory and the use of diamond and cubic boron nitride cutting tools, assembly requirements, and function analysis. **Sp**

MFG083B Production/Assembly/Control Methods-Lab 6 lab hrs/wk, 2 cr.

Provides experience in compiling and executing production plans and process sequencing. Applies techniques in data collection, scheduling, manufacturing, assembling, and testing. Brings together knowledge and skills gained from previous course work or experience to manufacture, assemble, test, and evaluate a project. **Prerequisite:** Concurrent enrollment in MFG083A or consent of instructor. Class fee \$30. **W**

MFG088 Hydraulics 3 class hrs/wk, 3 cr.

Covers the theory, symbols, components, systems, and trouble shooting procedures related to fluid power technology. Includes lecture and hands on instruction. **Sp**

MFG088A Intermediate Hydraulics 3 class hrs/wk, 3 cr.

An intermediate course covering the symbols, systems, and trouble shooting procedures of fluid power. **Prerequisite:** MFG088 or completion of a basic hydraulics course. **Sp**

MFG090A Fixture Design and Manufacturing 2 class hrs/wk, 2 cr.

Introduces the theory and key concepts of jig, fixture, and gauge design, use, and manufacture. **Prerequisite:** Consent of instructor. **W**

MFG090B Fixture Design and Manufacturing-Lab 6 lab hrs/wk, 2 cr.

Designed to provide students enrolled in MFG090A with application of theory and concepts of jig, fixture, and gauge design used in building functional work holding and gauging devices. Students in teams design jigs, fixtures and gauges based on design specifications determined by part characteristics. **Prerequisite:** Concurrent enrollment in MFG090A or consent of instructor. Class fee \$30. **W**

MFG099 Machinist Apprentice Evaluation
24 lab hrs/wk, 1 cr.

Provides the review and final examination for individuals working in the machinist trade who have never formally completed an apprenticeship program or received a journeyman card. **Prerequisite:** Machinists working at journeyman level who have been referred by Mid-Valley JATC for testing for official journeyman standing. Class fee \$6. **Offered as needed.**

MFG130 CNC Machine Setup/Operation
1 class and 3 lab hrs/wk, 2 cr.

Provides fundamental information about the operation of computer numerical control (CNC) systems used in today's manufacturing environment. Includes hands-on experiences with both personal and manufacturing-specific computers to establish basic operational skills. Class fee \$5. **F**

MFG135 Programming CNC Mills
2 class and 3 lab hrs/wk, 3 cr.

Introduces computer numerical control (CNC) programming for milling applications and operations related to manufacturing. **Prerequisite:** MFG130 or consent of instructor. Class fee \$15. **W**

MFG140 Programming CNC Lathes
2 class and 3 lab hrs/wk, 3 cr.

Introduces computer numerical control (CNC) programming for lathe applications and operations related to manufacturing. **Prerequisite:** MFG130 or consent of instructor. Class fee \$10. **Sp**

MFG230 CAM Applications/Mills
2 class and 3 lab hrs/wk, 3 cr.

Introduces students to the concepts and application of computer aided manufacturing (CAM) software programs for creating CNC milling machine part programs. **Prerequisite:** MFG135 or MFG140 or consent of instructor. Class fee \$20. **F**

MFG235 CAM Applications/Lathes
2 class and 3 lab hrs/wk, 3 cr.

Introduces students to the concepts and application of computer aided manufacturing (CAM) software programs for creating CNC lathe part programs. **Prerequisite:** MFG130, MFG135 or MFG140, or consent of instructor. Class fee \$20. **F**

MFG240 CAD/CAM Integrations
2 class and 6 lab hrs/wk, 4 cr.

Introduces projects that demonstrate practical applications of computer integrated manufacturing. Includes 3-D generated parts and transfer of computer aided design (CAD) generated 2-D and 3-D drawings to a computer aided manufacturing (CAM) system for manufacturing purposes. **Prerequisite:** MFG230 or MFG235, or consent of instructor. Class fee \$20. **Sp**

MFG280 Cooperative Work Experience
see AUM280.

MS

MILITARY SCIENCE

MS111 Military Science I: Leadership Development

1 class hr/wk, 1 cr.

Introduction to ROTC and its relationship to the U.S. Army. Covers the role of the army officer,

including leadership and management fundamentals. **Offered as needed.**

MS112 Military Science I: Military Skills

1 class hr/wk, 1 cr.

Covers basic rifle marksmanship, military first aid, customs and traditions of the U.S. Army, unit organization, and missions. **Offered as needed.**

MS113 Military Science I: Land Navigation

1 class 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

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

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 Army ROTC and the Army officer. Presents individual military skills and their incorporation into tactical operations at the squad level and land navigation using map and compass. **Offered as needed.**

MS216A-F Basic Military Science

1-6 class 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.**

MT

MICROELECTRONICS/INDUSTRIAL

MT100 Electronics Fundamentals for Non-Majors

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

Introduces the fundamental theories, circuits, and devices used in electronics. Covers direct and alternating current theory, test equipment, semiconductor devices, motors, and generators. Emphasizes practical concepts in both lectures and

laboratories. Suitable for those desiring a general knowledge of electronics or exploring electronics as a career. **Prerequisite:** MTH070, or high school algebra, or consent of instructor. Class fee \$8. **F, W**

MT110 Microelectronics

3 class hrs/wk, 3 cr.

Covers development of and trends in the microelectronics industry and introduces the subjects of chemistry, physics, and material science as they relate to integrated circuit manufacturing. **Prerequisite:** MTH070, or high school algebra, or consent of instructor. **F**

MT223 High Vacuum Technology

3 class hrs/wk, 3 cr.

Addresses high vacuum concepts, theory, and the various types of vacuum systems. Includes vacuum pumps, seals, gauges, valves, power supplies, leak detecting equipment, and related hardware. Examines the set up, operation, troubleshooting and monitoring of vacuum systems. **Prerequisite:** MTH070, or high school algebra, or consent of instructor. **Sp**

MT227A Introduction to Hydraulics/Pneumatics

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

Provides instruction in the theory, operation, and application of hydraulic and pneumatic systems. Includes diagnosis, service, maintenance, and repair of pneumatic components and systems. **Prerequisite:** MTH070. Class fee \$15. **Sp**

MTH

MATHEMATICS

MTH020 Basic Mathematics

3 class hrs/wk, 3 cr.

Includes fundamentals of addition, subtraction, multiplication, and division in problems involving use of whole numbers, fractions, decimals, percentages, and geometric measurements. Emphasizes analysis and solution of word problems. **F, W, Sp, Su**

MTH052 Introduction to Algebra and Geometry

3 class hrs/wk, 3 cr.

Introduces basic algebraic and geometric techniques and applications. Includes signed numbers, elements of algebra, simple equations and formulas, measurements and conversions, angles, perimeters, and areas of common geometric figures. **Prerequisite:** Grade C or higher in MTH020 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH053 Introduction to Trigonometry with Geometry

3 class hrs/wk, 3 cr.

Introduces basic trigonometric and geometric techniques beyond those covered in MTH052 as well as applications of these techniques. Includes Pythagorean theorem similar triangles, volumes of common geometric figures, and right and oblique triangle trigonometry. **Prerequisite:** Grade C or higher in MTH052 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH060 Introductory Algebra

4 class hrs/wk, 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 MTH020 or equivalent as determined by instructor. **F, W, Sp, Su**

MTH062 Business Applications Using Mathematics

4 class hrs/wk, 4 cr.

Presents mathematical business applications. Includes applications involving securities, profit distribution, business statistics, simple and compound interest, notes and bank discounts, multiple payment plans, annuities, depreciation, inventory valuation, and financial statement analysis with ratios. **Prerequisite:** MTH060 or equivalent as determined by the instructor. **F, W, Su**

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 presentation 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 instructor. **F, W, Sp, Su**

MTH075 Applied Geometry

1 class hr/wk, 1 cr.

Individualized course which students may start and complete any time during the term. Covers basic concepts of points, lines, planes, angles, triangles, congruence, 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 complete any time during the term. Presents basic concepts of perimeter, circumference, arc length, central and inscribed angles, areas of polygons, areas of circles and sectors, surface area of solids, and volumes of various solids are studied. Includes applied problems involving these figures. **Prerequisite:** MTH075 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH078 Applied Trigonometry

1 class hr/wk, 1 cr.

Individualized course which students may start and complete any time during the term. 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 are 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. Other topics include radian measurement, vectors, and trig ratios of all angles. **Prerequisite:** MTH078 or equivalent. **F, W, Sp, Su**

MTH081 Technical Mathematics I

4 class hrs/wk, 4 cr.

First course of a three-term sequence. Designed to train technicians to work in technical fields and engineering, drafting, mechanical design, and electronics. Covers fundamental algebra concepts, graphing, ratio and proportion, basic right-angle trigonometry, solution of linear equations, work problems, factoring, and operations with algebraic expressions. **Prerequisite:** Grade C or higher in MTH070 or equivalent as determined by the instructor. **F, W**

MTH082 Technical Mathematics II

4 class hrs/wk, 4 cr.

Second term in a sequence. Covers mathematical skills necessary for technicians in civil-structural engineering, mechanical design, or electronics. Includes trigonometric functions, oblique triangle solutions and applications, exponents and radicals, logarithms, solution of logarithm equations, trigonometric identities, solution of trigonometric equations, vectors, complex numbers, and graphs of trigonometric functions. **Prerequisite:** Grade C or higher in MTH081. **W, Sp**

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 logarithmic 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 cr.

Surveys the application of mathematics as a problem-solving tool in the real world. Includes business, consumer, ecology, and city planning applications using probability, statistics, geometry, graph theory, linear programming, and game theory. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH111 College Algebra

5 class hrs/wk, 5 cr.

The study of functions and related inequalities using a graphing calculator. Includes polynomial, rational, exponential, logarithmic, and related piecewise-defined functions. Presents a study of the complex number system, the algebra of functions, the applications of functions in sequences and series, and the powers of binomials. Higher order linear systems will be solved using a calculator. Group activities, writing assignments, and laboratory activities may be required. Graphing

calculator required. **Prerequisite:** Grade C or higher in High School Algebra 2 or MTH095. **F, W, Sp, Su**

MTH112 Trigonometry

5 class hrs/wk, 5 cr.

A pre-calculus course covering quadratic relations, circular functions, and trigonometric functions. Applications and the use of a graphing calculator are emphasized throughout the course. Group activities, writing assignments, and laboratory activities may be required. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH111 and MTH075 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH116 Precalculus Review

5 class hrs/wk, 5 cr.

Designed for students needing review of precalculus functions and related inequalities. Includes polynomial, rational, exponential, logarithmic sequences and series, related piecewise defined functions, quadratic relations, circular and trigonometric functions, and vectors. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH112 or equivalent as determined by the instructor. **F**

MTH211 Foundations of Elementary Mathematics

3 class hrs/wk, 3 cr.

First course of a three-term sequence for liberal arts students, especially prospective elementary teachers. Emphasizes problem solving and basic concepts about whole numbers, integers, sets, and number theory. Uses manipulatives to deepen understanding. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. **F**

MTH212 Foundations of Elementary Mathematics

3 class hrs/wk, 3 cr.

Second term of liberal arts mathematics sequence. Covers basic concepts about rational and real numbers and consumer mathematics. Uses computers and manipulatives. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. **W**

MTH213 Foundations of Elementary Mathematics

3 class hrs/wk, 3 cr.

Third term of liberal arts mathematics sequence. Covers topics in geometry. Uses computers and manipulatives. **Prerequisite:** Grade C or higher in MTH095 or equivalent as determined by the instructor. **Sp**

MTH231 Discrete Mathematics

4 class hrs/wk, 4 cr.

Introductory course for computer science and mathematics majors. Introduces logic, sets, functions, algorithms, matrices, graph theory, and trees, with applications. **Prerequisite:** Grade C or higher in MTH111 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 fundamentals from MTH231 to number theory, counting techniques,

relations, and boolean algebra. **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 MTH111 or equivalent as determined by the instructor. **F, W, Sp, Su**

MTH243 Probability and Statistics I 4 class hrs/wk, 4 cr.

A first course in descriptive statistics covering data analysis, counting and probability, common probability distributions, confidence intervals, and sample size and one-sample hypothesis testing. **Prerequisite:** Grade C or higher in MTH111 or equivalent as determined by instructor. **F, W, Sp, Su**

MTH244 Probability and Statistics II 4 class hrs/wk, 4 cr.

A second course in descriptive statistics covering testing two-sample problems, linear regression and correlation, chi-squared goodness-of-fit tests, one-way and two-way Analysis of Variance. **Prerequisite:** Grade C or higher in MTH243 or equivalent. **Offered as needed.**

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 instructor. **F, W**

MTH252 Integral Calculus 5 class hrs/wk, 5 cr.

Continuation of MTH251. Covers applications of definite integral, constructing functions from their rates of change, techniques of integration, and an introduction to differential equations. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH251 or equivalent as determined by instructor. **W, Sp**

MTH253 Series Calculus and Linear Algebra 4 class hrs/wk, 4 cr.

