

Catalog
Catalog 2001

Chemeketa Community College

2002

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Student Record Form (Application Form)

Providing your social security number is voluntary. If you provide it, the college will use your social security number for keeping records, doing research, aggregate reporting, extending credit and collecting debts. Your social security number will not be given to the general public. If you choose not to provide your social security number, you will not be denied any rights as a student. Please read the statement on the inside back cover of the schedule of classes which describes how your number will be used. Providing your social security number means that you consent to use of the number in the manner described. Contact the Student Record Office (Admissions) for additional information.

Social Security or ID Number

Name: _____
 Last First MI (Previous last name)

Mailing address: _____

 City State Zip

County _____

Telephone _____
 Day Evening

E-mail address: _____

Term I plan to enroll at Chemeketa Community College: (check one)
 Fall (Sept.) Winter (Jan.) Spring (Mar.) Summer (Jun.)

I plan to enroll in the following courses at CCC (check all that apply): Noncredit Credit

Gender: Male Female Date of Birth: _____ Age: _____
 Month/Day/Year

Please circle one: (voluntary)

African American² Hispanic³ American Indian or Alaskan Native⁴ Asian or Pacific Islander⁵ White¹

Are you a citizen of the United States? yes no

Select a program from the list on the back of page that best describes your area of study or area of interest. Program title: _____

Do you plan to earn a degree or certificate/diploma at Chemeketa Community College? (check one)
 Yes, certificate or associate degree^{CD}
 Yes, high school diploma or GED^{HS}
 No, here to take classes^{NO}
 Undecided^{UN}

High school information:
 School name: _____
 City: _____ State: _____

I have completed high school as follows: (check one)
 Did not complete high school^{NC}
 Still in high school^{SH}
 High school graduate^{HS} Year _____
 GED^{GE} Year _____
 Alternative high school diploma^{AH}
 Certificate of Initial Mastery^{CI}
 Certificate of Advanced Mastery^{CA}
 External diploma program^{ED}
 Attendance completion^{AC}
 Proficiency exam^{PE}

Prior to Chemeketa, I have completed college as follows: (check one)
 Have not attended college^{NOC}
 Short-term training, private vocational school award, or other^{VOC}
 One-year certificate from a community college^{CER}
 Associate degree^{AD}
 Bachelor's degree^{BD}
 Master's degree^{MD}
 Doctorate or professional degree^{PD}

Name of last college attended other than Chemeketa:
 Name: _____
 City: _____
 State: _____

Pick the one main reason you are here this term: (check one)

- Take classes to transfer to a 4-year college
- Learn skill to get a job
- Improve job skills
- Explore career or educational options
- Take classes to finish high school or GED
- Improve writing, reading or math skills
- Learn English
- Personal enrichment
- Other

Are you currently employed? (check one)

- Yes, 35+ hrs/wk
- Yes, under 35 hrs/wk
- No, not at this time
- Retired

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

I certify that all statements on this application are complete and true. I also understand that if I am admitted and do not enroll for the term to which I am admitted, I will need to reapply for admission. Submitted materials will not be returned nor duplicated.

 Signature
 Date: _____

Please send this form to:
 Enrollment Services – Bldg. 2-200
 Chemeketa Community College
 PO Box 14007
 Salem, OR 97309-7070
 Phone: 503-399-5006 • Fax: 503-399-3918

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Chemeketa Community College is an equal opportunity, affirmative action institution.



Program Choices

Select one of the following programs of study:

Personal Enrichment (non-degree seeking)

Non-credit only

Use only if *all* courses are non-credit

Credit classes

Professional/Technical Programs

Some programs listed below may have special admission requirements, prerequisites and/or require assessment before admission. Contact Counseling Services at 503-399-5120 for information.

Accounting
Automotive Technician or Auto Body Repair
Building Construction Training
Building Inspection - 1 & 2 Family Plans Examiner (One-year)
Building Inspection - Mechanical Inspector (One-year)
Building Inspection - Structural Inspector (One-year)
Building Inspection - Structural Plans Examiner (One-year)
Building Inspection (Two-year)
Business Technology - Accounting Administrative Asst.
Business Technology - Administrative Asst.
Business Technology - Business Support Specialist
Business Technology - Business Software (One-year)
Business Technology - Business Technology (One-year)
Business Technology - Clerical Basics
Business Technology - Medical Administrative Asst.
Child Development Certificate
Civil Engineering
 Computer-Aided Design/Computer-Aided Manufacturing
Computer Electronics Technology
Computer Programming
Computer Programming - Microcomputer Support Specialist
Criminal Justice (One-year Juvenile Corrections Certificate
 and Two-year AS degree)
Dental Assisting
Drafting Technology - CAD
Early Childhood Education (One- and Two-year)
Education Certificate
Electronic Engineering
Electronic Engineering-Advanced Technology Certificate (One-year)
Emergency Medical Technology - Paramedic
Fire – Advanced Fire Officer (One-year)
Fire – Fire Prevention
Fire – Fire Suppression
Forest Resource Technology
Health Services Management - Health Information Technician
Health Services Management - Health Services Management
Health Services Management - Medical Transcriptionist
High School Completion
Hospitality and Tourism Management
Human Services - Addiction Studies and Social Services
Human Services - Addiction Counseling Certificate
IC Mask Design
Industrial Technology
Management
Manufacturing Operations
Mechanical Design
Medical Office Assisting
Microelectronics/Industrial Electronics
Network Technology
Nursing
 Pre-Nursing
Occupational Skills Training
 Pre-Professional/Technical
Professional Technical Teacher Preparation (One- and Two-year)
Real Estate
Survey Technology
Travel Agency Operations
Visual Communications
Vineyard Management
Vineyard Operations
Welding
Welding Fabrication
Winemaking (Two-year)
Winemaking Certificate

Lower division courses of study which may be transferred to Oregon's four-year colleges and universities.

LDC-BUSINESS

*** Accounting
*** Business Administration

LDC-COMPUTER SCIENCES

*** Computer Science

LDC-EDUCATION

*** Elementary
*** Secondary

LDC-ENGINEERING

*** Engineering

LDC-FORESTRY

*** Forestry

LDC-GENERAL STUDIES

*** Exploratory
 General Studies
 Undecided Majors

LDC-HEALTH

*** Community Health
*** Health Education
*** Nursing

LDC-HOME ECONOMICS

*** Child Development
*** Home Economics

LDC-HOTEL, RESTAURANT AND RESORT MANAGEMENT

*** Hotel, Restaurant and Tourism Management

LDC-HUMANITIES

*** Architecture
*** Art
*** English
*** Foreign Languages
*** Journalism
 Literature
*** Music
*** Philosophy
*** Speech
*** Theater

LDC-MATHEMATICS

*** Mathematics

LDC-PHYSICAL EDUCATION / HUMAN MOVEMENT STUDIES

*** Physical Education

LDC-SCIENCE

*** Agriculture
*** Biology
*** Chemistry
*** Chiropractic
*** Dental Hygiene
*** Entomology
*** Environmental Science
*** Geology
*** Horticulture
*** Oceanography
*** Physical Science
*** Physics
*** Pre-Professional Study
 (Medicine, Dentistry, and Veterinary Medicine)
*** Zoology

LDC-SOCIAL SCIENCES

*** Anthropology
*** Criminal Justice
*** Economics
*** Ethnic Studies
*** Geography
*** History
*** Political Science
*** Pre-Law
*** Psychology
*** Sociology

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

For use with the Student Record Form on page iii.

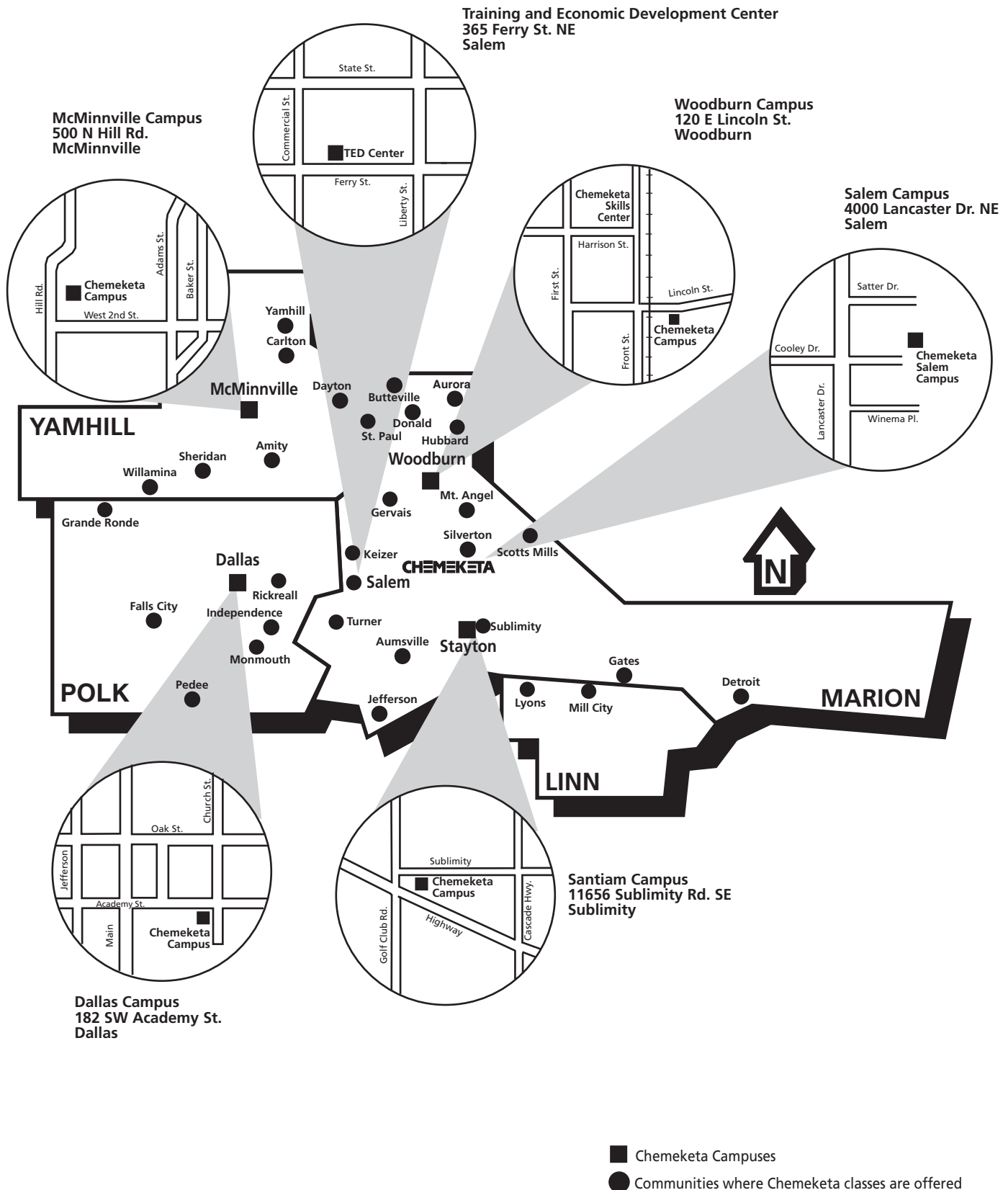
Abstract

About Chemeketa

Chemeketa Community College



Chemeketa Community College District



Welcome to Chemeketa

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Chemeketa is your community college. It is a place where you can accomplish almost any educational goal you have in mind.

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 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 can go to school full time to finish a one- or two-year program. You can go part time to take a class or a workshop.

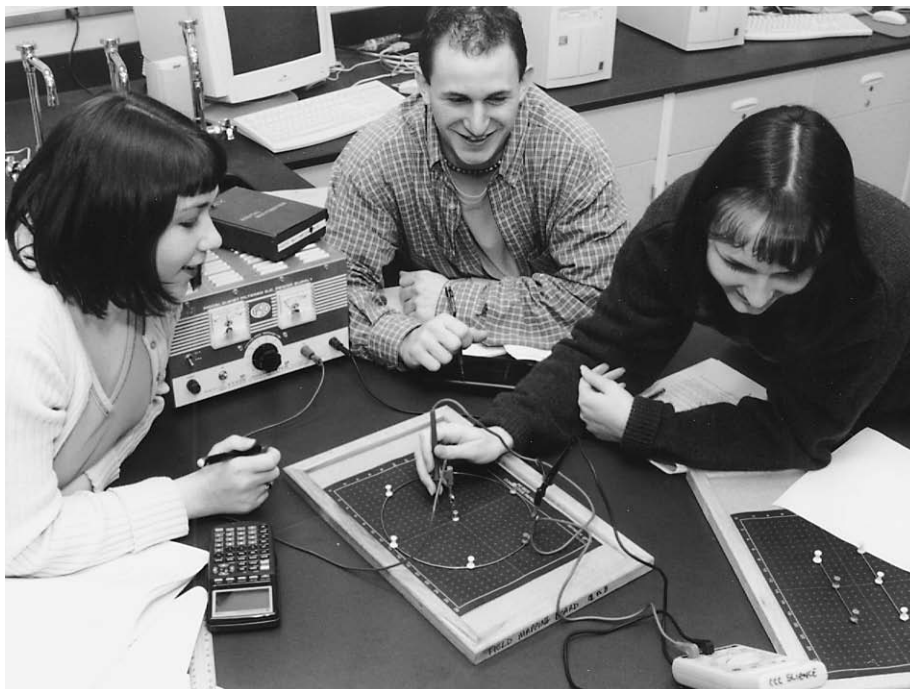
You can attend classes and special events on the Salem Campus or at the college's Santiam, Dallas, McMinnville or Woodburn campuses. We also offer classes in schools and other locations in communities throughout the college district. You can even stay home and take a class by television or via the Internet.

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

Programs

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 35 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.

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.