Combines topics from linear algebra and infinite series. Includes Taylor and Fourier Series with applications and systems applications using determinants and matrices. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH252 or equivalent as determined by the instructor. **Sp, Su**

MTH254 Vector Calculus I 4 class hrs/wk, 4 cr.

First of two courses in multivariable calculus. Explores functions of many variables such as curves and surfaces in three-dimensional space, vectors, rates of change of functions of several variables, and optimization in multivariable mod-

els. **Prerequisite:** Grade C or higher in MTH253 or equivalent as determined by the instructor. **F**

MTH255 Vector Calculus II 4 class hrs/wk, 4 cr.

Second course in multivariable calculus. Explores integration of functions of many variables; descriptions in parametric, polar, cylindrical, spherical, and vector forms; motion in space; introduction to vector fields; and line and surface integral. **Prerequisite:** Grade C or higher in MTH254, or equivalent as determined by the instructor. **W**

MTH256 Applied Differential Equations 4 class hrs/wk, 4 cr.

Covers solutions of linear and first order non-linear differential equations. Includes Laplace transforms and convolutions. Graphing calculator required. **Prerequisite:** Grade C or higher in MTH254 or equivalent as determined by the instructor. **Sp**

MUP and MUS

MUSIC

MUP100 Piano 1 class hr/wk, 1 cr.

A study of the language and symbols of music applied at the keyboard through weekly class instruction, private instruction, and daily individual practice. Course may be repeated for a maximum of nine credits. **F, W, Sp**

MUP105 Jazz Ensemble 3 lab hrs/wk, 1 cr.

A performance course which offers applied study and performance on musical instruments played in ensemble or solo formats. May be repeated for a maximum of nine credits. **Prerequisite:** Two years instruction on an instrument and/or audition. Class fee \$12. **F, Su**

MUP174 Voice 1 class hr/wk, 1 cr.

Individual instruction in fundamentals of theory, melodic contouring and phrasing, vocal production, and body mechanics incorporated into basic singing skills and music reading. Open to students of all levels and interests. May be repeated for a maximum of nine credits. **F, W, Sp**

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 instructor and previous experience singing with school, civic, or church choirs is helpful but not mandatory. Course may be repeated for a maximum of eight credits. **F, W, Sp**

MUS201 Introduction to Music and Its Literature 3 class hrs/wk, 3 cr.

Focuses on the music of the 17th and 18th centuries, including, early vocal music, the origins of opera and sacred music, and the early instrumental forms of music that led to the classical symphonies of Hayden, Mozart, and Beethoven. **F**

MUS202 Introduction to Music and Its Literature 3 class hrs/wk, 3 cr.

Focuses on the 18th and 19th centuries, including, late Beethoven and his Ninth Symphony, the growth of the orchestra and the music written for it, the emergence of the piano as an important musical and sociological factor, and the new dimensions of song and opera. **W**

MUS203 Introduction to Music and Its Literature 3 class hrs/wk, 3 cr.

Focuses on the music of the 20th century, including the Impressionism, Expressionism, Neo-classicism, and Minimalism movements. Covers popular music traditions of the 20th century, including musical theater, jazz, and rock n' roll. **Sp**

NUR

NURSING

NUR060 Nursing Success Strategies 3 class hrs/wk, 3 cr.

Introduces the basic skills that are built upon in the nursing curriculum. It includes an overview of the Nursing program, development of study skills, math and writing for nursing, learning styles, coping strategies, and workplace skills as related to the nursing curriculum. Students may repeat this course once without requiring instructor approval. **Prerequisite:** One year each of high school algebra and chemistry or an acceptable college course in either of these (see Nursing Program Application Packet for a listing of acceptable courses) and BI231. All of these prerequisites must have been taken within the last four years. Class fee \$5. **W, Sp; offered fall as needed**

NUR106 Nursing 5 class and 12 lab hrs/wk, 9 cr.

Beginning concepts and skills develop the foundation for socialization into the nursing profession and for providing safe basic nursing care. Nursing process is introduced with an emphasis upon assessing the basic human 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. **F**

NUR108 Nursing 5 class and 12 lab hrs/wk, 9 cr.

Concepts and skills integrate growth and development, psycho-social coping responses to illness, 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 current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. Class fee \$30. **Sp**

NUR206 Nursing

5 class and 16 lab hrs/wk, 10 cr.

Concepts and skills are related to nursing care of medical/surgical patients and families, and mentally ill clients. Standards of nursing care are adopted to meet the basic human needs of individual patients. Patient/client teaching is emphasized. **Prerequisite:** NUR109. 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. **F**

NUR208 Nursing

6 class and 13 lab hrs/wk, 10 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. Multiple standards of nursing care are synthesized to meet the basic human needs of individual patients. **Prerequisite:** NUR106, NUR108, NUR109, and NUR206. 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 \$20. **W**

NUR209 Nursing

3 class and 16 lab hrs/wk, 8 cr.

Leadership and management concepts and skills are emphasized in providing nursing care at the associate degree 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 student is permitted in the clinical area. Current CPR certification is required. Class fee \$5. **Sp**

NUR250 Introduction to the Operating Room I

3 class hrs/wk, 3 cr.

Fundamentals of nursing practice in an operating room. Focuses on roles of circulating and scrubbing nurses, sterilization concepts, patient support, surgical techniques, and instrumentation. **Prerequisite:** RN license or eligibility for licensure, or enrollment in an accredited nursing education program. **Offered as needed.**

NUR251 Introduction to the Operating Room II

15 lab hrs/wk, 5 cr.

Fundamentals of nursing practices in an operating room. Focuses on roles of circulating and scrubbing nurses, sterilization, patient support, surgical techniques, and instrumentation. Practical experi-

ence included. **Prerequisite:** NUR250. Current CPR certification (Level C) is required. Class fee \$10. **Offered as needed.**

NUR260 Decision Making in the Clinical Setting

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

Focuses on the critical thinking skills necessary for appropriate determination of nursing implications (interventions) based on a thorough patient assessment of the acutely ill hospitalized patient. **Prerequisite:** RN license, or nursing degree with instructor approval. **Su, offered as needed.**

NUR268 Drug Therapy and Nursing Implications

3 class hrs/wk, 3 cr.

Knowledge and principles required for safe administration of medications in caring for patients. Provides comprehensive base for clinical application, with specific considerations for pediatrics, maternity, and geriatric patients. **Prerequisite:** RN, currently enrolled nursing student, LPN. **Offered as needed.**

OC

OCEANOGRAPHY

OC133 Introduction to Oceanography

3 class hrs/wk, 3 cr.

Discusses four main areas of oceanography: chemical, physical, geological, and biological. Covers plate tectonics, ocean circulation, physical properties of seawater, chemical cycles, marine ecosystems, sedimentation, land and sea cycles, and climate effects. **Offered as needed.**

PHOTOGRAPHY

see Art and Visual Communications

PE

PHYSICAL EDUCATION

PE131 Introduction to Physical Education

3 class hrs/wk, 3 cr.

Human movement as a scientific and humanistic field of study, including historical development, professional opportunities and qualifications, and leaders and major organizations in physical education and athletics. **W**

PE180BN Basketball-Women's Varsity

3 lab hrs/wk, 1 cr.

Varsity basketball for women. **F, W**

PE180CL Cross Country/Varsity Women

3 lab hrs/wk, 1 cr.

Intercollegiate varsity cross-country competition for women. **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 competition with tryouts for player selection. 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 execute conditioning programs for specific athletic activities. 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 exercises, education, and encouragement from a support group to improve unhealthy backs and maintain healthy backs. Special care will be given to begin exercise program slowly and make personal adjustments to prevent injury. Class fee \$5. **F, W, Sp**

PE185BE,BF,BG Baseball-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

Designed to introduce the student to the fundamentals of baseball. Class fee \$5. **F, W, Sp**

PE185BJ,BK,BL Basketball-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

Emphasis on fundamental skills, team play, and a knowledge of the sport. Class fee \$5. **F, W, Sp**

PE185BO Basketball Officiate

3 lab hrs/wk, 1 cr.

Officiating techniques for beginning and novice referees. Class fee \$5. **Offered as needed.**

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**

PE185BV,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 lifetime sports activity. **F, W, Sp**

PE185CA,CB,CC Conditioning-Beginning, Intermediate, Advanced

3 lab hrs, 1 cr. each

Combines cardiovascular and strength training. Students set individual fitness goals and monitor progress throughout the term. Class fee \$10 each. **Su**

PE185CD,CE,CF Correctives-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

Designed to provide the setting, assistance, and instruction for improving the fitness level of students with a physical injury or disability. **Prerequisite:** Completion of Health Information form by physician, registered therapist, or self. Class fee \$5 each. **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**

PE185CW,CX,CY Cycling: Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr.

Designed to maintain or improve fitness through participation in a regular schedule of bicycle riding. Examines cycling techniques, basic bicycle maintenance, and safety factors. Class fee \$5 each. **Offered as needed.**

PE185DA,DB,DC Aerobics, Low Impact-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Designed to obtain cardiovascular and health benefits. Class activities may include any one of the following: power aerobics, step aerobics, jazz aerobics, line dancing, yoga aerobics, body sculpt, and hi/lo aerobics. Class fee \$5 each. **F, W, Sp, 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 Schottische and Polka. Class fee \$5 each. **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 each. **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 to develop muscular strength and flexibility through stretching, isometric, and isotonic routines. Includes information on proper nutrition. Class fee \$5 each. **F, W, 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, Waltz, and Cha Cha. Beginning class covers basics. Intermediate and advanced classes cover progressively more difficult variations. Class fee \$5 each. **Offered as needed.**

PE185DV Square Dance Basic I
PE185DW Square Dance Mainstream II
PE185DX Square Dance Plus
3 lab hrs/wk, 1 cr.

Contemporary dances. Includes history, etiquette, and dances by International Association of Square Dance Callers. **Prerequisite:** PE185DW; PE185DV; PE185DX: PE185DV and PE185DW. Class fee \$5 each. **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, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Covers the fundamentals of soccer and basic conditioning. Class fee \$5 each. **Offered as needed.**

PE185GJ,GK,GL Golf-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Designed for the beginning to advanced golfer. Emphasizes the development of basic swing fundamentals. In the latter stages of the class, students who have mastered the fundamentals will be allowed optional playing days. Proper golf etiquette, rules, and playing procedures emphasized throughout. **F, Sp, Su**

PE185JA,JB,JC Dance, Jazz-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Development of basic warmups at the barre, stretching, isolations, and floor movement with emphasis on technique, alignment, and contemporary jazz style. Class fee \$5 each. **F, W, Sp**

PE185JJ,JK,JL Jogging-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Jogging to gain and maintain cardiovascular fitness. Class fee \$5 each. **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 each. **F, W, Sp, Su**

PE185LA,LB,LC Ballet-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Addresses correct alignment, basic stretching, and warmups at the barre. Includes body and arm positions. Emphasizes techniques and technical terms. Class fee \$5 each. **Offered as needed.**

PE185PA,PB,PC Personal Defense-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

An activity course designed to introduce the student to preventive measures and basic moves relating to personal defense. Class fee \$5 each. **Offered as needed.**

PE185RA,RB,RC Racquetball-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

An activity course to familiarize students with racquetball fundamentals, including grip, swing mechanics, rules, strategy and etiquette. Class fee \$5. **F, W, Sp, Su**

PE185RG,RH,RJ Roller Skating-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Covers fundamentals, including stroking, turns, figures, dance steps, and entry-level free-style moves. Promotes and encourages techniques of safety while practicing various skating activities. **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 each. **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 hrs/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 each. **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 student support systems. Class fee \$5 each. **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 each. **F, W, Sp**

PE185TF,TG,TH Tennis-Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each

Deals with tennis fundamentals, including stroke production, rules, scoring, strategy, and court etiquette. Class fee \$5 each. **F, Sp, Su**

PE185TI,TJ,TK Tai Ji-Beginning, Intermediate, Advanced

3 lab hrs/wk, 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 fee \$5 each. **F, W, Sp**

PE185TL,TM,TN Track and Field-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

Incorporates the fundamentals, rules, and training techniques in track and field events. Class fee \$5 each. **W**

PE185VJ,VK,VL Volleyball-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

Fundamentals, rules, and strategy of volleyball. Develops specific skills necessary for successful recreational and/or competitive experience in volleyball. Incorporates wellness in the areas of physical, social, emotional and nutritional health; stress management; and student support systems. Class fee \$5 each. **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 nutrition information, weigh-in, class discussion, and daily exercise management. Class fee \$5 each. **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 each. **F, W, Sp, Su**

PE185WK,WL,WM Walking Fitness

3 lab hrs/wk, 1 cr. each

Helps students develop a lifelong plan for walking fitness. Includes goal setting, group and individualized recommendations for walking intensity, and pre-and post-cardiovascular assessment. Class fee \$5 each. **F, W, Sp**

PE185WN, WO, WP Water Exercise-Beginning, Intermediate, Advanced

3 lab hrs/wk, 1 cr. each

For non-swimmers and swimmers. Includes warm-up, stretching, strength, aerobic, and cool down periods so that students may improve flexibility, muscular strength, endurance, and cardiovascular fitness. Emphasizes safe exercise for each individual. Class fee \$5 each. **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 postures, proper breathing techniques, and stress reduction will be emphasized. Class fee \$5. **F, W, Sp**

PROFESSIONAL PHYSICAL EDUCATION

PE190BI Baseball-Varsity

3 lab hrs/wk, 1 cr.