Academic Calendar

Fall 2001 Winter 2002 Spring 2002 Summer 2002 (tentative) Fall 2002 (tentative)

Registration Begins

Please check each term's Schedule of Classes for registration dates and information

Day and evening classes begin	June 25	September 24	January 7	April 1	June 24	September 30
Last day to withdraw and receive a refund	July 6	October 5	January 18	April 12	July 5	October 11
Last day to register or add classes	July 13	October 12	January 25	April 19	July 12	October 18
Audit requests due	July 20	October 19	February 1	April 26	July 19	October 25
Graduation applications for next term due	July 20	October 19	February 1	April 26	July 19	October 25
Holidays	July 4	November 12 November 22 November 23	January 21	May 27	July 4	November 11 November 28 November 29
Last day to withdraw from classes without responsibility for grades	July 27	November 16	March 1	May 24	July 26	November 22
Review and final exam	August 13-16	December 10-13	March 18-21	June 10-13	August 12-15	December 16-19
End of term	August 17	December 14	March 22	June 14	August 16	December 20
Graduation						
GED and High School Completion				June 15 (3 p.m.)		
One- and two-year programs				June 15 (7 p.m.)		

- *Lifelong learning* is important at Chemeketa. We encourage you to continue to learn throughout your life and 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; finish high school; or learn English as a second language.

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

Faculty

Chemeketa has over 250 full-time faculty members. In general, faculty who teach college transfer courses have at least a master's degree; some have doctorates. Faculty in professional-technical programs generally have a rich background which combines education with practical, on-the-job experience. In addition, we hire an average of 600 adjunct faculty each year. Many of them teach evening classes on subjects directly related to their full-time jobs in the community.

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.

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

Accreditation

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.

Location

The Chemeketa Community College district covers more than 2,600 square miles in Oregon's Mid-Willamette Valley, including 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.

Facilities

Chemeketa's Salem Campus has 10 major buildings and a number of smaller buildings. Building 2 houses Counseling and Career Services, Enrollment Services, Financial Aid, Cashier's Office, Tutoring Services Center, Study Skills Center and the Planetarium. By winter term 2001-2002, Chemeketa expects that an addition dedicated to student life activities will be complete.

The Learning Resource Center is located in Building 9. It includes the library equipped with computers for research, and Media Services with videos and other audio-visual materials. The Learning Resource Center also includes a television studio, teleconferencing capability, and facilities for audio, graphics and multimedia production.

The Technology Classroom Building 6 has up-to-date computer labs and an auditorium, where a variety of lectures and performances are scheduled throughout the year.

Our science and health building has modern, well-equipped laboratories for science and health-related programs. Workout and weight rooms, racquetball courts, and a gymnasium are located in the physical education building. Other buildings provide modern classrooms, and welding and manufacturing shops. The fire-training building also serves as a fire station.

For more information about facilities on the Salem Campus, contact the Facilities Scheduling Office in Building 2, or call 503-399-5008.

Chemeketa's Dallas, McMinnville, Santiam, and Woodburn campuses have classrooms, up-to-date laboratories and offices.

Chemeketa Community College

Vision

We are a dynamic community of learners and innovators, working together to create opportunities for people to reach their potential through learning.

Mission

We inspire people to achieve intellectual growth, personal fulfillment and career success through a lifetime of learning.

Values

Creativity *Through reflection, analysis, and imagination, we design our programs and services to meet changing needs.*

Caring *Each individual contributes to our learning environment. We care for and respect each other.*

Integrity *We provide current, effective educational services of the highest quality. We are responsible guardians of the public trust.*

Collaboration *We invent resourceful and innovative solutions in partnership with others. We respond with optimism and enthusiasm to opportunities for positive change.*

Diversity *We are enriched by the diversity of our students, staff and community. We welcome diverse perspectives and encourage the free exchange of ideas.*

Approved by the Board of Education September 15, 1999

Admission and Registration

Enrolling at Chemeketa

503-399-5006; Fax 503-399-3918

e-mail: admissions@chemeketa.edu

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.

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 in each term's *Schedule of Classes*. Before you submit this form, contact Counseling and Career Services 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 can also meet with a counselor at Chemeketa's Dallas, McMinnville, Santiam and Woodburn campuses.

Students younger than 18 who do not have a high school diploma or GED certificate should contact the Enrollment Services (Admissions) Office in Building 2 on the Salem Campus.

Placement tests

503-399-6556

If you are a new student pursuing a degree or certificate, 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 Counseling and Career Services in Building 2 on the Salem Campus or from Chemeketa's Dallas, McMinnville, Santiam and Woodburn campuses.

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 Business Services in Building 2.

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, please call the touch-tone registration system or complete a Student Schedule Change (add-drop) Form. Forms are available in the Enrollment Center, staff offices and Counseling and Career Services. We recommend the changes be approved by your academic advisor. Turn in the form at the Enrollment Center in Building 2. 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

How to enroll at Chemeketa

Student Classification	1. Academic and career decision	2. Placement testing	3. Applying for admission	4. Registration for classes
Enrolling for most Salem Campus classes* **	Contact Counseling and Career Services, Building 2, Salem Campus (optional).	Contact Counseling and Career Services, Building 2, Salem Campus.	Submit Student Record Form with Enrollment Services, Building 2, Salem Campus.	New Students —Register following directions sent by Enrollment Services. 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 Counseling and Career Services, Building 2, Salem Campus.	Contact nearest Chemeketa campus.	Submit Student Record Form at the nearest Chemeketa campus or with Enrollment Services, Building 2, Salem Campus.	New Students —Follow procedure above for enrolling on Salem Campus. Continuing Students —Follow procedure above for enrolling on Salem Campus.
Enrolling for Salem evening, weekend, or non-credit classes	Contact Counseling and Career Services, Building 2, Salem Campus (optional).	Contact Counseling and Career Services, Building 2, Salem Campus (optional).	Submit Student Record Form with Enrollment Services, Building 2, 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 22, Salem Campus; or the college's Dallas, McMinnville, Santiam or Woodburn campuses.	GED: Contact Developmental Education Office, Building 22. ESL: Contact the Developmental Education Office, Building 22, Salem Campus.	Submit Student Record Form with Enrollment Services, Building 2, Salem Campus. Students 16 to 18 must have an Underage Consent Form.	Consult quarterly <i>Schedule of Classes</i> . Open entry during term.
Interested in earning a high school diploma	Contact the Winema School Office, Building 50, Salem Campus; or the college's Dallas, McMinnville, Santiam or Woodburn campuses (optional). During summer, contact the Developmental Education Office, Building 22.	Contact Counseling and Career Services, Building 2, Salem Campus.	Submit high school transcript with Winema School Office, Building 50, Salem Campus. Submit Student Record Form with Enrollment Services, Building 2, Salem Campus. Students 16 to 18 must have an Underage Consent Form and be referred by the Downtown Learning Center if living in the Salem-Keizer School District.	Follow directions sent by Enrollment Services before registration.
*These programs have prerequisites and require assessment before admission. Contact Counseling and Career Services at 503-399-5120 for assessment.				
Accounting Automotive Technology Business Technology Civil Engineering Technology Computer Programming Criminal Justice	Dental Assisting Drafting Technology—CAD Early Childhood Education Education Certificate Electronics Technologies Financial Services	Forest Resources Technology Health Services Management Medical Transcription Hospitality and Tourism Management	Human Services Integrated Circuit Mask Design Management Manufacturing Engineering Technologies Medical Office Assisting	Network Technology Real Estate Visual Communications Vineyard Management Vineyard Operations Winemaking
**These programs have special admission requirements or enrollment limits. Contact Enrollment Services at 503-399-5006 for details.				
Building Inspection	Emergency Medical Technology	Fire Suppression	Network Technology	Nursing (RN, LPN, Nursing Assisting, re-entry course)

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

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 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 Counseling and Career Services.

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

503-399-5006

You may transfer credits from other colleges you have attended by requesting they send an official copy of your transcript to our Enrollment Services (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 Enrollment Services 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)

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 (ORS 659); 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 per-

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

Questions or complaints may be directed to the Affirmative Action Officer, P.O. Box 14007, Salem, Oregon 97309, 503-399-8677.



Office. Then contact the Admissions Office and request, in writing, an evaluation of your transcripts and scores. For more CLEP and Advanced Placement information, see page 17.

Chemeketa also accepts some credits from the military and the Community College of the Air Force. Contact the Enrollment Services Office for details.

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@chemeketa.edu

An average of about 200 international students attend Chemeketa each year representing a variety of cultures and ethnicities. They come from more than 20 different countries. International students may enroll in any of our professional-

technical programs or college transfer programs, or attend intensive English language training.

Chemeketa offers an outstanding range of international student services and activities to help students get started and to succeed. These services are offered through the Student Life Office. Some of these services include: an orientation program, conversation partners, drop-in advising, volunteer opportunities, housing assistance, writing center, academic tutoring and clubs.

If you are a citizen of another country, you may enter the college any term, four times a year. You must meet certain federal immigration and college requirements before being admitted to Chemeketa. Once you are admitted you are expected to maintain levels of academic achievement acceptable to the United States Immigration Service and to the college. Chemeketa has special application materials and deadlines for international students. Chemeketa has established enrollment limits for international students, so we suggest you apply as early as possible. For current information on admissions requirements and the schedule for orientation and enrollment, contact Teter Kapan, International Student Services.

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 after you register. Please refer to the current term *Schedule of Classes* for additional information.

Credit courses

Use the chart on page 8 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 118.

Política de acción afirmativa y contra el acoso

Es la política de Chemeketa Community College que no existirá ninguna discriminación o acoso a base de raza, color de piel, religión, sexo, origen nacional, estado civil, edad, incapacidad o estado familiar, en ninguna área, actividad u operación del colegio, así como requiere el Título IX de las Enmiendas Educativas de 1972; la Sección 504 del Acto de Rehabilitación de 1973; los títulos VI y VII del Acto de Derechos Civiles de 1964; el Acto contra la Discriminación a Base de la Edad; el Acto a Favor de los Americanos con Deshabilitades de 1990; la Ley de Oregon de

Derechos Civiles (ORS 659); y sus regulaciones correspondientes.

La política del colegio también prohíbe el acoso a base de todos los factores arriba mencionados. El acoso se define por cualquier comportamiento o demostración inoportuno, sea verbal, físico o visual, el cual se conforma con cualquiera de la siguiente criteria: 1) la sumisión a tal condición se entiende como una condición implícita o explícita del empleo o del cumplimiento académico; 2) la sumisión a o el rechazo de la condición por un empleado o estudiante es usado como la base de decisiones que afectan el

empleo o el cumplimiento académico de esa persona; 3) la condición tiene el propósito o el efecto de interferir inmoderadamente con el cumplimiento laboral o académico del individuo, o de crear un ambiente laboral o académico intimidante, hostil u ofensivo.

Preguntas o quejas deben ser dirigidas a la oficial de acción afirmativa Mariann Hyland, P.O. Box 14007, Salem, Oregon 97309-7070, 503-399-8677.

Non-credit courses

The cost of most non-credit courses is \$2.70 per class hour with a \$10 minimum charge, or as stated in the term *Schedule of Classes*.

The term *Schedule of Classes* lists any charges for adult basic education, General Educational Development (GED), and non-credit English as a second language classes. There is an \$85 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, for some classes offered by the college, you pay only 35 percent of tuition plus fees. 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 90 days prior to the term you begin. 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 for tuition purposes for 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 Enrollment Center in Building 2, Room 200 before the end of the fourth week of the term.

Refund policy

When you register for a class, you agree to pay for it whether or not you attend.

Credit Class Tuition

No. of Credit Hours	Oregon Students	Out-of-State Students	International Students
1	\$39	\$135	\$155
2	\$78	\$270	\$310
3	\$117	\$405	\$465
4	\$156	\$540	\$620
5	\$195	\$675	\$775
6	\$234	\$810	\$930
7	\$273	\$945	\$1085
8	\$312	\$1080	\$1240
9	\$351	\$1215	\$1395
10	\$390	\$1350	\$1550
11	\$429	\$1485	\$1705
12	\$468	\$1620	\$1860
13	\$507	\$1755	\$2015
14	\$546	\$1890	\$2170
15	\$585	\$2025	\$2325
16	\$624	\$2160	\$2480
17	\$663	\$2295	\$2635
18	\$702	\$2430	\$2790

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

If the college cancels a class, you will get a full refund of tuition and fees.

If you decide to drop a class, you may do so by using the telephone registration system or by visiting the Enrollment Center, Building 2 Salem Campus or your nearest Chemeketa Outreach campus during regular business hours. If you drop a class that meets for the entire term (full term class) within the first two weeks of the term, you will receive a refund of tuition and fees as long as you have no outstanding debts. Less than full term classes have a shorter refund period.

You will not receive a refund or credit toward another class for any classes dropped after the end of the refund period. Refunds for classes paid by Visa or Mastercard will be credited back to the credit card. Refunds are not issued for amounts under \$5 unless requested. Changes in the number of hours for

The Chemeketa Creed

The Chemeketa Creed is part of the Student Rights and Responsibilities Document which can be found on pages 182 and 183 of this catalog. The creed lists standards of behavior expected of students as they become members of our educational community.

1.0 Preamble

Chemeketa Community College provides an environment that celebrates the freedom to learn and the

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

2.0 Code of Behavior

As a community of people seeking education, Chemeketa students are dedicated to improving personally

and academically. Choosing to join the college community obligates each member to a code of behavior. Chemeketa students will:

2.1 Practice personal and educational integrity.

2.2 Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.



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 Enrollment Services Center in Building 2. 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 International

Student Office at 503-399-5141 for further information.

which you are registered may affect your financial aid, agency or veteran's benefits.

See information under **Withdrawal from College**, page 17.

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 48 to 114.

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 \$5 if you are not enrolled in a PE class.

Contact the Cashier's Office in Building 2 on the Salem Campus for more information on fees and program costs.

Veterans' services

503-399-5004

e-mail: veterans@chemeketa.edu

The Veteran Services Office in Building 2 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 Enrollment Center in Building 2.

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

Policy of satisfactory progress: In accordance with a Veterans Administration directive, if you receive veterans' educational

- 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 accom-

pany 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.

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 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' Office 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 2 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 U.S. 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 U.S. 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 Counseling and Career Services.

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 12 and 13.

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 Counseling and Career Services on the Salem Campus or Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses for details.
- Apply for admission to Chemeketa.

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.

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.