Varsity baseball for men. **Sp**

PE190BN Basketball-Men's Varsity

3 lab hrs/wk, 1 cr.

Varsity basketball for men. **F, W**

PE190CL Cross Country-Men's Varsity

3 lab hrs/wk, 1 cr.

Intercollegiate varsity cross-country competition for men. **F**

PE190TQ Track and Field-Men's Varsity

3 lab hrs/wk, 1 cr.

Intercollegiate varsity track and field competition for men. **Sp**

PE194RA Racquetball-Professional

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

Covers skill progression, knowledge, strategy, practice, conditioning, rule interpretation, and teaching and coaching techniques. Class fee \$5. **Offered as needed.**

PE194TF 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.**

PE266 Basketball Coaching Theory

2 class hrs/wk, 2 cr.

An introduction to the coaching profession. Provides information, techniques, and strategies necessary to make a better coach. Addresses the fundamentals of organizing a basketball program using available resources, leadership strategies, and interpersonal communications. **F, Sp**

PE294BP Professional Activities-Basketball

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

Includes skill progression, knowledge, strategy, teaching and coaching techniques, practice, rules interpretation, and conditioning for safety. Class fee \$5. **F**

PE294TR Track and Field-Professional

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

For physical education majors. Class fee \$5. **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 support 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 lifting techniques. **Prerequisite:** PE185WD or consent of instructor. Class fee \$5. **Offered as needed.**

PH

PHYSICS

PH060 Applied Physical Science

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

Provides the necessary physical science concepts and skills required to enter Industrial and Engineering Systems programs. **Prerequisite:** Program instructor's consent based on math placement score. **F, Sp**

PH081 Applied Physics

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

Fundamental principles, concepts, and applications of work, energy, and power; basic machines and straight line and rotary motion. Use of vectors to analyze and solve problems. **Prerequisite:** Concurrent enrollment in MTH082 or MTH053, or consent of instructor. Class fee \$8. **F, W**

PH082 Applied Physics

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

Applied physics at post-high-school level covering mechanics of measurement, structure of matter, heat energy, heat engines, sound, light, and nuclear physics. Laboratory time provides demonstrations and experiments to clarify principles and procedures covered in lectures. **Prerequisite:** PH081 or consent of instructor. Class fee \$8. **W**

PH106 Physics for Poets

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

A non-mathematical approach to the study of physics, including the philosophy, history, and modern achievements of this discipline. Class fee \$12. **F, W, Sp**

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:** MTH070 or equivalent as determined by instructor, or consent of instructor. Class fee \$5. **Offered as needed.**

PH201 General Physics

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

Develops strategies for analyzing the motion of objects. Applications range to the motion of molecules. **Prerequisite:** MTH111 and MTH112. Class fee \$12. **F**

PH202 General Physics

3 class and 3 lab hrs/wk, 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. **Sp**

PH207 Astronomy

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

A descriptive treatment of Earth's coordinate system, observational astronomy, the moon and the planets, evolution of the solar system, and the sun. Lab demonstrations illustrate principles of our

solar system. **Prerequisite:** MTH070. Class fee \$8. **F**

PH208 Astronomy

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

A descriptive treatment of stellar coordinates and sidereal time, the nature of light and the spectro-scope, and the birth and death of stars. **Prerequisite:** Grade C or higher in MTH070. Class fee \$8. **W**

PH209 Astronomy

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

A descriptive treatment of astronomical, optical, and radio telescopes; the Milky Way galaxies; the universe of galaxies; the origin of the universe and life in the universe. Laboratory demonstrations illustrate physical principles of the galactic system. **Prerequisite:** Grade C or higher in MTH070. Class fee \$8. **Sp**

PH211 General Physics for Engineers and Scientists

4 class and 3 lab hrs/wk, 5 cr.

Covers motion, force, work, energy, and field interactions in one-, two-, and three-dimensional space. **Prerequisite:** MTH251. Class fee \$12. **F**

PH212 General Physics for Engineers and Scientists

4 class and 3 lab hrs/wk, 5 cr.

Describes electricity, magnetism, induction, and lightwave theory. **Prerequisite:** MTH252 and PH211. Class fee \$12. **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:** PH212. Class fee \$12. **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 structure 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 knowledge, 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, truth, 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 modern theories of ethics. Includes explanations of the theories, evaluations of their relative weaknesses and strengths, analyses of their application 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 governing careful, systematic thought and applies those principles to philosophical writings, newspaper/magazine editorials and arguments, and to political and commercial advertisements. **Offered as needed.**

PHL205 Biomedical Ethics

3 class hrs/wk, 3 cr.

Focuses on ethical theory as it applies to allied health fields. Explores real-world dilemmas using value clarification, case studies and class member experience. Introduces ethical theories surrounding Eastern and Western health care traditions with special emphasis on integration of these theories. Examines professional ethical codes and personal values as they relate to the responsibility of the health care professional in the decision-making process. **Offered as needed.**

PS

POLITICAL SCIENCE

PS151 Introduction to State of Oregon Legislative Process

1 class hr/wk, 1 cr.

An overview of the Oregon legislative process. Examines organization, legislative participation, legislative enactment, lobbying, and the electoral process. In addition, constituent, institutional, and organizational influences in legislative decision making will be discussed, and the influence of political parties and lobbyists will be analyzed. **Offered as needed.**

PS201 American Government

3 class hrs/wk, 3 cr.

An introduction to American government 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. Includes the study of the relationship of corporate America and government, and the making and execution of domestic and foreign 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 communities. Examines the political and institutional processes by which state and local governments 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 politics, North-South relations, and the mechanisms of conflict resolutions. Examines current global issues facing nation-states. **Offered alternate spring terms 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, learning, emotion, and motivation; personality theory; abnormal behavior; and therapeutic interventions. **F, W, Sp**

PSY101 Psychology of Human Relations

3 class hrs/wk, 3 cr.

Explores basic principles of psychology necessary for enhancing self-understanding, effective communication, and development of positive interpersonal relationships. Covers developing emotional well being, determining values and setting goals, and dealing with problems and changes in interpersonal relations resulting from an individual's growth and development. **F, W, Sp**

PSY102 Assertiveness Training

3 class hrs/wk, 3 cr.

Theoretical background, behavioral skills, and techniques of assertion. Particularly valuable to those anxious about situations which require they stand up for their personal rights. Explores internal and external blocks to assertion as a method for learning self-management skills. **Offered as needed.**

PSY104 Psychology in the Workplace

4 class hrs/wk, 4 cr.

Integrates documented principles from psychology and human relations and applies them to the workplace of the 21st century, including recognition and analysis of personal strengths, enhancement of personal effectiveness, development of team work skills, and mastery of conflict mediation techniques, with emphasis on taking personal responsibility for change and problem solving. **Sp**

PSY119 Processes in Living

3 class hrs/wk, 3 cr.

How to achieve self-understanding through exploring values, attitudes, interests, beliefs, and

abilities. How these personal factors influence learning, educational and vocational decision-making, and interpersonal relationships. **Offered as needed.**

PSY201 General Psychology-Biological Emphasis

3 class hrs/wk, 3 cr.

Focuses on psychology as a science stressing history, methodology, the biological foundations of behavior, human development, sensation, and perception. **F, W, Sp, Su**

PSY202 General Psychology-Cognitive Emphasis

3 class hrs/wk, 3 cr.

Second of three introductory courses in psychology. Includes learning, memory, cognition, motivation, emotion, and stress. Recommended that students take PSY201 prior to this course. **F, W, Sp, Su**

PSY203 General Psychology-Clinical/Social Emphasis

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. **F, W, Sp, Su**

PSY206 Introduction to Social Psychology

3 class hrs/wk, 3 cr.

Problems, theories, and methods of social psychology. Emphasizes diverse ways social influences alter an individual's thoughts, feelings, and actions. Examines prejudice, conformity, leadership, and aggression and how they affect such events as war, sexuality, discrimination, violence, and interpersonal attraction. Recommended that students take PSY201 prior to this course. **Offered as needed.**

PSY237 Life Span Development

3 class hrs/wk, 3 cr.

An introductory course in human growth and development from genetics and conception to death. Recommended that students take PSY201 prior to this course. **F, W, Sp**

PSY239 Introduction to Abnormal Behavior

3 class hrs/wk, 3 cr.

Theories, diagnosis, and treatment of major psychopathological syndromes. Includes anxiety and related neuroses, depressions, schizophrenia, psychophysiological and personality disorders, and sexual variations and dysfunctions. Recommended that students take PSY100 or PSY201 prior to this course. **Offered as needed.**

QS

QUALITY SCIENCE

QS062A Foundations for Quality, Overview (Partnerships for Quality)

10 class hrs/1 cr.

Provides an orientation to a system of approaches for integrating continuous improvement into a business or organization. **Offered as needed.**

QS062B Foundations of Quality (Partnerships for Quality)

20 class hrs/2 cr.

Introduces a system of approaches for integrating continuous improvement into a business or organization. **Offered as needed.**

QS062C Managing Customer Expectations (Partnerships for Quality)

10 class hrs/1 cr.

Guides participants through an examination of who their customers are, how to serve them, what value is, and how it evolves. **Offered as needed.**

QS062D Continuous Process Improvement (Partnerships for Quality)

20 class hrs/2 cr.

Provides participants with information and practice in process management and improvement. Uses a comprehensive simulation for practicing the quality tools of CPI. **Offered as needed.**

QS062E Simulation for Continuous Process Improvement (Partnerships for Quality)

10 class hrs/1 cr.

Simulation designed to provide practice applying the key tools of process improvement. Participants assume jobs in a fictional company and experience the problems of a traditional workplace first-hand while collaboratively redesigning the system to increase productivity, employee morale, and quality. **Offered as needed.**

QS062F ISO 9000 Overview (Partnerships for Quality)

10 class hrs/1 cr.

Provides an overview to the ISO 9000 series, a set of international standards that have been developed to provide direction in the design, assessment, and maintenance of quality systems. Includes history, standards, and the resources required of an organization desiring to implement them. **Offered as needed.**

QS062G Understanding ISO 9000 (Partnerships for Quality)

10 class hrs/1 cr.

Prepares participants in companies that will undergo ISO 9000 registration. **Offered as needed.**

QS062H Quality Auditing (Partnerships for Quality)

10 class hrs/1 cr.

Provides an understanding of the quality auditing process, with particular focus and application on internal quality auditing and associated role of corrective action. **Offered as needed.**

QS062I Effective Team Skills (Partnerships for Quality)

24 class hrs/2 cr.

Provides an opportunity to learn and practice effective team skills using a variety of learning modules, including team activities, simulation, role-play, meeting practice, presentations, self-assessments, surveys, and discussion. **Offered as needed.**

QS062J Facilitating Effective Teams (Partnerships for Quality)

20 class hrs/2 cr.

Presents team facilitator and team facilitation skills through a variety of learning modules, including team activities, videotaping, simulation, role-play, meeting practice, presentations, self-assessments, surveys, process analysis, and discussion. **Offered as needed.**

QS062K Putting Teams to Work (Partnerships for Quality)

10 class hrs/1 cr.

Examines the merit of teams and how teams might support their organization's business strategy through team activities, simulation, role-play, meeting practice, presentations, self-assessments, surveys, individual exercises, and discussion. **Offered as needed.**

QS062L Statistical Process Control (SPC) (Partnerships for Quality)

32 class hrs/3 cr.

Prepares participants for developing and implementing Statistic Process Control (SPC) in their organizations. **Offered as needed.**

QS062M Gauge Capability (Partnerships for Quality)

12 class hrs/1 cr.

Continuous improvement of product and service quality has become the primary driver for increasing productivity, customer satisfaction and employee involvement. This training module covers the use and interpretation of gauge capability studies and statistical control of a gauge setup. **Offered as needed.**

QS062N Just-In-Time (Partnerships for Quality)

12 class hrs/1 cr.

Introduces JIT core techniques for manufacturing organizations using simulation exercises. **Offered as needed.**

QS062O Cycle Time Reduction (Partnerships for Quality)

10 class hrs/1 cr.

Provides practical ideas and tools for reducing cycle time in a manufacturing or service setting. **Offered as needed.**

QS062P Strategic Planning for Change (Partnerships for Quality)

20 class hrs/2 cr.

Presents a process for organizational change and growth by facilitating the organizational strategy decision-making process for managers and other leaders. Participants will complete an action plan to take back to their workplace to initiate a change process or strengthen the strategic plan for their organization. **Offered as needed.**

QS062Q Leadership for Change (Partnerships for Quality)

20 class hrs/2 cr.

Assists in understanding the changing role of leadership. Participants will examine the skills, roles, and styles that leaders must understand and encourage in others to improve organization effectiveness. **Offered as needed.**

R**RELIGION****RD201 Primitive and Far Eastern Religions**

3 class hrs/wk, 3 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**

RD202 Near Eastern Religions

3 class hrs/wk, 3 cr.

Introduces Judaism, Christianity and Islam, examining their origins in the Middle East, their historical development and geographic expansion, and exploring their principal beliefs and practices. **W**

RD203 American Religions

3 class hrs/wk, 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 Communication Skills, Skills Development

RD090 College Textbook Reading

3 class hrs/wk, 3 cr.

The first in a series of three reading courses prepares students to comprehend and apply information from college-level textbooks. Encourages active reading by teaching students how to ask and look for answers to questions about the author's purposes and strategies, and includes application of active reading skills to specific academic disciplines and career fields. **Prerequisite:** A score of 34-39 on the college reading placement test or consent of instructor. **F, W, Sp, Su**

RD115 Accelerated Reading Tactics I

3 class hrs/wk, 3 cr.

The second in a series of three reading courses prepares students to become active participants in the process of reading more sophisticated college-level materials. Encourages students to build and transfer a repertoire of reading skills, applying selected reading/study strategies to meet the reading demands in an academic setting. **Prerequisite:** Grade C or higher in RD090; a score of 40-46 on college reading placement test or instructor approval. **F, W, Sp**

RD116 Accelerated Reading Tactics II

3 class hrs/wk, 3 cr.

The last course in a series of three reading courses presents strategies to help students become better critical readers and critical/creative thinkers. Includes reading discipline-specific multiple materials with complex vocabulary, ideas, and structure; using on-line, traditional library, and computerized sources; and synthesizing information to gain new perspectives, implications, insights, or consequences. **Prerequisite:** Grade C or higher in RD115, or a score of 47-53 on the college reading placement test or consent of instructor. **F, W, Sp**

RD117A,B,C Reading for Professionals, Managers and Technicians

1 class hr/wk, 1 cr. each

Focuses on reading techniques using personal job-related materials. The enhancement 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 learn how to examine and evaluate thinking processes. Critical reading skills will be applied to verbal and mathematical word problems and to essays in a variety of content areas. **Prerequisite:** College placement score at or above RD115 or consent of instructor. **F, W, Sp**

RE**REAL ESTATE****RE056 Escrow Procedures I**

3 class hrs/wk, 3 cr.

The use of work sheets by escrow agents. Emphasizes significance of a third party in real estate transactions. Covers documents required to be held on deposit between the seller and buyer until terms of a contract are completed. **Prerequisite:** BA262. **Offered as needed.**

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. This course satisfies the State of Oregon brokers license requirement for appraising. **Prerequisite:** BA264. **Sp**

RE062 Real Estate Appraisal II

3 class hrs/wk, 3 cr.

Methods and theories of income property appraisal techniques using indicators of value, including gross rent multiplier (GRM), capitalization, and yield rates. **Prerequisite:** RE061. **F**

RE063 Real Estate Appraisal III

3 class hrs/wk, 3 cr.

Income property case study requiring a narrative report. **Prerequisite:** RE062 or equivalent. **W**

RE064 Mass Appraising of Real Estate

3 class hrs/wk, 3 cr.

Designed to help student appraisers meet educational requirements for state registration. Covers how mass appraisals are planned, organized, executed, and evaluated and presents the responsibilities of the county assessor. **Prerequisite:** RE061 or qualified appraisal experience. **Sp**

RE065 Appraisal Report Writing

3 class hrs/wk, 3 cr.

How to write appraisal reports that can be easily understood by clients and their representatives.

Prerequisite: RE061 and RE062, or consent of instructor. **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:** BA264. **F**

RE067 Residential Real Estate Appraisal

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

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

RE069 Elements of Design and Construction

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

An introduction to design and construction terminology, architectural styles and building design, material and labor requirements, building codes, and approximate cost estimating for real estate students. **Sp**

RE070 Zoning, Subdividing, and Community Planning

3 class hrs/wk, 3 cr.

A practical study of the zoning regulations, codes, and restrictions applied to subdividing or upgrading property or changing land use. Uses local state, county, and city zone codes, procedures, and materials. Examines the cost of property development. **Prerequisite:** Second-year standing in the Real Estate program or consent of instructor. **W**

RE071 Uniform Standards and Professional Appraisal Practice (USPAP)

2 class hrs/wk, 2 cr.

A thorough examination of the Uniform Standards of Professional Appraisal Practice (USPAP) accepted by government, the public, and the appraisal industry. **Prerequisite:** RE061. **F, Sp**

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. **Offered as needed.**

RE280 Cooperative Work Experience

see AUM280.

RUS**RUSSIAN****RUS101, 102, 103 First Year Russian, Terms I, II, III**

4 class hrs/wk, 4 cr. each

Introduction to the Russian language (including listening, speaking, reading and writing) and Russian culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. **Prerequisite:** These classes

are to be taken sequentially. **RUS101:** None; **RUS102:** RUS101, one year of high school Russian, or consent of instructor; **RUS103:** RUS102, two years of high school Russian, or consent of instructor. Class fee \$2 each. RUS101: **F**; RUS102: **W**; RUS103: **Sp**

RUS201, 202, 203 Second Year Russian, Terms I, II, III

4 class hrs/wk, 4 cr. each

Extensive practice in all four language skills (reading, writing, speaking, and listening). Included are cultural and literary readings and an in-depth review and expansion of basic Russian grammar and vocabulary, as well as a broadening of the student's understanding of Russian culture. **Prerequisite:** These classes are to be taken sequentially. **RUS201:** RUS103, three years of high school Russian, or consent of instructor; **RUS202:** RUS201 or consent of instructor; **RUS203:** RUS202 or consent of instructor. Class fee \$2 each. **Offered as needed.**

SECRETARIAL

see **Business Technology**

SKD

SKILLS DEVELOPMENT

see also **Human Development, Mathematics, Reading**

SKD003 College Orientation For Deaf Students

1 class hr/wk, 1 cr.

Presents deaf and hard-of-hearing students with communication and study skills and habits which promote college success. Explores typical resources found in two-year as well as four-year colleges. **Offered as needed.**

SKD013A,B,C Phonics for Spelling

3 class hrs/4 wks, 1 cr. each

Course provides instruction in phonics principles and syllabication as an aid to spelling. In addition, students will develop a personal spelling log. **F, W, Sp, Su**

SKD014A,B,C Intermediate Spelling

3 class hrs/4 wks, 1 cr. each

Individualized instruction includes patterns of spelling 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. **F, W, Sp, Su**

SKD030A,B,C Advanced Vocabulary Building

3 class hrs/4 wks, 1 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 ter-

minology. **Prerequisite:** SKD015A,B,C or consent of instructor. **F, W, Sp, Su**

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.**

SKD051 Studying for College

3 class hrs/wk, 3 cr. each

Designed for students who feel challenged in getting organized and studying effectively. Student will develop strategies for learning effectively in a college setting. **Prerequisite:** None. SKD051 cannot be taken if SKD031A,B,C have already been taken. **F, W, Sp, Su**

SOC

SOCIOLOGY

SOC204 General Sociology-Introduction

3 class hrs/wk, 3 cr.

Basic issues and findings regarding the biological, symbolic, and social nature of humankind. Discusses foundations for social interaction including patterns of social structure, culture, socialization, primary relationships, social differentiation, organization, deviance, and collective behavior. Includes principles of scientific methods and major sociological theorists. **F, W**

SOC205 General Sociology-Institutions

3 class hrs/wk, 3 cr.

An analysis of social institutions with special emphasis on family, religion, education, economy, and politics. 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 hrs/wk, 3 cr.

A sociological approach to major social problems in contemporary American society. Emphasizes concepts of aging, health care, law, leisure, minorities, pollution, poverty, technology, urbanization, work, and youth. It is recommended that students take SOC204 prior to this course. **Sp**

SOC210 Marriage and Family Relationships

3 class hrs/wk, 3 cr.

Sociological approach to marriage, including preparation for marriage, mate selection, adjustment to marriage, marital problems to expect and solve, and changing styles of family relationships. **Offered as needed.**

SOC221 Juvenile Delinquency

3 class hrs/wk, 3 cr.

The nature, extent, causes, control, reaction, treatment, and rehabilitation of juvenile delinquency in contemporary American society from a sociological perspective. **Offered as needed.**

SOC227 Introduction to Social Psychology

3 class hrs/wk, 3 cr.

Presents some of the problems, theories, and methods of social psychology. Emphasizes diverse ways in which social influence alters an individual's thoughts, feelings, and actions. Examines prejudice, conformity, leadership, and aggression from an experimental viewpoint. Considers the relationship of these traits to such phenomena as war, sexuality, discrimination, violence, and interpersonal attraction. Recommended that students take PSY201 and SOC204 prior to this course. **Offered as needed.**

SOC235 Society and Forestry

3 class hrs/wk, 3 cr.

An analysis of some of the classical sociological theories and their relevance in understanding the management of forests and natural resources by a society. **W**

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.

Surveys areas of communications with emphasis on interpersonal, group, and public modes of communication. **F, W, Sp, Su**

SP112 Fundamentals of Persuasion

3 class hrs/wk, 3 cr.

Introduces public speaking on a persuasive level. Includes discussion of the verbal and nonverbal levels of persuasion and concentrates on effective delivery, theories of persuasion, and use of support in effective persuasive speeches. Activities allow students to use theories in public speaking situations. **F, W, Sp, Su**

SP113 Fundamentals of Small Group Communication

3 class hrs/wk, 3 cr.

Preparation for effective participation in a committee-oriented society. Includes discussion of leadership abilities and small task group environment. Activities are designed to develop leadership abilities and improved communication techniques in small task group situations. **F, W, Sp**

SP114 Interpersonal Communication

3 class hrs/wk, 3 cr.

Introduces interpersonal communication. Emphasizes development of effective communication with strangers, friends, work associates, and family members. Designed to offer experiential classroom practice in various interpersonal skills. **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, 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 sender/receiver perceptual differences, the need for message clarity and increased feedback and active listening to create more effective communication. **Offered as needed.**

SP130 Business and Professional Speaking

3 class hrs/wk, 3 cr.

Designed to improve speech efficiency, self-confidence, and skill in planning, organizing, and delivering the kinds of presentations encountered in business organizations through practical experiences in designed communication situations. **Offered as needed.**

SP230 Oral Interpretation

3 class hrs/wk, 3 cr.

Analysis and presentation of literature; use of emotional reactions to give color and interest, expressive vocal and body gestures and characterization to interpret literature. **Offered as needed.**

SPAN

SPANISH

SPAN101, 102, 103 First Year Spanish—Terms I, II, III

4 class hrs/wk, 4 cr. each

Introduction to the Spanish language (including listening, speaking, reading and writing) and Hispanic culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. **Prerequisite:** These classes are to be taken sequentially. **SPAN101:** None; **SPAN102:** SPAN101, one year of high school Spanish, or consent of instructor; **SPAN103:** SPAN102, two years of high school Spanish, or consent of instructor. Class fee: \$2 each. **SPAN101: F; SPAN102: W; SPAN103: Sp**

SPAN111, 112, 113 Beginning Spanish Conversation—Terms I, II, III

3 class hrs/wk, 3 cr. each

Spanish for beginners whose primary goal is basic communication in the language and an understanding of Hispanic culture. Listening, speaking, reading and writing skills are developed with an emphasis on conversation, facilitated by the study of vocabulary and structure. **Prerequisite:** These classes are to be taken sequentially. **SPAN111:** None; **SPAN112:** SPAN111 or consent of instructor; **SPAN113:** SPAN112 or consent of instructor. Class fee \$2 each. **SPAN111: F; SPAN112: W; SPAN113: Sp**

SPAN121, 122, 123 Español para nativos (Spanish for Native Speakers)—Terms I, II, III

4 class hrs/wk, 4 cr. each

Taught in Spanish, this series is designed to help native speakers of Spanish develop reading, writing and grammar skills in their native language, and to appreciate the depth and diversity of Hispanic culture in the United States and abroad. These classes emphasize spelling, accents, vocabulary, punctuation and sentence grammar of standard Spanish, and consist of daily readings, dictations and composition. **Prerequisite:** These classes are to be taken sequentially. **SPAN121:** Native Spanish speaker. No previous college coursework in Spanish is required. However, students are expected to have had some contact with the written language; **SPAN122:** SPAN121 or consent of instructor; **SPAN123:** SPAN122 or consent of instructor. Class fee: \$2 each. **SPAN121: F; SPAN122: W; SPAN123: Sp**