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.
- 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.
- 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 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 2001-2002 will be \$3,750. 	<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 \$450 to \$2,000 a year. • The estimated highest award at Chemeketa for 2001-2002 will be \$450. 	<ul style="list-style-type: none"> • The Financial Aid Office will determine and then notify you of your eligibility.
Oregon Opportunity 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 2001-2002 will be at least \$1017. 	<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 \$2,250 in an academic year. • The highest award at Chemeketa for 2001-2002 will be \$2,250. • Priority will be given to second-year students. 	<ul style="list-style-type: none"> • You do not have to pay any interest or principle 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 five 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 days before the first check is issued.

Programs and source of funding	Eligibility requirements	Available amounts	Special information
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Loans

<p>Federal Subsidized Stafford Loan</p> <p>(funded by commercial lenders with state or other agency guarantee and interest subsidy from the federal government)</p>	<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.
<p>Federal Unsubsidized Stafford Loan</p> <p>(Provides for insured loans for borrowers who do not qualify for federally subsidized Stafford Loans.</p> <p>Terms and conditions for subsidized Stafford Loans apply to unsubsidized Stafford Loans.)</p>	<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.
<p>Federal "PLUS" program</p> <p>(funded by commercial lenders with state or other agency guarantee)</p>	<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

<p>Federal Work Study Program</p>		<ul style="list-style-type: none"> Amounts vary according to your financial need. Funds usually are not more than \$800 a term or \$2,400 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.
<p>Chemeketa part-time employment</p> <p>(funded by Chemeketa Community College)</p>	<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.
<p>Part-time jobs</p> <p>(funded by private businesses)</p>	<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 2000-2001 was \$7.11 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.



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

Your aid stops if you completely withdraw, officially or unofficially, from Chemeketa. 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.) Refunds are credited to the financial aid programs in the following sequence: 1) unsubsidized Stafford Loan, 2) subsidized Stafford Loan, 3) Perkins Loan, 4) "PLUS" Loan, 5) Pell Grant, 6) Supplemental Educational Opportunity Grant, 7) other Title IV aid and 8) student.

Repayments

When a student who has received financial aid completely withdraws, officially or unofficially, the Financial Aid Office will determine whether the student was entitled to all of the financial aid received. If not, the Financial Aid Office will determine what portion of the financial aid the student owes, and will notify the student. Repayments are based on the last withdrawal date. 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) Pell Grant, and 2) Supplemental Educational Opportunity Grant. Students have 30 days from the date of the bill to repay the funds. Students who do not repay in full will have their debts turned over to the U.S. Department of Education for collection.

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.

Questions? Call for information

Campus Welcome Center,
503-399-5155

Chemeketa's Welcome Center is located in Counseling and Career Services 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 Welcome 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

Academic Information

Student records and transcripts

503-399-5001, e-mail: regist@chemeketa.edu

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.

Transcripts of Chemeketa credit courses are kept permanently. You may obtain an official transcript from the Enrollment Center in Building 2, Room 200 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 Enrollment Center clears your obligation.

We recommend you keep the Enrollment Center 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 Department of Community Colleges and Workforce Development, and the Oregon Community College Assoc. 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 to 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 continue with their education and to find out whether community college courses are a good basis for further education;
- The Oregon Employment Department, which gathers information, including employment and earnings, to help state and local agencies plan education and training services to help Oregon citizens get the best jobs available;
- The Oregon Department of Education, to provide reports to local, state and federal governments. The information is used to learn about education, training, and job market trends for planning, research and program improvement.
- 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 Service, if you take the Asset placement test, for educational research purposes.

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

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. However, you may request no information be released by completing a Non-Disclosure Form at the Enrollment Center in Building 2, Room 200.

Family Educational Rights and Privacy Act (FERPA)

FERPA affords students the following rights with respect to their education records:

1. The right to inspect and review the student's education records within 45 days of the student's written request.
2. The right to request the amendment of the student's education records to ensure that they are not inaccurate, misleading, or otherwise in violation of the student's privacy or other rights.
3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests.
4. The right to file with the U.S. Department of Education a complaint concerning alleged failures by the college to comply with the requirements of FERPA.
5. The right to obtain a copy of the college's student records policy.

Directory Information

Directory information is available to anyone upon request unless the student completes a Non-Disclosure Form. Chemeketa Community College considers the following to be directory information:

- dates and terms of enrollment
- degree or certificate earned and dates earned
- athletic statistics and honors

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 awards

Students who earn a 4.0 grade point average receive certificates of recognition. Students earning a grade point average of 3.50 or higher are listed on the college honor roll. These honors are given for grades earned in a single term and are not cumulative. Students must complete at least 12 credit hours in the term to be considered for placement on the honor roll.

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 Enrollment Center in Building 2, Room 200 to change your grade to an R (Repeated). Please note that both the original course and the repeated course must have been taken at a Chemeketa Community College campus to request the original grade be changed to an R. 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 2, Room 200 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 or web registration systems or you may obtain a Student Schedule Change (add-drop) Form from the Enrollment Center, Counseling and Career Services, or Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. Submit the completed form to the Enrollment Center 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 or web registration systems 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 department 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

503-399-6556

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 Counseling and Career Services about what courses and scores are accepted at Chemeketa.

College Level Examination Program (CLEP)

503-399-6556

You may earn credit for some college courses through the College Level Examination Program (CLEP). Inquire at Counseling and Career Services to determine which examinations and scores Chemeketa accepts. If you wish to take a CLEP examination, schedule a testing time through Counseling and Career Services.

Credit by examination

503-399-6556

Another way to earn credit for some courses is to demonstrate your college-level ability by successfully passing 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 pays for the course.

Contact Counseling and Career Services 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:

- Study of a topic which is not covered in an existing course.
- In-depth study of a topic introduced in a course.
- Field studies.
- 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 Counseling and Career Services.

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 online. Students may be required to attend some class meetings on the Salem Campus.

Listings, registration procedures, and information about distance education courses are available on the college web site bbs.chemeketa.edu and are published each term in the *Schedule of Classes*. (Chemeketa charges a fee of \$35 per course in addition to tuition.)

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 Library, the Grand Ronde Education Center, Oregon Coast Community College in Newport, or at Chemeketa's Dallas, McMinnville, Santiam, or Woodburn campuses. Videos for most courses are available by rental. Chemeketa charges a fee of \$20 per telecourse in addition to tuition.

Chemeketa television (CTV) broadcasts live Salem Campus classes to the Dallas, McMinnville, Santiam, and Woodburn campuses, to the Grand Ronde Education Center. 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 Internet Service Provider account to access course material, to send your coursework to campus and to communicate with your instructor and classmates. Chemeketa charges a fee of \$35 per course in addition to tuition.

CTV cable classes can be taken in your home as they are being taught simultaneously on campus. Use your telephone to interact with the class and instructor. Classes can always be recorded to watch later at your own convenience.

Online Telecourses See information listed above for telecourses. You will need access to a computer, modem, and active Internet account and web browser to send coursework to campus and to communicate with your instructor and classmates.

Student-instructor conferences

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

Student Development Services

Tutoring services

503-399-5190

Tutoring is available in most subject areas to all registered Chemeketa students. Visit the tutoring center upstairs in Building 2, on the Salem Campus. Tutoring is also available on-line via e-mail or WebBoard; addresses can be found on our web site: www.chemeketa.edu/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 and English as a Second Language tutoring on a one-to-one basis in Salem and throughout the Chemeketa district. Contact the literacy volunteer program coordinator in Building 16.

Student's Check List

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

- taken mathematics, reading, and writing placement tests? Contact Counseling and Career Services, Salem Campus, Building 2, 503-399-5120.
- submitted a Student Record Form? Contact the Enrollment Center, Salem Campus, Building 2, Room 200, 503-399-5006.
- checked to find out if there are special requirements for the program you want to enter? Contact the Enrollment Center, Salem Campus, Building 2, 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 2, 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 Veteran's Office, Salem Campus, Building 2, Room 200, 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 Counseling and Career Services, Salem Campus, Building 2, at the Chemeketa campus in your community, or by calling 503-399-5006.



of instruction from beginning through advanced. Advanced classes may be taken for college credit.

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.

Services for Students with Disabilities

503-399-5192 voice/TTY

The office of Services for Students with Disabilities (SSD) in Building 2 on the Salem Campus has information about services and accommodations for students with disabilities.

Study Skills Program

503-399-5162

Learning assistance services and skill-building classes are available to improve the academic skills you'll need for success in college. Individual, lecture and online classes are offered in reading, study skills, critical thinking, vocabulary building and spelling. For more information on these classes and services, contact the Study Skills Center in Building 2, Room 212 on the Salem Campus or look under the *Academics* heading on the Chemeketa web site.

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 22 on the Salem Campus. Staff members will help you learn to speak, read, and write English.

Services on the Salem Campus include:

Counseling and Career Services—Building 2, 503-399-5120, for admission and career-planning assistance.

English as a Second Language program—Building 22, 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.

Chemeketa Language and Culture Institute

503-315-4290

The Language Institute provides English instruction to meet the needs of international students planning to enter American colleges and universities. It also serves students who want to experience American culture and improve their English for personal or professional reasons. The Institute offers six levels

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.

If you have a disability, including learning, psychiatric, sensory, orthopedic or otherwise, you are encouraged to use campus support services. The SSD office is available to help you assess your needs, coordinate access to facilities and processes, and plan academic adjustments that will make classes accessible.

If you need special accommodations for classes or college events, contact the SSD office at least five working days in advance. If you need an alternative format for this publication, call the SSD office at 503-399-5192 (voice/TTY).

A TRIO student support service provides additional support in supplemental instruction and mentoring for students with disabilities who qualify as first generation college students planning to transfer to a four year college or university.

Services for students who are deaf and hard of hearing

503-399-5122 voice or 399-5049 TTY

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

Trio Projects

503-315-4293

Chemeketa currently operates three TRIO programs. Each program is designed to provide support for low-income, first-generation students wanting to pursue higher education.

Student Support Services offers academic support, advising, transfer information and college visits to students planning to transfer to a four-year college or university. Students may earn six college credits through program sponsored classes and are eligible to borrow textbooks at no cost. **Talent Search** provides

students in sixth through twelfth grade an opportunity to explore the benefits of a college education. Chemeketa students can participate in the program by being a mentor for a student in the program. Mentors develop goals and plan for their academic future. **Upward Bound** is a college preparatory program for high school students. The program provides services year-round such as tutoring, after-school activities and Saturday workshops. During the summer, the program provides a six week academy where students earn high school credits.

Migrant Education Programs

Chemeketa currently operates two migrant education programs to help migrant and seasonal farm workers and their children attend classes. These programs are funded by the U.S. Department of Education.

College Assistance Migrant Program (CAMP) based in Salem offers first-year scholarships and academic and personal support for students planning to transfer to a four-year college or university. For information about CAMP call 503-589-7778.

High School Equivalency Program (HEP), located in Woodburn, assists students each year to complete instruction and take the General Educational Development (GED) test. HEP offers classes in the afternoon and evenings and provides funds for transportation and child care. For information about HEP, call 503- 981-6253.

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 classes offered by the center. For more information or to make an appointment, call or stop by the Writing Center in Building 35, Room 101.

Student Services

Library Services

503-399-5043

☐ terra.chemeketa.edu/library/

The library is located on the second floor of Building 9, the Learning Resource Center (LRC). The collection of books, magazines, journals, newspapers, pamphlets, audio cassettes, video cassettes, laser discs and slides focus on the courses taught at Chemeketa. Our online catalog connects you to other libraries in the area and allows you to place holds on materials to be delivered here. An interlibrary loan service can locate other materials throughout Oregon and the world and have them sent to Chemeketa.

Computers are available which allow you to access library materials, electronic information resources, the Internet and word processing programs.

Within the library are group study rooms and group media viewing rooms that can be scheduled in advance, and an open media view area for use at any time. Other equipment available includes typewriters, calculators and photocopiers. Staff can assist you in making transparencies and duplicating audio cassettes. The LRC houses an art collection, a small collection of materials in Spanish, children's books, "easy readers" and periodical stacks that you can browse through.

The library is open to the community. Chemeketa students, faculty and staff may check out most materials. As a member of the Chemeketa Cooperative Regional Library Service (CCRLS—see page 26), the library also allows people with a valid CCRLS card to borrow materials.

Bookstore

503-399-5131

☐ www.bookstore.chemeketa.edu

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, 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, tutoring services, 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 on 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 a small fee.

First aid

503-399-5023

For first aid services on the Salem Campus, call Public Safety at 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, the Enrollment Center in Building 2, 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 Public Safety Office.

Smoking on the Salem Campus

503-399-5023

College policy prohibits the use of tobacco products inside all college buildings, or within 20 feet of any building entrance. In addition, there are certain areas outside of buildings that have been designated as Non-Smoking areas. Non-smoking areas are: the covered area near the entrance to Building 2 facing the old quad, the curved brick area adjacent to the south side of Building 2 facing the new quad, the Art Gallery entrance to building, and all exterior stairwells leading to upper floors of buildings, e.g., buildings 6 and 8.

Non-smoking areas outside of buildings are clearly identified with appropriate signs. Smokers are asked to be considerate of non-smokers and refrain from smoking or using tobacco products in non-smoking areas, and also to use appropriate ash cans and refuse containers.

Where to eat

Food Central, Building 2, 503-399-5180. Open Monday through Friday. Seven station food court featuring Wraps,

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.



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. 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 care for approximately 90 children, ages six weeks to six years. 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 2, has a list of other child-care centers in the Salem area, or you may call Salem's Child Care Information Service, 503-585-2491. Local child care providers advertise their services on the bulletin board located outside the Student Life Office in Building 3, Room 101.

Grill, Grab -n- Go, Soup Express, Hot Entrees, Salad Toss and a Pastry/Dessert Station.

Java Coast Espresso, Building 2. Monday through Thursday until 9 p.m. and Saturday, 8 a.m. to 1:30 p.m. Espresso, gourmet coffees, pastries and smoothies.

Summet Subs and Barrel Head Pizza, Building 2, 503-399-5180. Monday through Thursday until 9 p.m. and Saturday, 10 a.m. to 1:30 p.m. Sub sandwiches made to order and great pizza.