SPAN150, 151 First Year Spanish, Accelerated—Terms I, II

6 class hrs/wk, 6 cr. each

Introduction to the Spanish language (including listening, speaking, reading and writing) and Hispanic culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. This two-quarter sequence is equivalent to the three quarters of SPAN101, 102, 103. **Prerequisite:** **SPAN150:** None. It is recommended that the student have had some experience studying a foreign language; **SPAN151:** SPAN150, one year of high school Spanish, or consent of instructor. Class fee \$3 each. **SPAN150: W; SPAN151: Sp**

SPAN201, 202, 203 Second Year Spanish—Terms I, II, III

4 class hrs/wk, 4 cr. each

Extensive practice in all four language skills (reading, writing, speaking, and listening). Included are cultural and literary readings and an in-depth review and expansion of basic Spanish grammar and vocabulary, as well as a broadening of the student's understanding of Hispanic culture. **Prerequisite:** These classes are to be taken sequentially. **SPAN201:** SPAN103, SPAN123, three years of high school Spanish, or consent of instructor; **SPAN202:** SPAN201 or consent of instructor; **SPAN203:** SPAN202 or consent of instructor. Class fee \$2. **SPAN201: F; SPAN202: W; SPAN203: Sp**

SPAN211, 212, 213 Intermediate Spanish Conversation—Terms I, II, III

3 class hrs/wk, 3 cr. each

Spanish for intermediate learners whose primary goal is increased basic communication in the language and an expanded understanding of Hispanic culture. Listening, speaking, reading and writing skills continue to be developed with an emphasis on conversation, facilitated by the study of vocabulary and structure. **Prerequisite:** These classes are to be taken sequentially. **SPAN211:** SPAN113, SPAN102 or consent of instructor; **SPAN212:**

SPAN211 or consent of instructor. **SPAN213:** SPAN212 or consent of instructor. Class fee \$2 each. **SPAN211: F; SPAN212: W; SPAN213: Sp**

SSC

SOCIAL SCIENCE

SSC150 Ethnic Cultures of the Northwest 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 Hispanic/Latino and Indigenous Cultures of the Northwest United States

3 class hrs/wk, 3 cr.

Provides an introductory study of minority ethnic groups in the northwest United States, focusing on Hispanic/Latino and indigenous cultures and represents an interdisciplinary overview of historical, cultural, economic, social, psychological, and political factors. **Offered as needed.**

SSC206 Dealing with Diversity

3 class hrs/wk, 3 cr.

Provides lessons in social interaction; the concepts of race, social class, age, gender, and sexual orientation; the sociology of minorities; global and national demographic trends; and U.S. immigration policy. **Offered as needed.**

ST

OCCUPATIONAL SKILLS TRAINING

ST050A-P Occupational Skills Training

40-180 lab hrs/term, variable 1-15 cr. per term

This course is the primary component of a site-based, short-term training program for eligible students. Students receive instruction at the job site based on individualized curricula developed to meet the needs of the student and the chosen occupation. Students must meet screening criteria for admission to program. Variable class fee. See information in the Programs of Study section of this catalog for costs and various non-credit courses available through this program. **F, W, Sp, Su**

TA

THEATER ARTS

TA110 Introduction to the Theater Arts

3 class hrs/wk, 3 cr.

An introduction to the art and craft of theater, including historical lecture, field trips, and an examination of the roles of modern theater people. **Offered as needed.**

TA121 Fundamentals of Acting

3 class hrs/wk, 3 cr.

The first of a three-term sequence provides a general introduction to the basic skills of acting. Defines the common terminology used in acting and demonstrates the similarities between different systems of acting and uses theater games to promote creativity and improve group dynamics. Pre-

sents an overview of the ancient history of western acting. **F, W, Sp**

TA122 Fundamentals of Acting

3 class hrs/wk, 3 cr.

The second of a three-term sequence emphasizes movement systems and improvisations. Reinforces ideas and systems first learned in TA121. **Prerequisite:** TA121 or consent of instructor. **F, W, Sp**

TA123 Fundamentals of Acting

3 class hrs/wk, 3 cr.

The third of a three-term sequence exposes students to specific genre work such as the development of a variety of comic or dramatic skills. An overview on acting for the camera includes a videotaping or video simulation of the final acting project. **Prerequisite:** TA122 or consent of instructor. **F, W, Sp**

TA285A,B,C, Theater Production Workshop

Variable hrs and cr.

Presents the elements of dramatic production through rehearsal and performance of a play to be presented to an audience. Course may be repeated for a maximum of nine credits. **F, W, Sp**

VC

VISUAL COMMUNICATIONS

VC080A,B,C Introduction to Graphic Processes A,B,C

1 class hr/wk, variable 1-3 credits

Overview of graphic arts production methods, including typesetting and layout, paste up, traditional prepress techniques and offset printing. **Prerequisite:** Credit is dependent on prior experience to be determined by a proficiency test or consent of instructor. CS101 for Macintosh or concurrent enrollment unless waived by program chair; enrollment in the Visual Communication program or Visual Communications Bridge. Class fee **B:** \$5; **C:** \$10. **Offered as needed.**

VC100 Special Topics in Visual Communications

1 class hr/wk, 1 cr.

Topics will change each term and may include trapping, freelance work, preflighting, graphics software, papers and inks, and web page design. Course may be repeated for a maximum of six credits. **Offered as needed.**

VC111 Survey of the Graphic Arts

3 class hrs/wk, 3 cr.

An overview of the graphic arts. Includes the history of printing and publishing; the evolution of graphic design, digital graphics, typesetting and related fields of applied arts; future trends; and career opportunities. Class fee \$10. **F, offered as needed.**

VC114 Introduction to Computers for Graphics

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

An introduction to software for the graphics arts. Includes page layout, illustration and photo manipulation software, file formats, linked and exported files, scanned images, memory, hardware and software, and high resolution imagesetting. **Prerequisite:** CS101 or equivalent and touch keyboard ability 25 words per minute and enrollment in the

Visual Communications program. Class fee \$10. **F, offered as needed.**

VC121 Layout and Design 1

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

Introduces the basic skills required in the layout and design process of the graphic arts, including electronic page layout with type, photographs and other graphic elements. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC111 and VC114. Class fee \$10. **W, offered as needed.**

VC122 Layout and Design 2

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

Continuation of VC121. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC121. Class fee \$10. **Sp, offered as needed.**

VC130 Beginning Photoshop

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

Introduces the concepts and techniques of scanning, digital imaging, and image manipulation. **Prerequisite:** Macintosh (or compatible) computer experience, or VC114. Class fee \$10. **Offered as needed.**

VC131 Advanced Photoshop

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

Refines and expands the concepts and techniques of digital imaging with an emphasis on electronic media. **Prerequisite:** VC130 or working knowledge of all basic scanning and image manipulation techniques, Macintosh (or compatible) computer experience. Class fee \$10. **Offered as needed.**

VC133 Page Layout with QuarkXPress

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

Uses QuarkXPress to produce basic page layouts to industry standards. **Prerequisite:** VC114 or Macintosh (or compatible) computer experience. Class fee \$10. **W, offered as needed.**

VC137 Web Graphics

1 class hr/wk, 1 cr.

Develops fundamental graphic skills for use on the Internet. **Prerequisite:** Macintosh (or compatible) computer experience and basic Internet browsing experience. Class fee \$10. **Offered as needed.**

VC139 Beginning Freehand

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

Introduces the use of illustration software for graphic arts. **Prerequisite:** Macintosh (or compatible) computer experience. Class fee \$10. **Offered as needed.**

VC141 Prepress Production 1

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

Introduces prepress production methods including process photography, image assembly, proofing, and platemaking. **Prerequisite:** VC111, VC114, concurrent enrollment in VC161 and enrollment in the Visual Communications program. Class fee \$10. **Offered as needed.**

VC145 Print Production 1

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

Introduces traditional prepress and press production methods, including process photography, image assembly, proofing, platemaking, and press and bindery operations. **Prerequisite:** VC111,

VC114, and enrollment in the Visual Communications program. Class fee \$15. **Offered as needed.**

VC151 Electronic Imaging 1

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

Introduces digital photography, black and white scanning and photo manipulation on the Macintosh. Work includes electronic imagesetting and operating a film processor. **Prerequisite:** VC111, VC114, ART261 or concurrent enrollment and enrollment in the Visual Communications program. Class fee \$10. **Sp, offered as needed.**

VC161 Small Press Operations

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

Introduces the basic skills required in small offset press and duplicator and bindery operations while working on real production jobs. **Prerequisite:** VC111, VC114, and enrollment in the Visual Communications program. Class fee \$10. **Offered as needed.**

VC162 Large Press Operations

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

Continues the basics of press and bindery operations with multiple-color work on large presses. Multiple-page brochures and publications are included in real production jobs. **Prerequisite:** VC161, and enrollment in the Visual Communications program. Class fee \$10. **Offered as needed.**

VC171,172,173,174,175,176,177,178,179

Special Projects

variable hours and 1-9 cr.

Students have the opportunity to work with an instructor on special projects defined by a contract between student and instructor. **Prerequisite:** Enrollment in the Visual Communications program or consent of instructor. Course may be repeated. **F, W, Sp**

VC183 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. **Sp, offered as needed.**

VC184 Portfolio Preparation

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

Sixth-term course for students enrolled in the Visual Communications program. Covers building a portfolio of work, evaluating job markets, designing resumes and business stationery. Includes participation in portfolio show. **Prerequisite:** Second-year standing in the Visual Communications program or consent of instructor. Class fee \$10. **Sp**

VC221 Layout and Design 3

2 class and 3 lab hrs/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 may include work on live jobs in a production environment. **Prerequisite:** VC121 and VC122, and second year standing in the Visual Communications program. Class fee \$10. **F, offered as needed.**

VC222 Layout and Design 4

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

Further develops the concepts and skills required in the design and layout process. Project work on live jobs in a production environment. **Prerequisite:** VC221, and second year standing in the Visual Communications program. Class fee \$10. **W, offered as needed.**

VC241 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 VC141, and VC151. Class fee \$10. **Offered as needed.**

VC245 Print Production 2

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

Continues work in the basic skills of prepress and offset press operations. Multi-color work will be emphasized in image assembly, proofing, and press and bindery operations which will include live production jobs. **Prerequisite:** VC145 and second-year standing in the Visual Communications program. Physical challenges: Students who are unable to freely and quickly walk will not be able to perform the required tasks on the printing presses and bindery equipment. Dyslexia may be a challenge. Class fee \$15. **Offered as needed.**

VC251 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 VC151. Students should have completed a course in basic black and white photography or be concurrently enrolled in such a course. Class fee \$10. **F, offered as needed.**

VC261 Advanced Press Production 1

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

Refines the basic skills required in offset press and bindery operations on live production jobs. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC161. Class fee \$10. **Offered as needed.**

VC262 Advanced Press Production 2

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

Continues with more complex press and bindery operations with work on large presses in multiple colors. Multiple page brochures and publications will be produced in live production jobs. **Prerequisite:** Enrollment in the Visual Communications program and completion of VC261. Class fee \$10. **Offered as needed.**

VC280 Cooperative Work Experience

see AUM280.

WFB

WELDING FABRICATION

WFB087 Fabrication Practices III

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

Emphasizes structural fabrication using steel and aluminum. **Prerequisite:** Enrollment in Welding Fabrication program or consent of program chair. Class fee \$15. **W**

WFB088 Fabrication Practices IV

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

Instruction and experience in production-type welding with use of jigs, fixtures, and positioners. **Prerequisite:** WFB087 or consent of program chair. Class fee \$15. **Sp**

WFB096 Shop Projects

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

Practical experience in maintenance and repair of weld shop machines, accessories, and fixtures. Uses selected fabrication and repair projects to develop resourcefulness and confidence in the application of skills and knowledge developed in concurrent courses. **Prerequisite:** Enrollment as a full-time student in the Welding 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.

Continuation of WLD051 covering ferrous and non-ferrous alloys and welding procedures. Demonstration and supervised practice of techniques on various metals applied in fabrication and repair. **Prerequisite:** WLD051 or consent of program chair. Class fee \$30. **W**

WLD053 Advanced Arc Welding

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

Preparation for welding, under code-type procedures, on plate and pipe. A study of welding procedures previously covered, as they apply to heavy gauge welding, with groove-type joints. At the end of the term the student will be given the opportunity to take a certification test, in accordance with American Welding Society (AWS) or American Society of Mechanical Engineers (ASME) code welding standards. **Prerequisite:** Satisfactory completion of WLD051 and WLD052, or equivalent industrial experience with consent of program chair. Class fee \$30. **Sp**

WLD056 Blueprint Reading and Sketching

6 lab hrs/wk, 2 cr.

Basic sketching techniques and reading of three-view drawings for welders. Includes dimensioning practices, scaling, line alphabet notes, and symbols. Emphasizes developing skills in reading detail and welding drawings. **F**

WLD057 Layout Practices

3 lab hrs/wk, 1 cr.

A study of layout tools and their use in fabricating structural members, bins, hoppers, pipe fittings,

chutes, etc. Includes principles and practices of pattern development for typical forms and fitting. Class fee \$5. **W**

WLD058 Weld Shop Problems

2 class and 15 lab hrs/wk, 7 cr.

A review and application of welding, layout, and fabrication processes covered during the year. Includes study and practice of production welding methods, electrode consumption, and method selection. Selected fabrication and assembly projects present typical layout, fabrication, and production problems. **Prerequisite:** Successful completion of the first two terms of the one-year Welding program, or equivalent industrial experience with consent of program chair. Class fee \$25. **Sp**

WLD061 Basic Gas Metal Arc Welding (MIG)

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

Basic skills in semiautomatic metal inert gas (MIG) welding processes. Principles involved in equipment, material, and procedures combined with demonstrations and supervised practical experience using standard industrial equipment. Use of solid and flux-cored wire in typical industrial applications. Class fee \$25. **F**

WLD062 Intermediate Gas Metal Arc Welding (MIG)

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

A continuation of WLD061. Includes study of and practice in welding of carbon steel. Emphasizes production welding situations using large diameter electrodes (solid and flux-cored) with mixed shielding gases in flat or horizontal positions. **Prerequisite:** WLD061 or consent of program chair. Class fee \$35. **W**

WLD063 Advanced Gas Metal Arc Welding (MIG)

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

Continuation of WLD062. Includes welding mild steel, aluminum, stainless steel and steel pipe welding. Students may take a certification test in accordance with the American Society of Mechanical Engineers (ASME) Section IX code or the American Welding Society (AWS) unlimited plate test in accordance with AWS D1.1 structural code. **Prerequisite:** WLD061 or equivalent industrial experience, with consent of program chair. Class fee \$35. **Sp**

WLD070 Oxyacetylene Processes

1 class and 6 lab hrs/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 fee \$20. **F**

WLD072 Oxyacetylene Cutting

5 lab hrs/wk, 2 cr.

Use and care of oxyacetylene cutting equipment. Class fee \$20. **Offered as needed.**

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/wk, 4 cr.

A beginning course in fundamentals of shielded metal arc welding, oxyacetylene welding and cutting, metallic inert gas welding (MIG), and arc-air procedures. Class fee \$35. **W**

WLD081 Welding Metallurgy I

2 class hrs/wk, 2 cr.

Fundamentals of metallurgy pertaining to welders. Covers identification of ferrous metals, distortion, stress relieving, flame straightening and hardening, plus various metallurgical problems. **W**

WLD082 Welding Metallurgy II

2 class hrs/wk, 2 cr.

A continuation of WLD081 covering heat treatment of steel, common non-ferrous alloys, and alloy steels. **Prerequisite:** WLD081. **Sp**

WLD097 Welding

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

Fundamentals and application of arc welding, oxyacetylene welding, brazing and cutting pertaining to the automotive industry. Class fee \$20. **Sp**

WLD280A-L Cooperative Work Experience

see AUM280.

WR

WRITING

see also Skills Development

WR040 Writing Skills

3 class hrs/wk, 3 cr.

Focuses on writing complete and coherent sentences using correct grammar, punctuation, usage, and spelling. These abilities are developed in the context of paragraphs and longer pieces of writing. **F, W, Sp, Su**

WR090 Fundamentals of Writing

3 class hrs/wk, 3 cr.

Focuses on writing essentials that will build confidence in writing for professional-technical students and anyone who writes in the workplace. Includes discussion, reading, lectures, and constant writing practice. Sentence concepts are presented and reinforced by working with paragraphs and longer pieces of writing. All concepts 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, work-

place 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. **W, Sp**

WR115 Introduction to Composition

3 class hrs/wk, 3 cr.

An introduction to WR121, this course focuses on writing well-developed, unified, coherent paragraphs, and formulating and developing a main idea in the composition of short, expository essays. Explores techniques for generating and controlling topic sentences, selecting and incorporating supporting details, and creating coherence within and between paragraphs. Reinforces competency in sentence writing skills and accepted conventions of grammar, punctuation, usage, and spelling in the context of paragraphs and short essays. Class fee \$2. **F, W, Sp, Su**

WR121 English Composition-Exposition

3 class hrs/wk, 3 cr.

First-term, college-level English composition course emphasizes clear, detailed informative writing, logical thinking, and active reading. **Prerequisite:** Ability to organize thoughts and competency in standard written English, as demonstrated by (a) standard placement test, (b)WR115, or COM051 (if required by professional-technical program). Class fee \$2. **F, W, Sp, Su**

WR122 English Composition-Logic and Style

3 class hrs/wk, 3 cr.

Includes logical, effective argumentative prose, awareness of stylistic elements, and critical reading. **Prerequisite:** WR121. Class fee \$2. **F, W, Sp, Su**

WR123 English Composition-Research Writing

3 class hrs/wk, 3 cr.

This third-term college-level English composition course covers the acquisition and evaluation of evidence, integration of source material and personal opinion, and the appropriate processes and forms for developing the research paper. **Prerequisite:** WR121 and WR122. Class fee \$2. **F, W, Sp, Su**

WR198A-B Independent Studies: Writing

Variable 1-2 credits

The use of the college learning contract provides student and instructor with vehicle to allow independent study in an area of student interest. **Prerequisite:** Consent of instructor. **Offered as needed.**

WR227 Technical Writing

3 class hrs/wk, 3 cr.

Covers a variety of reports that include format, organizational, supplemental, bibliographical, and illustrative considerations. Emphasizes factual content, objective presentation, and a defined purpose for specific readers/audiences. **Prerequisite:** WR121. Class fee \$2. **F, W, Sp, Su**

WR241, 242, 243 Imaginative Writing

3 class hrs/wk, 3 cr.

Designed to help writers of fiction, poetry and drama, using discussions of student writing and explorations of texts by established writers. Includes individual and group projects. Students taking the course for a second or third term are asked to submit work for publication. Although all

three genres are explored each term, fiction is emphasized in the fall, poetry in the winter, and drama in the spring. Class fee \$2 each. WR241: **F**; 242: **W**; 243: **SP**

WR248A-C Strategies for Revision

3 class hrs/wk, 1-3 cr.

Series of exercises designed to initiate, sustain, and refine personal and professional writing. **Offered as needed.**

WR298A Independent Studies: Writing

3 cr.

Faculty-supervised independent study in an area of student interest. May be taken for a maximum of nine credits. **Offered as needed.**

WS

WOMEN'S STUDIES

WS101 Introduction to Women'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 scholarship concerning women in western civilization, their history, and alternative futures. **F**

WS102 Introduction to Women's Studies:

Women, Work and Family

3 class hrs/wk, 3 cr.

Examination of the economic position of women in American society today. Includes an overview of working women in American history from colonial times to the present. Focuses on the problems women face today as a result of economic pressures, changing family and work roles, societal expectations, and the double day. **W**

WS103 Introduction to Women's Studies:

Women Around the World

3 class hrs/wk, 3 cr.

A survey of women around the world in the Twentieth 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. Debates the politics of ecofeminism, environmental consciousness, and ecological awareness. **Sp**

ZOO

ZOOLOGY

ZOO201 General Zoology

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

An introductory study of the major unifying principles and concepts of biology as applied to the study of animals. Includes the chemical basis of life, cell biology, theories about the origin of life, evolution, and genetics. Class fee \$12. **F**

ZOO202 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. Princi-

ples and concepts studied in ZOO201 will be applied to study of the invertebrates. **Prerequisite:** ZOO201 or consent of instructor. Class fee \$12. **W**

ZOO203 General Zoology

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

An introductory study of 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 Lawrence
- Zone Two**—Marilyn Crouser
- Zone Three**—JoAnne Beilke, Vice Chair
- Zone Four**—Michael Stewart
- Zone Five**—Tom Marks
- Zone Six**—Gerald Watson, Chair
- Zone Seven**—Gwen VanDenBosch

STAFF AS OF JUNE, 1998

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, Building Construction 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, Gwen Ellyn**—Counselor, Life Skills
- Anderson, Holly**—Program Chair, Human Services
- Anderson, Kenneth**—Instructor, Mathematics
- Andrea, Ara**—Instructor, Forest Resources Technology
- Andrews, Peggy**—Instructor, Emergency Medical Technology
- Antoine, Patricia**—Instructor, Criminal Justice
- Ashe, Barbara**—Instructor, Corrections Education
- Asher, Greg**—Instructor, Psychology

B

- Badrena, Josef**—Instructor, Mathematics
- Baker, Ronald**—Distance Education
- Balyo, Mike**—Instructor, History
- Bannon, David**—Instructor, Physical Science
- Barber, Wayne**—Instructor, Mathematics
- Barfknecht, Mary**—Instructor, Alternative High School
- Bassett-Smith, Ron**—Director, Workforce Integration
- 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**—Instructor, Business Technology
- Beigh, Marybelle**—Instructor, Electronics
- Benson, June**—Program Chair, Adult Basic Education and GED
- Berger, Gerard**—President
- Berman, Arthur**—Program Chair, Accounting and Management
- Bibler, Rob**—Program Chair and Instructor, Art; Instructor, Film Studies
- Blodget, James**—Specialist, Media Production
- Blucher, Robert**—Instructor, Computer Science
- Bode, Betty**—Program Chair, Medical Office Assisting
- Bodtker, Diana**—Program Chair, Life Science
- Bohlander, Susan**—Instructor, Business Technology
- Bone, Andrew**—Instructor, Accounting
- Booth, Karleen**—Coordinator, Occupational Skills Training
- Borden, Tiffany**—Counselor
- Bothwell, Bruce**—Instructor, Electronics
- Bowman, Roberta**—Instructor, Deaf Services and Learning Assistance/

Skills Development and American Sign Language

- Boyington, Gary**—Program Chair, Electronics
- Brooks, W. David**—Instructor, Accounting
- Brummond, Candis**—Counselor
- Buchanan, Mary Ann**—Instructor, High School Completion
- Bush, Lori**—Project Specialist, JOBS Program
- Byers, E. Maxine**—Instructor, Learning Assistance/Skills Development
- Bynum, Randall**—Instructor, Speech

C

- Cammack, Janice**—Instructor, Physical Science
- Campbell, Kathy**—Director, Financial Aid
- Campbell, Lorraine**—Coordinator, Family Resource Center
- Carnegie, Kay**—Team Coordinator, Nursing
- Caster, John**—Instructor, Farm Business Management
- Chancey, Fred**—Instructor, Writing, and Literature
- Chesley, Bob**—Program Chair, Mathematics
- Christensen, Janet**—Instructor, Corrections Education
- Clark, Lori**—Instructor, Health and Physical Education
- Cochrane, Linda**—Director, Learning Resource Center
- Colton, Lois**—Instructor, Developmental Education
- Concepcion, Paul**—Program Chair, Social Science
- Connor, Marilyn**—Instructor, Communication Skills
- Cornutt, Delvin**—Instructor, Sociology
- Crandall, Sondra**—Instructor, Public Speaking and Composition
- Craven, Linda**—Instructor, Early Childhood Education
- Crossler-Laird, Janice**—Instructor, English as a Second Language
- Cudmore, Wynn**—Instructor, Life Science
- Cullison, Joanne**—Instructor, Learning Assistance/Skills Development
- Culveyhouse, James**—Instructor, Training and Economic Development
- Cunningham, Susan**—Director, Social Science, Human Resources and International Education

D

- Davidson, Mollie**—Instructor, Human Services
- Davis, Anne**—Counselor
- Decker, Michele**—Team Coordinator, Nursing
- DePue, Thomas**—Director, Information Technology
- Desel, Theodore**—Instructor, Speech
- Dinsdale, Sara**—Instructor, English as a Second Language
- Dobay, Deborah**—Instructor, Psychology
- Duggan, Michael**—Program Chair, Disability Services
- Dunn, Tim**—Program Chair, Forest Resources Technology
- Dutch, Donald**—Instructor, Corrections Education

E

- Edge, Barbara**—Coordinator, Grants Development
- Edholm, Len**—Counselor
- Edwards, Karen**—Instructor, Management
- Ehlers, Deborah**—Instructor and Counselor, Life Skills
- Elegant, Ann**—Instructor and Counselor, Life Skills
- Elias, Marilyn**—Instructor, Nursing
- Entwit, Peggy**—Instructor, Emergency Medical Technology
- Eppler, Carol**—Instructor, Business Technology
- Eustrom, James**—Director, Student Life and Academic Support Services

F

- Fadel, Stephen**—Reference Librarian
- Faircloth, Kathleen**—Instructor, Psychology
- Falk, Cheryl**—Dean, Regional Education Services
- Farjami, Javad**—Instructor, Electronics
- Fenske, Helen**—Instructor, Human Services
- Ferguson, Jim**—Instructor, Physical Science
- Ferry, Marjorie**—Instructor, English
- Fish, Susan**—Instructor, Adult Basic Education and GED
- Fisher, Gene**—Program Chair, Fire Protection
- Fishfader, Randy**—Instructor, Early Childhood Education
- Fitzgerald, George**—Instructor, Life Science