Crossroads Café, Building 4. Monday through Friday. Espresso, gourmet coffees, pastries, soup, sandwiches and salads.

Blue Moon Café, MaPS Building 48, 503-399-8005. A sit down diner serving gourmet burgers, salads, blue plate specials and great ice cream shakes.

Catering, NW Hospitality Services, 503-399-3906. On campus delivery coffee services, lunches and dinners.

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 on the Salem Campus maintains a bulletin board listing available housing, including apartments for rent, rooms for rent in homes, homes for rent, and roommates wanted. You may post a notice and also check this bulletin board for housing.

Child care

Chemeketa offers two child care programs on the Salem Campus. Both programs are accredited by the National Academy of Early Childhood Programs.

Lost and found

503-399-5116

The Student Life Office works with the Chemeketa Public Safety Department in maintaining Lost and Found. Lost and found items are kept in the Student Life Office. If you have lost or found an item, please check with this office.

Bus Service

Local bus service to the Salem campus is available through the Cherriots. Carts and Wheels provides transportation to the campus from Woodburn, Silverton and Dallas.

For more information on all routes and schedules, contact the Salem Area Transit Information Office at 503-588-BUSS (TTY for hearing impaired: 503-370-8691) or visit their web site: www.cherriots.org.

Information about Carts and Wheels bus service is available by calling 503-585-5187 (TDD 503-364-7869)

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

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 for more information.

Counseling and Career Services

Counseling Services

503-399-5120

If you are interested in educational, vocational, or personal counseling, contact our Counseling and Career Services 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 and Career Services are available to both current and prospective students.

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 Counseling and Career Services for current hours of operation.

Career planning workshops

Career planning workshops are conducted by counseling staff to assist persons in choosing or changing careers. 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 Counseling and Career Services for a current schedule of career planning workshops.

Career Resource Center

Counseling and Career Services 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 Counseling and Career Services.



SKILLS program

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, Counseling and Career Services will assist in changing advisor assignments.

If you attend only evening classes or are a part-time student, we encourage you to visit Counseling and Career Services periodically for academic advising. You may also consult with a counselor at our Dallas, McMinnville, Santiam, or Woodburn campuses.

Job Search and Placement



ing employer contact and job search information at the resource center.

Videotapes on job search techniques are available in the Learning Resource Center in Building 9 and at Counseling and Career Services 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*.

Job Placement Services

503-399-5026

If you are interested in finding a job, learning job search techniques or finding out how you can combine classroom learning with work-based learning experiences, contact the Counseling and Career Services in Building 2 on the Salem Campus.

Job search assistance

If you are nearing graduation, we encourage you to visit the center at least one term before you will graduate. Job Placement 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 advertised in the Job Placement Office. Referrals are issued to qualified students and graduates who are registered with the Job Placement Office.

On-campus recruiting

Job Placement 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 includ-

Cooperative Work Experience

503-399-5029

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 number of hours you work per week. You will participate in weekly seminars or meet with a faculty member on a regular basis to discuss your progress.

CWE training can help you establish references for future employment and expand your knowledge of and experience in a particular kind of work while you are earning college credit. CWE may also improve your ability to make the transition from school to work when you complete your program.

Most of Chemeketa's professional-technical programs include CWE either as an elective or as a graduation requirement. Transfer students may also participate in CWE for elective credit. The CWE office is in Counseling and Career Services, Building 2 on the Salem Campus.

Occupational Skills Training

503-399-5028

Occupational Skills Training, Building 20. Students can earn college credit and a certificate of completion for work-based training at approved community training sites throughout the state. Instruction is based on a personalized curriculum created by the Skills Training coordinator, site supervisor, student, or sponsoring vocational consultant if a sponsoring agency is involved. Occupational Skills Training is financial aid eligible if a student qualifies, and relevant classes may also be part of the training if necessary for completion of required skills. For further information about the program, see page 102.

On-the-Job Evaluation — The OJE process provides evaluation service and workers' compensation coverage for clients who need a work-based evaluation at a designated site to clarify vocational goals and assess capabilities and potential for a designated job or training area. This is a non-credit, non-graded process which is monitored according to a personalized outcome assessment.

Vocational Courses — Chemeketa provides vocational courses, including occupational readiness and research, employment strategies, and work assessment for agency-sponsored clients who are working through a rehabilitation counselor or veterans' representative.

Contact a Skills Training coordinator for rate information on the above services and courses.

New Workforce Programs

503-399-3920

If you are a single parent, a displaced homemaker, a dislocated worker or an adult experiencing some other major life or career transition, you may benefit from one of the New Workforce Department programs located in Building 20 on the Salem Campus.

Life and Work Transitions Program

503-399-6554

The Life and Work Transitions Program (formally, "Life Skills") is part of a statewide network of Transitions Programs sponsored by 14 community colleges in Oregon. The Chemeketa program offers a six-credit course for re-entry adults who desire assistance in overcoming personal barriers to education and employment. The course is provided tuition-free to qualifying adults. Support services such as child care and transportation costs are available to low-income students to enable them to participate in the program. Follow-up support groups and brief counseling are also offered to program participants. See also page 153 (HD220/221, Life Skills Seminars 1 & 2).

Transitions Resource Center

503-399-5236

The New Workforce Transitions Resource Center is located on the Salem Campus in Building 20. The Center offers a supportive environment for re-entry adults to meet and study. Books and other media are available on personal development, career exploration and women's issues. Information and referral to community resources are also available. Brief workshops on career and personal topics of interest to adults in transition are offered in the Resource Center free of charge.

Agency-Sponsored Services

503-399-6075

New Workforce Department contracts with public and private agencies throughout the district to provide client and staff development services. Workshops on career and personal development topics, case consultation, assessments and individual counseling can be provided under contract to agency-sponsored clients. Professional development workshops can also be arranged for agency staff.

Domestic Violence Conference

503-399-6554

During spring term, the New Workforce Department of Chemeketa Community College and the Domestic Violence Education and Prevention Coalition of Salem co-sponsor an annual conference for professionals who work with victims of domestic violence. The conference is held on the Salem campus.

Services to the Community

Training & Economic Development Center

503-399-5181

www.chemeketa.edu/programs/tedcenter/

Chemeketa's Training & Economic Development Center is a resource for businesses and organizations and 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 assessments and workshops. You can choose from regularly scheduled workshops or arrange for customized, on-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, one-on-one counseling and a resource center are offered for current and prospective business owners. Workshops cover a variety of topics ranging from start-up information to advanced business management. One-on-one counseling is available to help businesses develop growth strategies, pursue international trade, and increase profitability and productivity.

Customized Training—Training is customized for business, industry, and government agencies. Services include organizational needs assessment, employee skills assessment, management consultation, job related 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 once a month.

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 five or six weeks.

Partnerships for Quality (P4Q)—This training program is designed to increase the productivity and effectiveness of Oregon's businesses and organizations.

Computer Training—The TED Center offers a full program of Internet based computer classes. Nearly 100 classes are available under the general headings of Internet, computer, personal enrichment, small business and management. Contact the TED Center for more information.

Core Workplace Skills—Chemeketa provides employee and organizational assessment and customized skill development classes in math, reading, writing, communications, problem solving, English as a second language, and Spanish for the workplace.

Work Keys Service Center—These services can help you to identify your skills and the skill requirements and competency levels of a job using the Work Keys occupational assessments and job profiling system. Customized training and organizational development services for employers are also available.

Capitol Center

503-316-3238

Located in the State Library building on the Capitol Mall, 250 Winter St. NE, the Center offers easy access from the downtown area. A wide range of credit and noncredit classes are available in the evening and weekends in business administration, computer science, general education, and other college transfer and short-term opportunities. Details are available in the quarterly schedule (look for location: OSL) or by calling.

Computer Technology Training Center

503-315-4590

The new Computer Technology Training Center helps individuals and organizations seeking information on computer skills training at a variety of Chemeketa locations. Among the topics covered are business application software, computer-aided design/drafting (CAD), geographical information systems (GIS), computer-aided manufacturing (CAM), graphics, and Internet/Web. The center also offers industry-recognized certification preparation training, contracted computer training, and lab rentals. Call for more information on the center, offerings and new developments.

Short-term training

503-399-7974

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 10 offerings including automotive body and engine repair, basic nursing assistant, building inspection technology, occupational skills training and welding. Offerings include credit and non-credit classes that 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 Studies, and the Oregon Associate of Arts transfer degrees. Check with Counseling and Career Services to determine if your coursework will apply.

Financial aid may be available to students who enroll in programs that 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 Counseling and Career Services in Building 2 on the Salem Campus, 503-399-5120, for the most current brochures on short-term training options. You can call the Workforce Integration Department at 503-399-7974 for a copy of the short-term training offerings for the current term.

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 16 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 other member libraries. CCRLS also provides 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.

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 to arrange group showings for schools, clubs and organizations.

Student 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 on the Salem Campus. There are numerous opportunities for students to participate in leadership opportunities.

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.

Your student government consists of 7 elected executives and 15 appointed senators. There are other volunteer opportunities to serve.

ASCCC coordinates student activities and community service projects that benefit the campus and the community.

The Chemeketa Courier (student newspaper) 503-399-5134

The Chemeketa Courier, Chemeketa's student newspaper, is published weekly during fall, winter and spring terms. It is written and prepared by journalism students and 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*.

Into the Streets 503-399-5221

Each year Chemeketa plans a major volunteer effort to involve students and staff in community service activities in the college district. This event not only provides volunteer experi-



ence, it is an opportunity for you to learn the leadership skills associated with community service.

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) 503-589-7644

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 503-315-4293

The TRIO Talent Search Mentor Program gives Chemeketa students an opportunity to take part in a community service-learning project. Student mentors are trained to assist middle and high 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 or high 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 Counseling and Career Services. 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:

- Arts Alliance
- Campus Crusade
- Chess Club
- Christian Fellowship Club
- Club Español
- Deaf and Hearing Impaired Club
- Emergency Medical Technicians Club
- Fire Protection Club
- Forestry Club
- Triangle Society
- Geography Club
- Health Occupation Students of America (HOSA)
- Horse Club
- Instrument Society of America (ISA)
- International Conference of Building Officials (ICBO)
- Juntos Club

- Latter-day Saints Club
 - MEChA
 - Native American Club
 - Pacific Islanders Club
 - Phi Theta Kappa
 - Philosophy Club
 - Salem Area Anime Society
 - Ski Club
 - Society of Manufacturing Engineers (SME)
 - Student Nurses Organization (SNO)
 - Table Tennis Club
 - Theatre Arts Club
 - Unique Club
- 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

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, men's and women's cross country and women's softball.

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.



- academic advising, program planning, and course selection guidance;
- career counseling;
- information on financial aid and on veterans' benefits;
- GED, placement and interest testing;
- Services to meet employment and training needs of businesses and job seekers.

Institute for Learning in Retirement

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/greenhouse;
Pesticide application license examination preparation

and recertification;

Agricultural leadership development in English and Spanish.

Classes are also offered on Christmas tree, woodland and pasture management; small gas engine repair; and beginning dog obedience.

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 503-589-7759

Chemeketa's three-year Farm Business Management program trains farmers in basic recordkeeping and financial management. For more information, see page 80.

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.

Community Education

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.

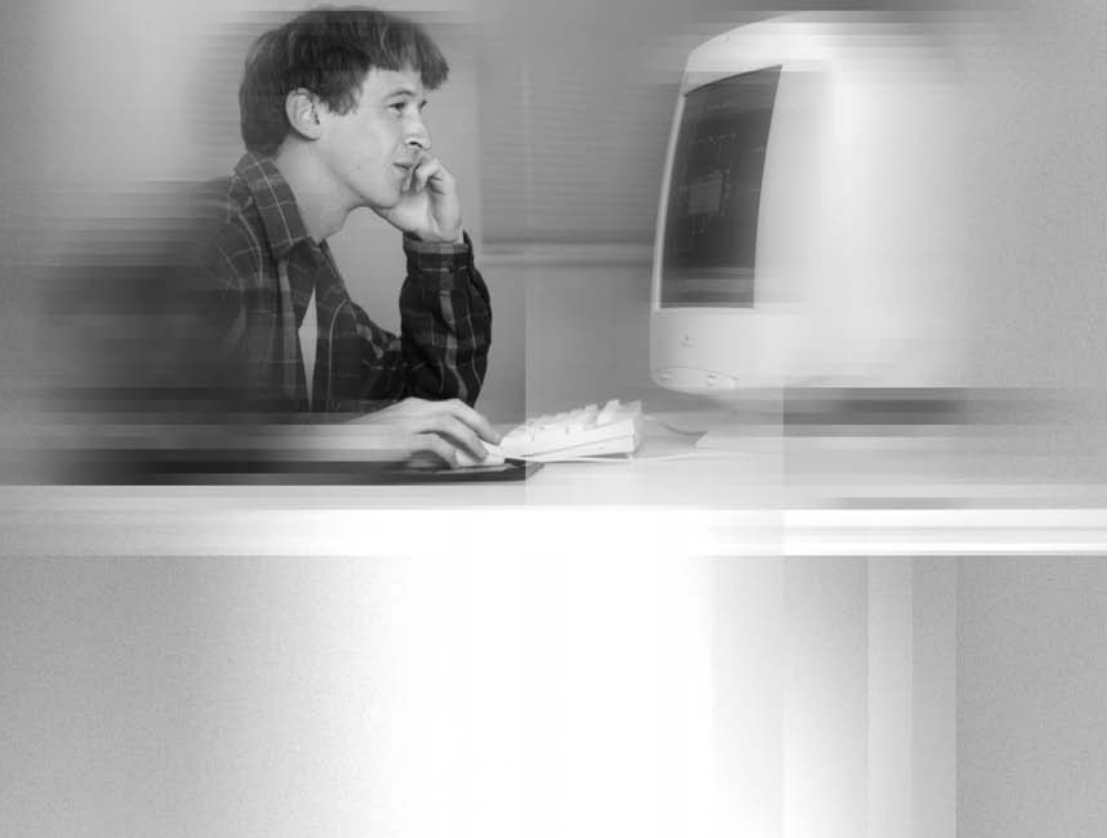
Committed to lifelong learning, the college schedules a wide variety of credit and non-credit classes, workshops, seminars and special programs which meet during the day, evening and on weekends. These include college transfer courses; professional-technical and job skill-upgrading classes; and personal 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, English as a Second Language, 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.

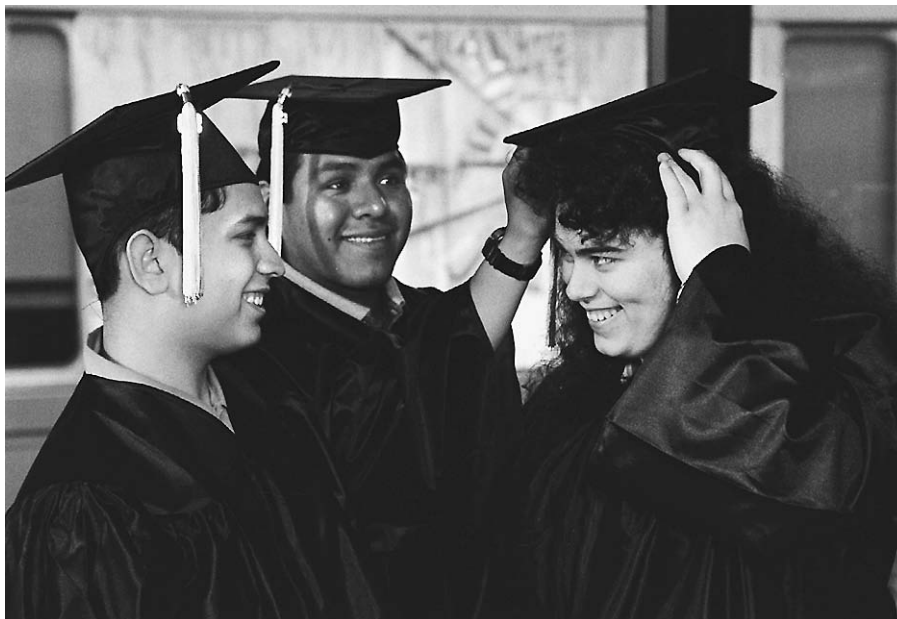
Outreach campus services

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

Chemeketa Community College 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 Associate of Arts Oregon Transfer degree, an Associate of Applied Science degree, 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.

Degrees

Graduates of Chemeketa's two-year programs are awarded an Associate of Arts Oregon 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 Associate of Arts Oregon Transfer (AAOT) degree program encompasses the core curriculum of a liberal arts education. This core includes coursework in 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 (AAOT) degree while earning college transfer credits. It is easy to earn this 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 AAOT degree requirements.

See the Program Guide on pages 46 and 47 for a complete list of our transfer programs. Information and curriculum outlines of these programs begin on page 48.

Students who earn an Associate of Arts Oregon 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 Associate of Arts Oregon Transfer degree, you must meet the requirements listed on page 35.

Associate of Applied Science degree

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

In most of these programs, you may earn an Associate of Applied Science (AAS) 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 46 and 47 for a

complete list of A.A.S. degree programs. Information and curriculum outlines of these programs begin on page 48 along with college transfer curricula.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on page 36.

Associate of General Studies degree

The Associate of General Studies degree addresses the needs of students who are not seeking an Associate of Arts Oregon 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 37.

Second degree

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@chemeketa.edu

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 Enrollment Center in Building 2, Room 200 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 on page 2 and 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.

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 written approval of the program director to make the substitution.
- Submit a Curriculum Deviation form, signed by your program director, to the Enrollment Center. 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 46 and 47 for a complete list of Certificate of Completion programs. Information and curriculum outlines of these programs begin on page 48 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; and;
- Apply courses numbered 050 or higher toward a certificate.

High School Completion

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 Winema School 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 high school 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. (At least two of these credits must have been earned at Chemeketa Community College.) To be in the program, you must be 16 years or older. Students who have met state minimum required courses/credits must complete residency as well as aforementioned requirements. You must have a release from your high school if you are under 18 years old.

General Educational Development (GED)

503-399-5224

You may earn a high school equivalency certificate by passing General Educational Development (GED) tests in English or Spanish. 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 during the term depending on space in classes and progress at your own pace. Classes are held at our Dallas, McMinnville, Santiam, and Woodburn campuses, and the Salem Campus. 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. Fees may apply.

GED tests are given in Salem, McMinnville, Dallas and Woodburn. The fee is \$85.

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 and at our Dallas, McMinnville, Santiam and Woodburn campuses. Fees may apply.

College Transfer

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 your responsibility to learn the program requirements of the school to which you plan to transfer. You should periodically contact Counseling and Career Services or one of their academic advisors 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, Portland State University and Oregon State University. Junior and senior level classes leading to a bachelor's degree at Linfield and Portland State University 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 Information Systems, Arts and Humanities, and Social and Behavior Sciences

Portland State University 503-399-5262

Child and Family Studies, General Studies

Oregon State University 503-589-7678

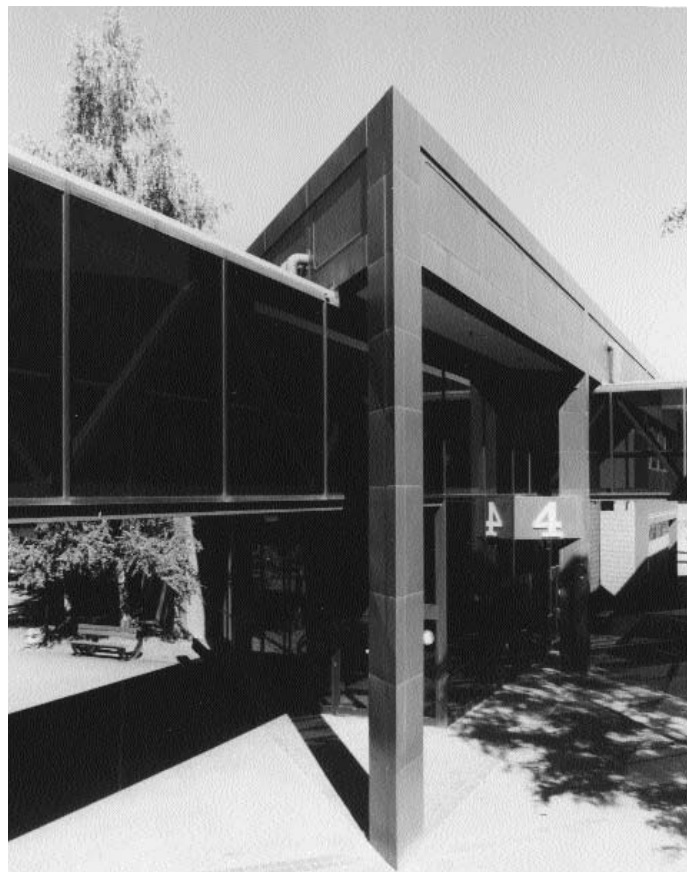
Liberal Studies.

For more information on these three 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 Counseling and Career Services 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 38–44. The Counseling and Career Services 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.



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	SP100, SP111, SP112, SP115, SP130, SP218, SP219, or SP229
<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	Three credit hours of Computer Information Science or Computer Science (CS101 or higher strongly recommended).

Distribution Requirements

(Courses used to meet the Distribution Requirements should be at least three credits each.)

Arts and Letters

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.

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ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 225, 230, 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, 265, 255, 256, 257, 258, 260, 261, 262, 263, 269; FA255, 256, 257; FR201, 202, 203; HUM106, 251, 252, 253, 259; JNL216, 217, 224, 225, 226, 227; MUS105, 161, 201, 202, 203, 205; PHL201, 202, 203, 204, 205; REL201, 202, 203; RUS201, 202, 203; SP100, 111, 112, 115, 130, 218, 219, 229; SPN201, 202, 203, 211, 212, 213; TA110, 121, 122, 123, 285C; WR241, 242, 243, 248C

Social Sciences

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

ATH101, 102, 103, 153, 180, 207, 208, 209, 212, 214, 231, 232, 233; CLA201, 202, 203; EC200, 201, 202, 203; GEG105, 106, 107, 190, 201, 202, 206, 207; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 293; PS201, 202, 203, 205; PSY100, 101, 102, 104, 119, 201, 202, 203, 206, 237, 239; SOC204, 205, 206, 210, 221, 235, 291; SSC150, 206; WS101, 102, 103

Sciences, Math, Computer Science

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, 143, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104 and 104R, 105 and 105R, 106 and 106R, 110 and 110R, 111 and 111R, 115, 116, 117, 121 and 121R, 122 and 122R, 123 and 123R, 201, 202, 203, 221 and 221R, 222 and 222R, 223 and 223R, 241 and 241B, 242 and 242B, 243 and 243B; GEO142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH106, 111 and 111R, 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: BI100, 251; CH172, 272; CIS120, 121, 122; CS101, 103, 105, 125A, 125E, 133C, 133E, 133U, 133VB, 135AC, 140A, 140B, 140U, 145, 160, 161, 162, 171, 178I, 179, 233C, 233U, 234C, 234L, 240, 240U, 244, 246, 260, 275, 278, 279, 285, 286, 288, 289; G130; GS120; MTH105, 111, 112, 116, 211, 212, 213, 231, 232, 241, 243, 244, 251, 252, 253, 254, 255, 256; OC133.

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 12 credit hours in professional-technical courses may be included, with the exception of the following: BT084, 085; COM051, 052, 053; MTH052 through 095; RD090; SSP050A, B, C; SSP051; WR090, 095 (see page 117). A maximum of 12 credit hours of cooperative work experience may be applied toward an Associate of Arts degree.

Electives

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: 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 requirement may also be met by completing two years of foreign language at the high school level. This is not a requirement for earning the Associate of Arts degree.

Associate of Applied Science Degree Requirements

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 general education courses you should take. The courses listed below meet the college's general education requirements.

Writing

One class of **WR115**, **WR121**, **BA214**, **BT084** or **COM051** or any higher numbered writing class.

Math

One class of **MTH052** or any higher numbered math course.

Computer Literacy

The following program-approved list of courses allows a student to meet the college's computer literacy competency requirement. Check with your program advisor if you have any questions related to this requirement.

CA100*	Microcomputer Basics	3 credits
CIS120*	Computer Information Science I	4 credits
CS101*	Introduction to Microcomputer Applications	3 credits
DRF165*	CAD System Administration	3 credits
MFG160*	Programming CNC Mills	3 credits

*Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or college advisor.

Three credit hours from each of the four following areas:

Social Sciences

Anthropology, Chicano/Latino Studies, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies.

Humanities/Fine Arts

American Sign Language, Art, English, Film Arts, Foreign Language, Humanities, Music, Music Performance, Philosophy, Religion, Theater Arts.

Science/Applied Science

Approved program-related instruction may satisfy this requirement, or courses in Biology, Botany, Chemistry, Foods and Nutrition, General Science, Geology, Oceanography, Physics, Physical Science, Zoology

*Communications**

Communication Skills, English as a Non-Native Language, Journalism, Speech, Writing, Reading, plus these specific classes: **BA214**, **BT120**, **HD112**, **RD115**, **RD116**, **RD117A**, **B**, **C** and **RD120**.

Three additional credits from any of these areas:

Communications
Health Education
Humanities/Fine Arts
Math
Physical Education
Science
Social Science

Complete a minimum of 30 credit hours at Chemeketa.

Earn a cumulative grade point average (GPA) of 2.0 or above for all course credits which apply toward the degree. Only courses numbered 050 or higher, unless otherwise indicated, apply toward the degree.

Notes:

1. We recommend that you see an advisor for guidance before you enroll.
2. 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 in communications, computation and human relations. See your advisor.
3. 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.
4. For information on the Industrial Technology and Apprenticeship degree, see page 94.

* Courses taken to meet the Writing requirement may not also be used to meet the Communications requirement.

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. See page 117 for how courses are numbered. 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 WR121, 123, 227, 241, 242, 243 or BA214															
<i>Math</i> (with a grade "C" or better)	4	MTH095 or above															
<i>Speech</i>	3	SP100 or above															
<i>Computer Studies</i>	3	The following approved list of courses allows a student to meet the college's computer literacy competency requirement. <table border="0" style="margin-left: 20px;"> <tr> <td>CA100*</td> <td>Microcomputer Basics</td> <td style="text-align: right;">3 credits</td> </tr> <tr> <td>CIS120*</td> <td>Computer Information Science I or higher</td> <td style="text-align: right;">4 credits</td> </tr> <tr> <td>CS101*</td> <td>Introduction to Microcomputer Applications or higher</td> <td style="text-align: right;">3 credits</td> </tr> <tr> <td>DRF165*</td> <td>CAD System Administration</td> <td style="text-align: right;">3 credits</td> </tr> <tr> <td>MFG160*</td> <td>Programming CNC Mills</td> <td style="text-align: right;">3 credits</td> </tr> </table> <p style="margin-left: 20px;">*Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or college advisor.</p>	CA100*	Microcomputer Basics	3 credits	CIS120*	Computer Information Science I or higher	4 credits	CS101*	Introduction to Microcomputer Applications or higher	3 credits	DRF165*	CAD System Administration	3 credits	MFG160*	Programming CNC Mills	3 credits
CA100*	Microcomputer Basics	3 credits															
CIS120*	Computer Information Science I or higher	4 credits															
CS101*	Introduction to Microcomputer Applications or higher	3 credits															
DRF165*	CAD System Administration	3 credits															
MFG160*	Programming CNC Mills	3 credits															
<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, Chicano/Latino Studies, 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.															
Electives: 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.