Florence, William—Instructor, Journalism; Adviser, Student Newspaper
Ford, Edward—Program Chair, Health and Physical Education
Forest, Jacques—Instructor, Economics
Forslund, Larry—Instructor, Life Science
Frey, Phil—Manager, Auxiliary Services
Furr, William—Program Chair, Alternative High School

G

Gaul, Debra—Program Chair, Volunteer Literacy Program
Garaventa, James—Specialist, Executive/Employee Development
Gerard, Kay—Program Chair, English as a Second Language
Gilbert, Jeremy—Instructor, Psychology
Gillette, David—Program Chair, Mathematics
Glennon, Barbara—Instructor, Nursing
Gohaidan, Carol Ann—Program Chair, English as a Second Language
Gohring, Judy—Director, Personnel, Affirmative Action and Payroll
Graham, Jerry—Instructor, Adult Basic Education
Green, Constance—Dean, Strategic Partnerships for Academic and Community Effectiveness

H

Haines, Beverley—Coordinator, Cooperative Work Experience
Hanby, Stephen—Instructor, Welding Technology
Hare, Nancy—Instructor, Clerical Technology and Office Occupations
Harmon, Millie—Instructor, Sociology
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—Program Chair, Humanities
Hirt, Donna—Instructor, Human Services
Hodges, Gary—Instructor, Automotive Technology
Holmes, Darrel—Program Chair, Building Inspection
Hoobler, Tony—Instructor, Physical Science
Horn, Terry—Director, Business 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
Hyland, Mariann—Director, Public Safety, Risk Management and Contracts

I

Irving, Jan—Instructor, Nursing
Ivey, Marion—Instructor, Custodial/Building Maintenance

J

Jacobson, Lee—Instructor, Art
Jantzi, Ron—Director, Trades and Technologies
Johanson, Terri—Director, Santiam Campus
Johnson, Robert—Instructor, Computer Science
Jones, Anetta—Instructor, Business Technology
Jones, Lee—Instructor, Mathematics
Jordan, Carol—Program Chair, Business Technology

K

Kaczmarczyk, Lisa—Instructor, Computer Science
Kalb, David—Instructor, Automotive Technology
Kelly, Mike—Instructor, Architectural Drafting
Kelly, Susie—Coordinator, National Science Foundation
King, James—Instructor, Human Services
Kizziah, John—Instructor, Welding Technology
Knab, Bernard—Director, Humanities and Visual Communications
Koch, Alan—Director, College Advancement
Krahn, Greta—Coordinator, Older Adult Programs

Kuhn, Gary—Coordinator, Cooperative Work Experience
Kurz, Sandra—Instructor, Health and Physical Education

L

Lacy-Tang, Jean—Counselor
Lang, William—Counselor
Lazzara, Edward—Program Chair, Foreign Language
Leonard, Phyllis—Program Chair, Mathematics
LeRoy, Robert—Instructor, Composition and Literature
Levine, Ellen—Director, Mid-Willamette Education Consortium
Levine, Richard—Vice President, Academic Services
Libbon, George—Athletic Director; Instructor, Health and Physical Education
Linder, Christine—Program Chair, Visual Communications
Longshore, Glen—Specialist, Media Production

M

MacDonald, Lucy—Instructor, Learning Assistance/Skills Development
MacInnes, Patricia—Instructor, Inmate Education
Mack, Johnny—Instructor, Fire Protection
Malone, Patricia—Instructor, Business Technology
Marckx, Elaine—Instructor, Nursing
Martin, Joel—Counselor
McCready, Marveen—Instructor, Mathematics
McCullough, Linda—Instructor, Accounting
McDonough, Thomas—Instructor, Physical Science
McGill, Meg—Coordinator, Salem Area Programs
McGlynn, Maureen—Director, Curriculum Resource Center
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—Team Coordinator, Nursing
Michels, John—Program Chair, Mathematics
Miller, Mark—Instructor, Engineering and Math
Mock, John—Instructor, Composition and Literature
Mohn-Brown, Elaine—Instructor, Nursing
Monson, Bryan—Instructor, Business Technology
Moothart, Janine—Coordinator, Cooperative Work Experience
Morgan, Micheal—Dean, Campus-Based Instruction
Moxley, Doug—Coordinator, Special Projects
Murphy, Lori—Director, Corrections Education and Hospitality Systems Management
Murray, Susan—Instructor, High School Completion

N

Nagle, Priscilla—Instructor, Adult Basic Education and GED
Nelson, Sandra—Director, New Workforce
Neuendorf, Mary—Coordinator, Public Relations and Publications
Newton, Kristi—Instructor, Business and Management
Nichols, Jane—Coordinator, Occupational Skills
Nichols, Van—Program Chair, College Transfer Engineering, Drafting Technology, and Civil-Structural Engineering Technology
Nielson, Lisa—Instructor, Cognitive Life Skills
Niebuurt, Kathleen—Instructor, Nursing
Nubile, Barbara—Team Coordinator, Nursing Skills Lab

O

Ochsner, Ken—Program Chair, Emergency Medical Technology
O'Hara, Rick—Instructor, Life Science
O'Harra, Kris—Instructor, Communication Skills
Olheiser, Dean—Program Chair, Automotive Technology
Ottaway, Carol—Program Chair, Business Education, Dallas Center
Owens, Chris—Instructor, Health Education

P

Panasuk, Eugene—Instructor, Farm Business Management
Parmeter, Stanton—Instructor, Life Science

Paul, Sheri—Instructor, Custodial/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 and Manufacturing
Poston, Susan—Instructor, Mathematics
Pratt, Betty—Program Chair, Financial Services
Prentice, Cynthia—Instructor, Life Science
Pringle, Bill—Program Chair, Tutoring Services
Prothero, Marilyn—Program Chair, English as a Second Language

R

Rasmussen, Douglas—Instructor, Mathematics
Rediski, Mark—Instructor, Education
Reed, Marilyn—Coordinator, Evening On-Campus and Apprenticeship Programs
Reid, Donna—Instructor, Art and Writing
Richardson, Steve—Program Chair, Modern Curriculum
Roach, Larry—Project Specialist, Technical Preparation Program
Roelofs, Gary—Instructor, English as a Second Language
Rogland, Paul—Instructor, Inmate Education
Rosen, Lois—Instructor, English as a Second Language

S

Salgado, Monica—Instructor, Adult Basic Education
Sansone, Steve—Instructor, Health and Physical Education
Saxowsky, Gail—Instructor, Emergency Medical Technology
Scheer, Sara—Instructor, Nursing
Scherf, Joan—Director, Dallas Campus
Schmidt, Steve—Manager, Computer Services
Schult, Eric—Instructor, Emergency Medical Technology
Scoggin, Paul—Coordinator, Hospitality Systems Management
Scott, Janet—Director, Online Programs
Seals, Georgina—Instructor, Business Technology
Sessions, Patricia—Instructor, Business 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—Coordinator, Opportunity Center
Stewart, Joanne—Instructor, Adult Basic Education and GED
Stubbs, Dina—Team Coordinator, Nursing
Suter, Marcia—Instructor, English, Writing, and Literature
Suter, Paul—Instructor, Writing and Literature
Swearingen, Dell—Director, Science, Mathematics, and Electronics

T

Terhes, John—Instructor, Communication Skills
Terpin, Mark—Director, Alternative High School, ESL, and Volunteer Tutoring
Thompson, Tammy—Instructor, Barbering
Thorp, Anne—Instructor, Adult Basic Education and GED, Downtown Learning Center
Troupe, Count—Instructor, Developmental Education/Cognitive Skills
Truesdell, Joanne—Dean, Student Development and Learning Resources
Trumbo, Mark—Director, McMinnville Campus

U

Ure, Douglas—Instructor, Life Science

V

Vaughn, Joyce—Instructor, Dental Assisting
Veldhuisen, Kathleen—Reference Librarian
Vessello, Jerry—Director, Facilities and Operations
Vollmar, Lorene—Program Chair, Dental Assisting

W

Wachal, Ken—Program Chair, Real Estate
Wahner, Royal—Instructor, Manufacturing and Drafting Technology
Ward, H. Jill—Director, Academic and Career Transitions
Warner, Linda—Instructor, Medical Assisting
Warren, John—Instructor and Counselor, Life Skills
Warren, Lynda—Director, Business Services
Wasson, Barbara—Program Chair, Learning Assistance/Skills Development
West, Susan—Instructor, Health and Physical Education
Wetle, Victoria—Program Chair, Health Services Management
Wheeler, Claire—Instructor, Developmental Education
White, Roger—Instructor, Electronics
Whitton, Louanne—Instructor, Adult Basic Education and GED
Whyte, Catherine—Program Chair, Education
Wieczorek, Emily—Instructor, Health Services Management
Wigginton, Barbara—Program Chair, English
Wilkins, Jimmie—Coordinator, Small Business Development Center
Williams, Doris—Director, Dental Assisting, Medical Office Assisting, and Nursing
Willis, Vicki—Assistant to the President, Organizational Development and Planning
Wintermeyer, Larry—Program Chair, Computer Science
Woods, Rae—Counselor
Wright, Larry—Instructor, Accounting and Business Management

Z

Zolkoske, Gary—Instructor, Manufacturing Engineering Technology

STUDENT RIGHTS AND RESPONSIBILITIES

1.0 Preamble

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

2.0 Code of Behavior

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

- 2.1 Practice personal and educational integrity.
 - 2.1.1 Students shall practice academic honesty by not cheating, plagiarizing, or misrepresenting their coursework in any way.
 - 2.1.2 Students shall not misuse college documents, library or computer resources, student records, or identification cards.
- 2.2 Maintain standards of academic performance and contribute to the safe, cooperative, and respectful learning environment throughout the college.
 - 2.2.1 Students shall participate in classroom assignments and discussions and attend classes regularly.
 - 2.2.2 Students shall not disrupt the teaching/learning process.
- 2.3 Discourage bigotry and respect the diversity and dignity of all persons.
 - 2.3.1 Students shall not participate in physical or verbal abuse of any individual.
 - 2.3.2 Students are encouraged to demonstrate respect for all persons.
- 2.4 Respect the rights and property of all persons.
 - 2.4.1 Students shall do nothing to impede another's right to move about freely, express his/herself or enjoy privacy.
 - 2.4.2 Students shall not destroy, deface, or misuse property belonging to an individual or the college.
- 2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.
 - 2.5.1 Students have an ethical obligation to confront, challenge, or report destructive or abusive behavior.
 - 2.5.2 Students shall not abuse alcohol or other drugs.
 - 2.5.3 Students shall abide by federal, state, and local laws.

3.0 Student Rights

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

The college will:

- 3.1 Provide access to education and campus facilities.
 - 3.1.1 The college shall be open to applicants who are qualified according to current admission requirements within the limits of its resources and facilities.
 - 3.1.2 Students have the right to be informed about class requirements and college policy and procedures. Students' access to education shall not be inhibited by prejudiced or capricious academic evaluation.
 - 3.1.3 Students have the right to participate in evaluations of programs, course content, and educational objectives.
 - 3.1.4 If a student is charged with a violation of law not related to his/her activities on campus, the matter shall be of no disciplinary concern to the college, unless the student is incarcerated and cannot comply with educational requirements.
 - 3.1.5 Students, official clubs and organizations may use available college facilities according to college policy and procedures.
- 3.2 Assure the protection of confidential student records and information.
 - 3.2.1 Student records and information are protected and governed by federal and state laws and the college's Student Records Policy and Procedures.

- 3.2.2 Information about student views, beliefs, private activities, and political associations which is acquired or learned by college employees in the course of work is to be treated with professional judgment and 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 learning the content of the course.
 - 3.3.4 Chemeketa Community College, as publisher, bears in conjunction with the staff of student publications, the responsibility for the content of the publications. The publications shall adhere to all applicable Oregon statutes, such as those regarding mass communications.
 - 3.3.5 The student newspaper shall be governed by the Student Newspaper "Guidelines" and shall follow the Canons of Journalism of the American Society of Newspaper Editors.
 - 3.3.6 Student publications shall state that the opinions expressed are not necessarily those of the college or student body.

4.0 Conflict Resolution

- 4.1 When there is a difference of opinion, values, or treatment, members of the Chemeketa community are encouraged to seek resolution directly with the individual with whom the conflict exists or his/her supervisor. When conflict is with a service area of the college, resolution should be sought first in that area or with its supervisor. If the issue involves alleged discrimination such as sexual harassment, the college's Affirmative Action Office should be contacted.
- 4.2 When resolution cannot be reached by talking to the individual (or when contact with the individual would not be appropriate) the Dean of Student Development and Learning 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 Referral to supervisors or appropriate staff to achieve resolution.
 - 4.2.2 Referral to the college ombudsperson. The ombudsperson serves as a resource to resolve disputes on an informal basis. The ombudsperson may find mediators who will work with the referred parties to achieve resolution.
 - 4.2.3 Referral to a fact-finding committee, especially designed to achieve resolution. The committee will be composed of members who are approved by both sides of the issue.
 - 4.2.4 The Dean of Student Development and Learning 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 Learning Resources.