Requirements	Credit hours	Chemeketa courses which satisfy requirements
Humanities (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ART101, 204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 222, 250, 253, 254, 255, 256, 257, 258, 260, 261, 262, 263, 269, 299; FA255, 256, 257; HUM251, 252, 253; JNL224; MUS105, 161, 201, 202, 203; PHL199, 201, 202, 203, 205; SP115; TA110
Natural Science (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ATH101, 153, 180; BI100, 101, 102, 103, 131, 132, 133, 143, 200, 251; BOT201, 202, 203; CH104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; GEO142, 143, 144, 201, 202, 203; GEG105, 190; GS104, 105, 106, 107, 120, 141, 142, 143; OC133; PH106, 111, 201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203
Social Science (Choose courses from at least two different prefixes other than your major.)	Minimum 15 hours	ATH102, 103, 207, 208, 209; EC200, 201, 202, 203; GEG106, 107, 201, 202, 206, 207, 299; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 257, 258, 259; PS201, 202, 203, 205; PSY100, 201, 202, 203, 237; SOC204, 205, 206; SSC206; WS101, 102, 103
Art, Languages and Logic (Choose courses outside of your major.)	Minimum 15 hours	
Artistic Creation (Sub-Area 1)	3 to 12 hours	ART115, 116, 117, 131, 132, 133, 154, 155, 221, 222, 223, 234, 235, 236, 238, 239, 244, 254, 261, 270, 271, 281, 284, 291, 292, 293; MUP100, 174; MUS197; TA121, 122, 123; WR241, 242, 243
Languages and Logic (Sub-Area 2)	3 to 12 hours	ASL101, 102, 103; CIS120, 121, 122; CS140B; FR101, 102, 103, 201, 202, 203; GER101, 102, 103; JPN101, 102, 103; MTH105, 211, 212, 213, 241, 243, 244, 251, 252, 253; PHL204; RUS101, 102, 103, 201, 202, 203; SP100, 111, 112, 115, 130, 218, 219; SPN101, 102, 103, 150, 151, 201, 202, 203

Notes:

1. A maximum of 126 credit hours of lower division coursework 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.
10. Two years of high school or two terms of college-level foreign language (same language) required for students graduating from high school spring, 1997 or later.

C www.eou.edu 541-962-3393

Requirements	Credit hours	Chemeketa courses which satisfy requirements
Communication		
Speech	3	SP111
English Composition	6	WRI121 and 122
Nine additional credits from speech/writing courses having WRI122 or SP111 as a prerequisite; specified by the major department from the following: WRI123, 214, 227, 321, 322, 323, 327, 328; SP321.	9	WRI123, 227; BA214; SP113; no equivalent courses for WRI321, 322, 323, 327, 328
Business		
Nine credits selected from upper-division business and industrial management courses.	9	No equivalent course.
Humanities		
Nine credits selected by student or specified by a major department from the following: ART, ENG, HUM, MUS, PHL, Language (second year)	9	ART101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 198, 199, 204, 205, 206, 210, 221, 222, 223, 230, 231, 234, 235, 236, 238, 239, 244, 245, 246, 254, 261, 262, 263, 264, 270, 271, 272, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293, 299; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 222, 250, 253, 254, 255, 260, 261, 262, 263; FA255, 256, 257; FR201, 202, 203; GER201, 202, 203; HUM251, 252, 253, 259; JPN201, 202, 203; MUP100, 105, 174; MUS105, 197, 199, 201, 202, 203; PHL201, 202, 203, 204, 205; REL201, 202, 203; RUS201, 202, 203; SPN201, 202, 203; TA110, 121, 122, 123, 285A, B, C
Social Sciences		
Twelve credits selected by student or specified by a major department from ANTH, ECO, GEOG, HST, PSCI, PSY, SOC.	12	ATH101, 102, 103, 207, 208, 209; CLA203; CJ101, 110, 131, 200, 206, 220, 226; EC200, 201, 202, 203; GEG105, 106, 107, 201, 202, 206; HST110, 111, 112, 157, 158, 159, 199A, 201, 202, 203, 228, 257, 258, 259, 293; PS151, 201, 202, 203, 205; PSY100, 101, 102, 104, 201, 202, 203, 206, 237, 239, 246; SOC204, 205, 206, 210, 221, 227, 235, 291; SSC150, 151, 206; WS101, 102, 103
Technology		
Twelve credits selected by student or specified by a major department. At least one computer course is required.	12	EGR211, 212, 213; select computer course from: CIS120, 121, 122; CS101, 125A1, 125A2, 125A3, 125FX, 133A, 133B, 133C, 133E, 133U, 133VB, 140A, 140B, 140C, 140U, 160, 171, 178I, 199B, 233U, 234C, 234L, 240, 244, 246, 260, 285
Science/Mathematics		
College Algebra	4	MTH111
Twelve additional credits selected by student or specified by a major department from biological sciences, mathematics, or physical science.	12	BI101, 102, 103, 131, 132, 133, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241, 242, 243; GEO142, 143, 144, 160A, 201, 202, 203; GS104, 105, 106, 107; MTH105, 112, 231, 243, 251, 252, 253, 254, 255, 256; OC133; PH201, 202, 203, 207, 208, 209, 211, 212, 213; ZOO201, 202, 203

Notes:

1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
2. Courses in which "D" grades have been earned will 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.
5. Two years of high school or two terms of college-level foreign language (same language) required for all students graduating from high school spring 1997 or later.

C www.oit.edu 541-885-1154 or 800-422-2017

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; 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, 218
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; GEO142, 143, 144, 201, 202, 203; GEG105; GS104, 105, 106, 107, 141, 142, 143; PH201, 202, 203, 207, 208, 209, 211, 212, 213
Biological Science Including Lab	4	BI101, 102, 103, 143, 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; GEG106; HST110, 111, 112, 201, 202, 203, 228; PHL201, 202, 203; REL202, 203
Cultural Diversity	3	ATH212, 214; CLA201, 202, 203; GEG202; HST157, 158, 159, 257, 258, 259; REL201, 202
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, 256, 257, 258, 260, 269, 299; MUS161, 201, 202, 203; TA110
Social Processes and Institutions	3	ATH103, 207, 208, 209; EC201, 202; ENG269; HM101; HE209; PS201, 202; PSY201, 202, 203; SOC204, 205, 235
Difference, Power and Discrimination	3	HST201, 202, 203; SOC206; 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 other than writing.
3. In general, only courses with letter prefixes and numbers above 100 are accepted at OSU. (Courses with AUM, BT, CA, DRF, MT, VC, and most courses with HM prefixes are not accepted.)
4. Up to 12 professional-technical credits (courses numbered 50-99) may be accepted as "unrestricted" electives. Students with professional-technical credits similar to those available in their major should contact the head of the department to determine transferability.
5. OSU will accept "D" grades. 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. Departments, schools, or colleges at OSU may restrict the courses used by their major students to satisfy each general educational component.
8. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.
9. Two years of high school or two terms of college-level foreign language (same language) required for students graduating from high school spring, 1997 or later.

C osu.orst.edu 541-737-4411 or 800-291-4192

Requirements	Credit hours	Chemeketa courses which satisfy requirements
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.	15	Complete 45 credit hours from courses listed for Oregon Associate of Arts transfer degree. Courses should include writing, speech and computer science. It is also important to learn appropriate information technology resources of the library.
Electives or Major Requirements	30	
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.	12	Complete 45 credit hours from courses listed for Oregon Associate of Arts transfer degree and courses required for major. Students planning to attend Chemeketa two years should complete the Oregon Associate of Arts transfer degree.
Electives or Major Requirements	33	

Notes:

1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
2. In general, only courses with letter prefixes and numbers 100 or 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 computer assisted 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. Two years of high school or two terms of college-level foreign language (same language) required for students graduating from high school spring, 1997 or later.
8. This guide is subject to change without notice and should not be regarded as a contract between PSU and students attending Chemeketa Community College.

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SOU requirements	Credit hours	Chemeketa courses which satisfy requirements
Writing	6	WR121, 122, or CORE101, 102, 103 (C- or better in each class at SOU.)
Oral Communication	3	SP111, 218, 219 (C- or better in each class.)
Mathematics	4	MTH105 or higher
Arts and Letter (sequence)	6-8	Choose a sequence of two or three classes from the following: ART115, 116, 117; 131, 132, 133; 204, 205, 206; 221, 222, 223; 234, 235, 236; 284, 285, 286; ENG104, 105, 106; 107, 108, 109; 201, 202, 203; 204, 205, 206; 253, 254, 255; 256, 257, 258; FA255, 256, 257; FR201, 202, 203; HUM251, 252, 253; JNL224, 225, 226; MUS201, 202, 203; PHL201, 202, 203; REL201, 202, 203; RUS201, 202, 203; SPN201, 202, 203; TA121, 122, 123; 285, 286, 287; WR241, 242, 243
Social Science (sequence)	6-8	Choose sequences of two or three classes from the following: ATH101, 102, 103; 207, 208, 209; 231, 232, 233; CLA201, 202; CJ100, 101; EC200, 201, 202, 203; GEG105, 106, 107; HST110, 111, 112; 157, 157, 158, 159; 201, 202, 203; 257, 258, 259; PS201, 202, 203; PSY201, 202, 203; SOC204, 205, 206; WS101, 102, 103
Science (sequence)	6-8	Choose sequences of two from the following: BI101, 102, 103; 131, 132, 133; 231, 232; BOT201, 202, 203; CH104, 105, 106; 115, 116, 117; 121, 122, 123; 201, 202, 203; 221, 222, 223; 241, 242, 243; CS160, 161; GEO142, 143, 144; 201, 202, 203; GS104, 105, 106, 107; 141, 142, 143; PH201, 202; 211, 212; ZOO201, 202, 203

General Education Notes:

1. Must complete 36 transferable credits before transferring.
2. Must complete a two quarter /6-8 credit sequence from each of the following three courses resulting in a total of 24 credit hours; Arts & Letters, Social Science, Science/Math.
3. **Bachelor of Science**
Need total of 8 credits w/Math, Computer Science or designated logic class.
Must have combined total of 48 credits from Math, Science, business and Social Science.

Bachelor or Arts

- Need one year of a foreign language at a second year level.
Must have a combined total of 48 credits from Humanities, and Fine and Performing Arts.

Students entering SOU who have earned an Oregon Associate of Arts Transfer Degree from Chemeketa will be considered to have met SOU's core curriculum requirements.

Notes:

1. A maximum of 108 hours taken at community colleges can be transferred to SOU. A total of 180 credits is required for a Bachelor of Arts or Sciences degree.
2. Only courses with a letter prefix and a number of 100 or higher are considered transferable.
3. A maximum of 24 credit hours of professional/technical courses are accepted as free electives.
4. Courses in which "D" grades have been earned are accepted by SOU.
5. This guide is subject to change without notice and should not be regarded as a contract between SOU and Chemeketa Community College.
6. *Two years of high school or two terms of college-level foreign language (same language) required for all students graduating from high school Spring 1997 or later.
7. Courses used to meet the general education requirements can also be used in the major minor.

SOU will not grant credit for the following courses; RD115, RD116.

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Requirements	Credit hours	Chemeketa courses which satisfy requirements
Written English	6	WR121 and WR122 or WR123 (with a "C" grade 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	Choose from the following: ART204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 222, 250, 253, 254, 255, 256, 257, 258, 260; FA255, 256, 257; FR201, 202, 203; HUM251, 252, 253; MUS201, 202, 203; PHL201, 202, 203, 204; RUS201, 202, 203; SPN201, 202, 203; TA110
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	Choose from the following: ATH102, 103, 180, 207, 208, 209, 212, 214, 231, 232, 233; BA101; CLA201, 202, 203; EC201, 202, 203; GEG106, 107, 201, 202, 206, 207; HST110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259; JNL224; PS201, 202, 203, 205; PSY202, 203, 206, 237, 239; REL201, 202, 203; SOC204, 205, 206, 210, 221; SSC150, 206; WS101, 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	ATH101; BI100, 101, 102, 103, 131, 132, 133, 143, 200, 231, 232, 233, 234; BOT201, 202, 203; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223; CIS120, 121, 122; CS161, 162, 244, 246; GEO142, 143, 144, 201, 202, 203; GEG105; GS104, 105, 106, 107, 120, 141, 142, 143; MTH105, 211, 212, 213, 231, 232, 241, 243, 244, 251, 252, 253; OC133; PH201, 202, 203, 207, 208, 209, 211, 212, 213; PSY201; ZOO201, 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	Area 1—ATH231, 232, 233; CLA201, 202, 203; ENG256, 257; HST257, 258, 259; MUS105; SSC150 Area 2—ED258; ENG222, 260; SP115; SSC206; WS101, 102, 103 Area 3—ATH103, 207, 208, 209, 212, 214; ENG258; GEG202; HST110, 111, 112, 157, 158, 159, 293; REL201, 202

Notes:

1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
 2. Courses with letter prefixes and numbers above 100 are accepted at the University of Oregon (with the exception of the following: RD115, 116, 117).
 3. A maximum of 12 credit hours of vocational/technical courses are accepted.
 4. B.A. degree requires equivalent of two years of college foreign language. Students who have not earned the Associate of Arts Oregon transfer, can not use the same foreign language courses to meet both the Arts and Letters and B.A. requirements.
 5. B.S. degree requires MTH111, 211, 212 and 213; or MTH105, 111 and 243; or MTH112 or 116 and 231, 241 or 243; or CS161 and 162; or any one of MTH251, 252, 253, 254, 255 or 256. All courses must be completed with a "C" grade or better.
 6. Courses in which "D" grades have been earned will transfer to UO, but will not satisfy degree requirements in writing, mathematics or foreign language and may not be acceptable for major requirements.
 7. Students not meeting freshman admissions criteria must complete WR121 and MTH105 or 111 before transferring.
 8. Students 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 UO. The Multicultural Studies requirement is not satisfied by completing the A.A. degree unless acceptable courses are taken as part of the A.A. degree.
 9. This guide is subject to change without notice and should not be regarded as a contract between UO and students attending Chemeketa Community College.
 10. Students graduating from high school in 1997 or after must have completed two years of high school-level second language or two terms of a college-level second language or demonstrated proficiency to be admitted to U of O.
- * 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.

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Requirements	Credit hours	Chemeketa courses which satisfy requirements
English Composition	3	WR121 and WR122 or WR123
Speech	3	SP111, 112, 126, 218, 219 or 229. SP111 preferred.
Physical Education	4	All activity courses selected from PE185, 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, 250, 253, 254, 255, 260, 261, 262, 263 and one philosophy or religion course: PHL201, 202, 203 or 204, or REL201, 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, GEO, GS, PH or 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 ATH, EC, GEG, HST, PS or SOC. The remaining three hours may be in any social science area, including psychology and criminal justice. (World history or geography are required for elementary education majors.)
Special Graduation Requirements		
Bachelor of Arts (B.A.)	4	(1) MTH105 or higher math. (Elementary education majors should take MTH211, 212, 213 Foundation of Elementary Mathematics);
	3	(2) CS101; and
	4	(3) Third term of a second-year foreign language
or		
Bachelor of Science (B.S.)	12	(1) A combined total of 12 credit hours in mathematics, computer science or designated statistics courses. A minimum of one math class and one computer science (MTH105 and CS101 do not meet this requirement). Each B.S. degree program in the Western catalog identifies the math, computer science and statistics courses that meet this.
	6	(2) Cultural diversity courses. Note: Acceptable courses are under review.

Notes:

1. A maximum of 108 credit hours earned at a community college may be applied toward a baccalaureate degree.
2. In general, only courses with letter prefixes and numbers above 100 are accepted at 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, but not the special graduation requirements.
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. Students who graduate from high school spring 1997 or later must have completed two years of high school foreign language (same language) or two terms of college-level foreign languages to be admitted to WOU.
12. This guide is subject to change without notice and should not be regarded as a contract between Western and students attending Chemeketa Community College.

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Programs of Study

Chemeketa Community College



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 Career and Counseling Services 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	C	A	T	O	Program	C	A	T	O
Accounting		✓			Civil Engineering Technology		✓		
Adult Basic Education				✓	•Survey Technology	✓			
Adult High School Diploma				✓	Computer Programming		✓		
Agriculture			✓		•Microcomputer Support Specialist		✓		
Anthropology			✓		Computer Science			✓	
Art			✓		Criminal Justice		✓	✓	
Automotive Technology		✓			Dental Assisting	✓			
•Automotive Body Repair	✓				Dental Hygiene			✓	
Biology			✓		Drafting Technology—CAD				
Botany			✓		•CAD		✓		
Building Construction Training	✓				•CAD/CAM		✓		
Building Inspection Technology	✓	✓			•Mechanical Design		✓		
•One- and Two-Family Plans Examiner, Structural Inspector and Mechanical Inspector	✓				Early Childhood Education				
•One-Year Structural Inspector	✓				•Child Development Certificate	✓			
•One-Year Structural Plans Examiner	✓				•One-Year Program	✓			
•One-Year Mechanical Inspection	✓				•Two-Year Program		✓		
Business Administration			✓		Economics			✓	
Business Technology					Education				
•Business Software Certificate	✓				•Education Certificate	✓			
•Business Technology Certificate	✓				•Elementary			✓	
•Administrative Assistant		✓			•Secondary			✓	
•Business Support Specialist		✓			Electronics Technologies				
•Clerical Basics	✓				•Computer Electronics		✓		
•Medical Administrative Assistant		✓			•Electronic Engineering Technician		✓		
•Accounting Administrative Assistant		✓			•Microelectronics/Industrial Electronics		✓		
Chemistry			✓		Emergency Medical Technology—Paramedic		✓		
Chiropractic			✓		Engineering			✓	

Program	C	A	T	O	Program	C	A	T	O
English			✓		Juvenile Corrections Certificate	✓			
English as a Non-Native Language				✓	Management		✓		
English as a Second Language				✓	Manufacturing Engineering Technologies				
Farm Business Management				✓	• <i>Manufacturing Operations</i>	✓			
Fire Protection Technology					Mathematics				✓
• <i>Advanced Fire Officer Certificate</i>	✓				Medical Office Assisting	✓			
• <i>Fire Prevention</i>		✓			Network Technology		✓		
• <i>Fire Suppression</i>		✓			Nursing				✓
Foreign Languages			✓		• <i>Practical Nursing</i>	✓			
Forest Resources Technology		✓			• <i>Associate Degree Nursing</i>		✓		
Forestry			✓		Occupational Skills Training	✓	✓		
General Educational Development				✓	Philosophy				✓
General Science			✓		Physical Education/ Human Movement Studies				✓
General Studies			✓		Physics				✓
Geography			✓		Political Science				✓
Geology			✓		Pre-Engineering				✓
Health, Health Education			✓		Pre-Law				✓
Health Services Management					Pre-Professional Study (medicine, dentistry, veterinary medicine)				✓
• <i>Health Information Technology</i>	✓				Professional-Technical Teacher Preparation	✓	✓		
• <i>Health Services Management</i>		✓			Psychology				✓
• <i>Medical Transcription</i>		✓			Real Estate		✓		
History			✓		Small Business Management				✓
Home Economics			✓		Sociology				✓
Hospitality and Tourism Management		✓			Speech				✓
• <i>Travel Agency Operations</i>	✓				Vineyard Management		✓		
Hotel, Restaurant and Resort Management			✓		• <i>Vineyard Operations</i>	✓			
Human Services					Visual Communications		✓		
• <i>Addiction Studies</i>		✓			Welding				
• <i>Addiction Counselor Certification Preparation</i>	✓				• <i>Welding Fabrication</i>		✓		
• <i>Social Studies</i>		✓			• <i>Welding Technology</i>	✓			
Industrial Technology and Apprenticeship		✓			Winemaking	✓	✓		
Integrated Circuit Mask Design		✓			Zoology				✓
Journalism			✓						

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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

BT061A	Electronic Calculators A (if less than 80 strokes/minute)	1
BT085	Business English 2	3
CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications ...	3
RD090	College Textbook Reading	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Counseling and Career Services 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 activities. Several professional accounting organizations, such as the National Association of Accountants and the American Society of Women Accountants, encourage you to become active in Salem area chapters.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,651; class fees, \$36; equipment and supplies, \$132. Contact the Financial Aid Office at 503-399-5018 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 with a grade of C or better in all accounting and management courses:

Course	Title	Credit Hours
Term 1		
BA202	Personal Effectiveness	3
BA211	Financial Accounting 1*	4
BA214	Business Communications	3
	or	
WR123	English Composition-Research Writing	3
CS125E	Excel-Workbooks	4
MTH062	Business Applications Using Mathematics (or higher)	4
Term 2		
BA101	Business Environment	4
BA203	Interpersonal Relations in Business	3
BA212	Financial Accounting 2	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 1	4
EC200	Introduction to Economics (or higher)	3
WR227	Technical Writing	3
Term 4		
BA156	Intermediate Financial Accounting 1	4
BA226	Business Law 1	3
BA240	Governmental/Nonprofit Accounting 1***	3
	or	
BA257	Income Tax Accounting 2	4
BA271	Information Technology in Business	4
FE205C	Interviewing for Success	1
Term 5		
BA157	Intermediate Financial Accounting 2	4
BA206	Business Management Principles	3
BA222	Financial Management	3
BA280C	Cooperative Work Experience	3
	or	
	Business elective****	3
Term 6		
BA158	Intermediate Financial Accounting 3	4
BA177	Payroll	4
SP111	Fundamentals of Public Speaking	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 higher math.

**Choose from CA201D, or a programming class; CS125A recommended.

***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 and RE, except BT084, BT085, BA051, BA052, BA053 and CS101.

Agriculture

(college transfer)

Oregon State University offers Bachelor of Science degrees in Agricultural and Resource Economics, Agricultural Business Management, General Agriculture, Animal Sciences, Crop and Soil Science, Fisheries and Wildlife Science, and Food Science and Technology.

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121 English Composition-Exposition or Speech courses* (WR227 Technical Writing and/or SP111 or SP112 required for some options; SP111, 112, 218 required for Agriculture Education and General Agriculture)	3	3	3
Mathematics (per placement test through MTH111 College Algebra for most majors; MTH243 Probability and Statistics 1, 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 and 121R, 122 and 122R, 123 and 123R General Chemistry (depending upon major and option; CH221 and 221R, 222 and 222R, 223 and 223R required for Food Science)	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
Second Year	4	5	6
BA211, 212 Financial Accounting (required for some majors)	(4)	(4)	

BI101, 102, 103 or CH121 and 121R, 122 and 122R, 123 and 123R (both sequences recommended but may not be required in all majors; some options require ZOO201, 202 General Zoology and BOT201, 202 General Botany or GEO201, 202 Geology or PH201, 202 General Physics)	4-5	4-5	4-5
Arts and Letters or Social Science electives*	6	6	6
Electives* (BA226 Business Law or FN225 Nutrition required in some majors; BI234 Microbiology for Animal Sciences check OSU for additional courses required in specific options)	6	3	6

*To meet OSU general education requirements.

Anthropology

(college transfer)

Oregon State University, Portland State University, and University of Oregon offer Bachelor of Arts and/or Bachelor of Science degrees in Anthropology. Eastern Oregon 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition-Exposition*	3	3	(3)
HPE295 Health and Fitness for Life* or elective			3
ATH101, 102, 103 Human Evolution, Archeology and Introduction to Cultural Anthropology (OSU requires ATH103 only; UO requires ATH102***)	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; may be required for graduate work; for WOU choose courses for minor)	3-4	3-4	3-4
Math or Science electives*(EOU requires a statistical class at EOU; SOU requires math through MTH243 Probability and Statistics 1)	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 and Statistics courses)	3	3	3

*To meet four-year college general education requirements; OSU students must meet liberal arts core and OSU general education requirements.

**MTH243 and MTH244 Probability and Statistics 1 and 2 and CS101 Introduction to Microcomputer Applications recommended for students planning to do graduate studies.

***A maximum of 12 credit hours of Anthropology at the 100 or 200 level can apply at UO.

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, Art History, Fine Arts, Graphic Design and Photography, and UO has majors in Art History, and Fine and Applied Arts.

A five-year program in Art leading to the Bachelor of Fine Arts (B.F.A.) degree is also 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition-Exposition*	3	3	(3)
ART115, 116, 117 Basic Design (does not meet requirement 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)	3-6		
Arts and Letters/Humanities* (non-art: UO requires two years of Foreign Language, preferably 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* (Second-year Foreign Language for UO Art History majors; recommend French, German or Japanese)	3-4	3-4	3-4
Science or Mathematics* (MTH111 College Algebra or 211 Foundations of Elementary Mathematics for EOU)	4	(4)	(4)
HPE295 Health and Fitness for Life* or elective	3		

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 Sculpture, ART221 Graphic Design and ART281 Painting, and ART262 Technical Photography and ART264 Digital Photography for some options; PSU choose nine-eighteen credits from study concentration and six-twelve additional Art credits outside of concentration; SOU choose eight credits from three groups listed in SOU History catalog; UO Art History majors take six hours of studio courses in Drawing, Painting, Sculpture, or Design; WOU twelve hours from ART155 Pottery 2, ART230 Drawing: Anatomy for Artists, ART270 Beginning Screen Printing, ART274 Printmaking, ART281, ART291)	3	3	3
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Electives (CS course required at EOU and SOU; ART221, 222 Graphic Design 1 and 2 recommended for EOU)	0-3		
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*To meet four-year college general education requirements; OSU students must meet liberal arts core as well as 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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free

placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

MTH020	Basic Mathematics	3
SSP051	Studying for College	3
WR040	Writing Skills	3

If you have questions about the requirements, call Counseling and Career Services at 503-399-5120 or 503-399-5210. 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, \$305; class fees, \$57; equipment and supplies, \$500. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these required 53 credit hours:

General Education requirements (12 credit hours):

Course	Title	Credit Hours
COM051	Communications Skills 1	3
	or	
WR121	English Composition-Exposition	3
CS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry	3
PSY100	Introduction to Psychology	3

Automotive Body core requirements (31 credit hours):

AUM156	Automotive Shop Safety	1
AUM168	Automotive Electrical Systems 1	4
AUM280L	Cooperative Work Experience	24
WLD097	Welding	2
	or	
WLD061	Basic Gas Metal Arc Welding (MIG)	3

Automotive Body Repair electives (Select 10 credit hours):

AUM151	Basic Automotive Engines	5
AUM157	Automotive Brake Systems	5
AUM158	Auto Steering and Suspension	5
AUM286	Automotive Heating and Air Conditioning	5

Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$900; class fees, \$261; equipment and supplies, \$500. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 103 required credit hours:

Course	Title	Credit Hours
Term 1		
AUM151	Basic Automotive Engines	5
AUM156	Automotive Shop Safety	1
AUM157	Automotive Brake Systems	5
COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition (or higher)	3
PH060	Applied Physical Science (or higher)	3
Term 2		
AUM152	Automotive Machine Shop	4
AUM158	Automotive Steering and Suspension	5
COM052	Communication Skills 2	3
	or	
WR122	English Composition-Logic and Style	3
CS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry (or higher)	3
Term 3		
AUM161	Manual Drive-trains and Axles 1	5
AUM168	Automotive Electrical Systems 1	4
AUM192	Automotive Diesel Engines	3
PSY100	Introduction to Psychology (or higher)	3
Term 4		
AUM262	Manual Drive Trains and Axles 2	3
AUM263	Automatic Transmissions and Transaxles 1	5
AUM266	Basic Fuel Systems	5
AUM276	Automotive Electrical Systems 2	4
Term 5		
AUM267	Advanced Carburetion and Fuel Systems	5
AUM277	Automotive Electrical Systems 3	5
AUM282	Electronic Vehicle Controls	5
AUM286	Automotive Heating and Air Conditioning	5
Term 6		
AUM253	Automotive Engines 2	2
	or	
AUM280	Cooperative Work Experience	2
AUM273	Automatic Transmissions and Transaxles 2	2
	or	
AUM280	Cooperative Work Experience	2
AUM281	Tune-up and Driveability	6
AUM283	Advanced Electronic Vehicle Controls	4
WLD097	Welding	2

Biology, Botany, General Science, 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. With minor adjustments as noted below, this outline of classes may also be followed for majors in Botany, Microbiology or Zoology at Oregon State University. See college catalogs for other class options and additional requirements. It may be advisable to transfer after one year of community college course work.