5.0 Student Discipline

- 5.1 If a college staff member believes a student has violated the Student Rights and Responsibilities document, the person or persons involved shall attempt to resolve the issue by personal contact, if possible.
 - 5.1.1 Informal conflict resolution processes (Section 4.2) are encouraged for resolution of possible violations of the Student Rights and Responsibilities document. The Dean of Student 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, other persons, college property or a threat of disrupting the educational process. (See College Policy 4220.) A written report of the circumstances requiring this action shall be submitted to the appropriate director or dean within one working day following the incident with specific directions or expectations and consequences for non-compliance.

2. *Disciplinary Probation* is a written warning to a student which may include interim exclusion. Interim exclusion may not exceed five days.

The appropriate director may impose disciplinary probation.

3. *Suspension* is the exclusion of a student from classes in a program or service area and college-sponsored functions for a specified period of time as set forth in the notice of suspension.

The appropriate dean may impose suspension from classes in a program, from a service area, or from college-sponsored functions. Suspension may not exceed one term.

4. *Expulsion* is the permanent separation of a student from a program or service area or conditional separation from the college.

The Dean of Student Development and Learning 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 Learning Resources specifying the nature of the alleged violation.

5.3.1 At the earliest possible time after a statement of violation, the appropriate director or dean shall meet with the student or issue a written statement for the purpose of advising the student of:

1. The nature of the charge(s).
2. Possible sanctions or sanctions imposed based on evidence.
3. The student's right to counsel, who may assist the student for advising purposes only.
4. The student's rights under college policy.

5.3.2 The student charged may:

1. Accept sanctions imposed by the college staff person. If the student does not submit a written appeal within five working days, it will be concluded that the sanctions have been accepted.
2. Request alternate resolution by notifying the college ombudsperson in writing within five working days.
3. Appeal the action within five working days by contacting the Dean of Student Development and Learning Resources who may use multiple informal processes to resolve the conflict or may refer to the College Appeals Committee.

6.0 College Appeals Process

6.1 A hearing before the College Appeals Committee occurs in situations which may require a summary decision on an unresolved conflict or may result in the permanent expulsion of a student.

6.2 The college president shall appoint two students and three staff members to form a College Appeals Committee. The appeals committee must have a quorum of four to conduct a hearing. The hearing is not considered a formal legal trial.

6.3 The general rules governing a hearing are listed below. The specific rules for a hearing are contained in the guidelines of the College Appeals Committee. A copy of these guidelines is on file in the office of the Dean of Student 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 directly in the hearing.

6.3.4 If the student who filed the appeal or is the subject of the appeal fails to appear for the hearing or agrees in writing not to contest the case, the College Appeals Committee shall review the evidence and prescribe the appropriate action.

6.4 In any case, the student may appeal findings and judgment of the College Appeals Committee to the College Board. If an appeal is submitted, the student must present to the College Board Chairperson a written notice stating the basis for the appeal. The appeal must be filed within five working days after the pronouncement of the judgment of the Appeals Committee; otherwise the right of the appeal shall be waived.

6.5 Upon the filing of an appeal, the College Board Chairperson shall review the record of the hearing and the judgment. The College Board may schedule a hearing if further clarification is needed.

6.6 Within a reasonable time, the College Board Chairperson will respond in writing prescribing the final decision.

7.0 Definitions

7.1 College shall mean Chemeketa Community College.

7.2 College Board shall mean the Board of Education.

7.3 Staff shall mean any employee of the college, both full- and part-time, management, faculty, and classified. Staff rights and responsibilities shall be provided by college policy, procedure, and collective bargaining agreements. Staff are expected to intervene and facilitate adherence to the Student Rights and Responsibilities document.

7.4 Student shall mean any person currently enrolled in a college class.

7.5 Community member shall mean any person not enrolled in a Chemeketa class. A community member shall have the rights and responsibilities provided by local, state, and federal laws. The Student Rights and Responsibilities document does not apply to community members. Community members may contact the college ombudsperson for clarification of their rights and responsibilities.

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

7.7 ASCCC Student Senate shall consist of student representatives of the student body selected according to the ASCCC Constitution and Bylaws.

7.8 Official club and organization shall mean a group of students and staff who have complied with the formal requirements of the college and ASCCC to gain recognition to operate at the college as an official organization.

7.9 The College Appeals Committee shall be composed of students and staff and will conduct non-judicial hearings on alleged violations of the Student Rights and Responsibilities document. The hearings are not considered formal, legal trials.

Students may obtain the Student Records Policy and Guidelines from the Registrar's Office in Building 22 on the Salem Campus.

INDEX

A

Academic Information, 13
Academic Progress/Review Program, 14
Accounting, 42, 106
Accreditation, 3
Admission, 4
 Application form, iii
Adult Basic Education, 31
Advanced placement courses, 15
Aerospace Science, 108
Advising, Academic, 19
Affirmative action policy, 6
Agriculture, 43
 Farm Business Management, 71
Allied Health, 106
American Sign Language (ASL), 108
Anthropology, 43, 106
Apprenticeship, 86
Art, 44, 106
Art gallery, 22
Astronomy, 108
Athletics, Intercollegiate, 23
Auditing courses, 8
Automotive Technology, 44, 108

B

Biology, 45, 114
Board of Education, 162
Bookstore, 17
Botany, 45, 115
Building Construction Training, 46, 113
Building Inspection Technology, 46, 114
Bus passes, 19
Business Administration, 47, 110
Business Management, Small, 98
Business Technology, 48, 115
 Clerical Basics Program, 48
 One-Year Program, 49
 Bookkeeping, 49
 General Clerical, 49
 Office Support, 49
 Word Processing, 49
 Two-Year Programs, 50
 Administrative Assistant, 50
 Business Assistant, 50
 Information Processing, 51
 Legal, 51
 Medical, 52
 Office Accounting, 53

C

Calendar, Academic, 2
Campus Tours, 6
Campuses, Chemeketa, vi, 15
Career preparation, 19
Certificates of Completion, 27
Chemeketa Courier, 22

Chemeketa Creed, 3
Chemistry, 53, 119
Child care, 19
Chiropractic, 54
Civil-Structural Technology, 124
Civil-Structural Engineering Technology, 54
Class changes, 6
Class loads, 6
College for Older Adults, 24
College Level Examination Program, 7, 15
College transfer, 1, 31
 from other colleges, 7
 to other colleges, 31
Communication Skills, 121
Communications, Visual, 99, 158
Community, Education for, 24
Community, Services to, 20
Computer Applications, 116
Computer Electronics Technology, 55
Computer Information Science, 120
Computer Programming, 55
Computer Science, 57, 121
Continuing education classes, 14
Cooperative Work Experience, 20
Counseling, 19
Course descriptions, 103
Course prerequisites, 15
Credentials, 3
Credit by examination, 15
Credit for Prior Learning, 16, 121
Criminal Justice, 57, 120

D

Dallas Chemeketa Campus, vi, 15
Dance, 124
Deaf/hard of hearing and visually impaired,
 Services for, 17
Definitions of Electives, 104
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, 59, 124
Dental Hygiene, 59
Dentistry, 96
Developmental Education, 16
Disabled, Services for, 17
Distance education, 16
Diversity statement, 3
Drafting Technology, 60, 125

CAD, 60
Computer-Aided Design/
 Computer-Aided Mfg., (CAD/CAM), 61
Mechanical Design, 61

E

Eating establishments, Salem Campus, 18
Economics, 64, 127
Education, 128
 Certificate, 65
 Early Childhood, 62, 127
 Elementary, 64
 Professional-Technical Teacher Preparation, 96
 Secondary, 65
Electronics, 129
Electronics Technologies, 66
 Advanced Technology Endorsement, 69
 Computer Electronics, 66
 Electronic Engineering Technician, 67
 Microelectronics/Industrial Electronics, 68, 147
Emergency Medical Technology, 69, 130
Emergency Services, 133
Engineering, 70, 132
English, 71, 131
English as a Non-native Language, 132
English as a Second Language, 17
Enrollment, 4
 How to Enroll at Chemeketa, 5
Enrollment limitations, 6

F

Fabrication, Welding, 101
Facilities, 3
Farm Business Management, 71
Fees, 8
Field Experiences, 134
Film Arts, 133
Financial Aid, 9
 Kinds of Financial Aid
 Available at Chemeketa, 10-11
Financial Services, 72, 134
Fire Protection Technology, 73, 135
 Fire Prevention, 74
 Fire Suppression, 73
First Aid, 18
Food Service, 136
Foods/Nutrition, 134
Foreign Languages, 74
Forest Resources Technology, 75, 136
Forestry, 76
French, 134

G

GED, 31
General Education Requirements:
 EOU, 32
 OIT, 33
 OSU, 34

PSU, 35
SOU, 36
UO, 37
WOU, 38
General Engineering, 137
General information, 1
General Sciences, 45, 138
General Studies, 76
Geography, 77, 138
Geology, 77, 137
German, 138
Grading system, 14
Graduation requirements, 27

H

Health, Allied, 106
Health Services Management, 78, 138
 Claims Analyst/Medical Reception and Billing, 78
 Health Information Technology, 79
 Health Services Management, 79
 Medical Transcription, 80
Health, Health Education, 78, 141
Health and Physical Education, 141
Health Services Management, 78
High School Completion, 27
History, 81, 144
Home Economics, 81
Hospitality and Tourism Management, 82, 143
 Travel Agency Operations, 82
Hotel, Restaurant, and Resort Management, 83
Human Development, 139
Human Development and Family Studies, 140
Human Resources, 141
Human Services, 83, 141
 Addiction Counselor Certification Preparation, 84
 Addiction Studies, 84
 Social Services, 85
Humanities, 144

I

Immunizations, 7
Incompletes, 14
Independent study, 16
Industrial Technology and Apprenticeship, 85
Integrated Circuit Mask Design, 86

J

Japanese, 145
Job placement, 20
Job search, 20
Journalism, 87, 144

L

Law (Pre-), 95
Learning Resource Center, 3
Library, 3
 Chemeketa Cooperative
 Regional Library Service, 22
Literature, 145

M

Management, 87, 145
Manufacturing Engineering Technologies, 88
 Manufacturing Operations, 88
 Manufacturing Technologies, 89, 145
 College Transfer, 89

Maps,
 District, vi
 Salem Campus, 169
Mathematics, 90, 147
McMinnville Chemeketa Campus, vi, 15
Mechanical Design, 61, 145
Medical Office Assisting, 90, 145
Medicine, 96
Military Science, 147
Mission, College, i
Music, 149

N

Newspaper, student, 22
Nursing, 91, 149
 College transfer, 92

O

Oceanography, 150
Occupational Skills Training, 93, 157
Older Adult Tuition, 8

P

Parking, 18
Philosophy, 93, 153
Photography, 150
Physical Education/
 Human Movement Studies, 94, 150
Physics, 94, 152
Placement tests, 4
Placement, job, 20
Planetarium, 22
Political Science, 95, 153
Professional-Technical Programs, 1, 40-41
Professional-Technical Teacher Preparation, 96
Program Guide, 40-41
Programs of Study, 39
Programs
 Professional-Technical and
 College Transfer, 40-41
Psychology, 97, 153

Q

Quality Science, 154

R

Reading, 155
Readmission, 7
Real Estate, 97, 155
Records, student, 13
Refund, tuition, 8
Registration, 6
Religion, 155
Repeating a course, 15
Residence requirements, 8
Ride sharing, 19
Russian, 155

S

Santiam (Stayton) Chemeketa Campus, vi, 15
Scholarships, 10
Secretarial, 156
Senior citizens, 8, 24
Short-Term Training, 21
Skill-building classes, 1
Skills Development, 156
Small Business Management, 98

Social Science, 157
Sociology, 98, 156
Spanish, 157
Speech, 99, 156
Staff, 1, 162
Student(s), 3
 Athletics, 23
 Clubs and organizations, 23
 Cultural forum, 23
 Disabled, 17
 Government, 22
 Insurance, 8
 International, 7
 Internships, 23
 Living accommodations, 18
 Mentor program, 23
 Newspaper, 22
 Peer Assistants, 23
 Programming Board, 22
 Records, 13
 Services, 17

T

Technical and professional programs, 1, 40-41
Theater Arts, 157
Training and Economic Development Center, vi, 15, 20
Transcripts, 13
Transfer,
 from other colleges, 7
 to other colleges, 31
Tuition, 7
Tutoring, 16

V

Veterans' services, 9
Veterinary Medicine, 96
Vision, College, i
Visual Communications, 99, 158

W

Welding, 101, 159
 Welding Fabrication, 101, 159
 Welding Technology, 101
Withdrawal from college, 15
Women's Studies, 160
Woodburn Chemeketa Campus, vi, 15
Work study, 11
Writing, 160

Z

Zoology, 45, 160