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition-Exposition*	3	3	(3)
HPE295 Health and Fitness for Life* or elective			3
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry (CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry is also accepted for OSU Botany and General Science and for UO Botany and General Science majors)	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 12 hours of math or a combination of math and computer science. MTH111, 112, and 243 Probability and Statistics required for SOU; MTH251, 252 Integral Calculus for OSU and UO; MTH251 and 252 or MTH241 Elementary Calculus and 243 for Botany, and General Science at OSU; PSU requires MTH243 and MTH244 Probability and Statistics 1 and 2 or MTH251 and MTH252; WOU requires MTH251 and MTH252 or MTH243 and CS161 Computer Science 1	4-5	4-5	4
Arts and Letters/Humanities courses* (SP111 Fundamentals of Public Speaking for SOU)	3	3	3

Second Year	4	5	6
PH201, 202, 203 General Physics or PH211, 212, 213 Physics for Engineers and Scientists (not required at WOU and only one term required at EOU; only PH201, 202 required for OSU Zoology majors; OSU Botany majors take BOT201, 202, 203 Botany; General Science majors at OSU may take twelve credits of physical science or physics; EOU choose between PH211 and MTH251 Differential Calculus; SOU also accepts GEO201, 202, 203 Geology; WOU take any science for general education requirements)	4	4	4
CH241, 241B, 242, 242B, 243, 243B Organic Chemistry and labs (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; CH242 and 242B and 243 and 243B not required at PSU; UO General Science majors may take GEO201, 202, 203 Geology)	4-5	4-5	4-5
Social Science courses* (ATH101 Human Evolution and GEG105 Physical Geography may be taken for General Science at UO)	3	3	3
Arts and Letters/Humanities* or electives	3-4	3-4	3-4
OSU Botany, Biology, Microbiology, and Zoology majors should take ZOO201, 202 General Zoology and BOT201, 202 General Botany; OSU General Science allows BI101, 102, 103. PSU General Science degree allows other science choices.			
Social Science electives or other electives* (EOU requires CS101 Introduction to Microcomputers or computer studies courses at or above the 200 level)	3	3	3

*To meet four-year college general education requirements.

** UO General Science needs three three-course sequences from CH121 and 121R, 122 and 122R, 123 and 123R or 221 and 221R, 222 and 222R, 223 and 223R; GEO201, 202, 203; PH201, 202, 203 or 211, 212, 213; or from Anthropology, Biology, Computer Science at UO.

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 at 503-399-5018 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	Introduction to Algebra and Geometry (or higher) .....	.3
Term 2		
BC061	Basic Construction Framing .....	.8
BC063	Construction Estimating .....	.3
COM051	Communication Skills 1 .....	.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 are four four-term focused plans for students with experience in the building trades and a two-year (seven-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, plan review, 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 programs have 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 Enrollment Services (Admissions) Office at 503-399-5006.

Focused Plans

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 at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion for the One- and Two-Family Plans Examiner, Structural Inspector and Mechanical Inspector by successfully completing these 66 required credit hours:

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1 .....	.3
BLD181	Mechanical Codes 1 .....	.3
BLD193A	Building Inspection-Lab .....	.1
BLD263	Structural Inspection - Concrete .....	.3
BLD271	Plumbing Codes 1 .....	.3
COM051	Communication Skills 1 .....	.3
	or	
WR121	English Composition-Exposition .....	.3
MTH052	Introduction to Algebra and Geometry (or higher) .....	.3
Term 2		
BLD152	Building Codes 2 .....	.3
BLD161	Structural Inspection-Wood .....	.3
BLD193B	Building Inspection-Lab .....	.1
BLD264	Structural Inspection-Steel .....	.3
BLD292A	CABO One and Two Family Dwelling Code (Structural) .....	.3
COM052	Communication Skills 2 .....	.3
	or	
WR122	English Composition-Logic and Style .....	.3
MTH053	Introduction to Trigonometry with Geometry (or higher) .....	.3
Term 3		
BLD153	Building Codes 3 .....	.3
BLD155	Building Department Administration .....	.3
BLD162	Structural Inspection-Masonry .....	.3
BLD193C	Building Inspection-Lab .....	.1
BLD292B	CABO One and Two Family Dwelling Code (Mechanical) .....	.3
COM053	Technical Report Writing .....	.3
	or	
WR227	Technical Writing .....	.3
Term 4		
BLD280	Cooperative Work Experience .....	.12

You may earn a Certificate of Completion for the One-Year Structural Inspector by successfully completing these 63 required credit hours:

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1 .....	.3
BLD193A	Building Inspection-Lab .....	.1
BLD263	Structural Inspection-Concrete .....	.3
BLD268	Foundations, Excavating and Grading .....	.3
COM051	Communication Skills 1 .....	.3
	or	

WR121	English Composition-Exposition	3
MTH052	Introduction to Algebra and Geometry (or higher)	3

Term 2

BLD152	Building Codes 2	3
BLD161	Structural Inspection-Wood	3
BLD193B	Building Inspection-Lab	1
BLD264	Structural Inspection-Steel	3
BLD292A	CABO One and Two Family Dwelling Code (Structural)	3
COM052	Communication Skills 2 or	3
WR122	English Composition-Logic and Style	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3

Term 3

BLD153	Building Codes 3	3
BLD155	Building Department Administration	3
BLD162	Structural Inspection-Masonry	3
BLD193C	Building Inspection-Lab	1
BLD292B	CABO One and Two Family Dwelling Code (Mechanical)	3
COM053	Technical Report Writing or	3
WR227	Technical Writing	3

Term 4

BLD280	Cooperative Work Experience	12
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You may earn a Certificate of Completion for the One-Year Structural Plans Examiner by successfully completing these 69 required credit hours:

Course	Title	Credit Hours
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Term 1

BLD151	Building Codes 1	3
BLD193A	Building Inspection-Lab	1
BLD263	Structural Inspection-Concrete	3
BLD268	Foundations, Excavating and Grading	3
COM051	Communication Skills 1 or	3
WR121	English Composition-Exposition	3
MTH052	Introduction to Algebra and Geometry (or higher)	3

Term 2

BLD152	Building Codes 2	3
BLD161	Structural Inspection-Wood	3
BLD193B	Building Inspection-Lab	1
BLD264	Structural Inspection-Steel	3
BLD266	Structural Plan Review	3
BLD292A	CABO One and Two Family Dwelling Code (Structural)	3
COM052	Communication Skills 2 or	3
WR122	English Composition-Logic and Style	3

Term 3

BLD153	Building Codes 3	3
BLD155	Building Department Administration	3
BLD162	Structural Inspection-Masonry	3
BLD193C	Building Inspection-Lab	1

BLD267	Non Structural Plan Review	3
BLD292B	CABO One and Two Family Dwelling Code (Mechanical)	3
COM053	Technical Report Writing or	3
WR227	Technical Writing	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3

Term 4

BLD280	Cooperative Work Experience	12
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You may earn a Certificate of Completion for the One-Year Mechanical Inspection by successfully completing these 63 required credit hours:

Course	Title	Credit Hours
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Term 1

BLD151	Building Codes 1	3
BLD181	Mechanical Codes 1	3
BLD193A	Building Inspection-Lab	1
BLD271	Plumbing Codes 1	3
COM051	Communication Skills 1 or	3
WR121	English Composition-Exposition	3
MTH052	Introduction to Algebra and Geometry (or higher)	3

Term 2

BLD152	Building Codes 2	3
BLD182	Mechanical Codes 2	3
BLD193B	Building Inspection-Lab	1
BLD272	Plumbing Codes 2	3
BLD292A	CABO One- and Two-Family Dwelling Code (Structural)	3
COM052	Communication Skills 2 or	3
WR122	English Composition-Logic and Style	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3

Term 3

BLD153	Building Codes 3	3
BLD155	Building Department Administration	3
BLD183	Mechanical Codes 3	3
BLD193C	Building Inspection-Lab	1
BLD292B	CABO One- and Two-Family Dwelling Code (Mechanical)	3
COM053	Technical Report Writing or	3
WR227	Technical Writing	3

Term 4

BLD280	Cooperative Work Experience*	12
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*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 at 503-399-5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 111 required credit hours:

Course	Title	Credit Hours
Term 1		
BLD150	Introduction to Building Inspection	3
BLD151	Building Codes 1	3
BLD181	Mechanical Codes 1	3
BLD193A	Building Inspection-Lab	1
COM051	Communication Skills 1	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		
BLD152	Building Codes 2	3
BLD159	Materials of Construction	2
BLD161	Structural Inspection-Wood	3
BLD182	Mechanical Codes 2	3
BLD193B	Building Inspection-Lab	1
COM052	Communication Skills 2	3
	or	
WR122	English Composition - Logic and Style (or higher)	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	3
Term 3		
BLD153	Building Codes 3	3
BLD155	Building Department Administration	3
BLD162	Structural Inspection-Masonry	3
BLD183	Mechanical Codes 3	3
BLD193C	Building Inspection-Lab	1
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
FE205A	Job Search Preparation	1
BLD280	Cooperative Work Experience	12
Term 4		
BLD193D	Building Inspection-Lab	1
BLD263	Structural Inspection-Concrete	3
BLD268	Foundations, Excavation and Grading	3
BLD269	Engineering for the Building Inspector	3
BLD271	Plumbing Codes 1	3
Term 5		
BLD193E	Building Inspection-Lab	1
BLD264	Structural Inspection—Steel	3
BLD266	Structural Plan Review	3
BLD272	Plumbing Codes 2	3
BLD292A	CABO One- and Two-Family Dwelling Code (Structural)	3
ART261	General Photography	4
	or	
	Social Science elective	3
	or	
	Humanities/Fine Arts elective	3
Term 6		
BLD193F	Building Inspection-Lab	1
BLD260	Fire Protection for Buildings	3
BLD267	Non-Structural Plan Review	3
BLD291	One- and Two-Family Electrical Code	3
	or	

FRP072	Uniform Fire Code	3
BLD292B	CABO One- and Two-Family Dwelling Code (Mechanical)	3
PSY101	Psychology of Human Relations (or higher)	3

Business Administration

(college transfer)

(Includes Accounting, Finance, International Business, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

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 or 227 Technical Writing or BA214			
Business Communication for OSU*;			
BA214 required for PSU; neither		(3)	3
required at UO)			
Mathematics per placement test (MTH111			
College Algebra, MTH243 Probability			
and Statistics I, MTH241 Elementary			
Calculus for OSU, UO, and WOU;			
MTH241 for EOU; MTH111, 243, and 244			
for PSU; MTH111 and 243 for SOU)	5	4	(4)
CS101 Introduction to Microcomputer			
Applications (also recommend BA271			
Information Technology in Business for			
OSU; and CA208 Computer Presentations			
for the Workplace-MS PowerPoint for			
UO; Micro Database Software-Access			
for OSU)	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 ATH, PSY or SOC)	3	3	3
HPE295 Health and Fitness for Life* or elective		3	
Electives* (recommend CS178I for PSU; BA275 Quantitative Business Methods or MTH244 Probability and Statistics 1 for OSU)	(3-4)	(3-4)	
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 Public Speaking for WOU; SP111 or SP112 Fundamentals of Persuasion for OSU; SP112 for PSU; choose one from SP111, 112, 113 Fundamentals of Small Group Communication or SP218 Interpersonal Communication for SOU; SP218 for EOU	3		
BA226 Business Law for EOU, OSU, and WOU;			
BA101 Business Environment for EOU, PSU, and 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.

Business Technology

Chemeketa offers a Clerical Basics certificate, one-year certificates and two-year degree programs in business technology for those who wish to pursue a career in a business office environment.

The 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 core curriculum and electives prepare you as an entry-level office support specialist. You may earn a Business Technology Certificate of Completion by successfully completing the credit hours required.

The two-year program is designed for people who want to become secretaries, assistants and support specialists. There are four options: Administrative Assistant, Accounting Administrative Assistant, Business Support Specialist and Medical Administrative Assistant. 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 a receptionist, file clerk, bookkeeper, typist and an employee in other related positions. Independent study and individualized instruction allow you to proceed at your own pace. The class time is flexible to accommodate your schedule. Courses include keyboarding, records management, business English, calculators, bookkeeping, proofreading, a computer operating system, and basic word processing, spreadsheet and database. 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, 503-623-5567 in Dallas, 503-472-9482 in McMinnville, and 503-981-8820 in Woodburn.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$700; class fees, \$61; equipment and supplies, \$43. Contact the Financial Aid Office at 503-399-5018 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 of C or better in all courses.

Required Courses:

Course	Title	Credit Hours
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
CS101	Introduction Microcomputer Applications .....	.3
	or	
CA100	Microcomputer Basics .....	.3
	Business elective* .....	.3

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

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

BT084	Business English 1	3
CA121A	Keyboarding A (if less than 25 wpm)	1
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3

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

One-Year Certificate Programs

You may earn a Certificate of Completion by successfully completing the credit hours required for the Business Technology Certificate or the Business Software Certificate.

Business Technology Certificate

This certificate prepares you to work as a word processing operator, general office clerk, receptionist, typist, file clerk, secretary, transcriptionist, bookkeeper and/or accounting clerk. You may enroll part time or full time. Upon successful completion of this program, you will receive a Certificate of Completion in Business Technology. You will complete 37 required credit hours and select 9 hours of elective classes. A course with an asterisk (*) has a prerequisite or is in the pre-program requirements determined when you were tested at entrance. Your classes will be offered primarily in traditional classrooms and labs. Taking classes through distance education is an option for some classes. If you are interested in taking classes primarily by distance delivery, see the Business Software Certificate.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$956; class fees, \$115; equipment and supplies, \$67. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing 46 required credit hours with a grade of C or better in all courses. These include the 37 credit hours listed under Business Technology Certificate core requirements, and 9 credit hours of Business Technology Certificate electives.

Business Technology Certificate core requirements (37 credit hours):

Course	Title	Credit Hours
BT061	Electronic Calculators	2
BT085	Business English 2	3
BT086	Personal and Professional Development	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA118D	Current Office Software-Internet	1
CA122	Keyboard Skillbuilding	3
CA201D	Word Processing Procedures 1	3
CA210	Office Microcomputer Applications	3
CS101	Introduction to Microcomputer Applications	3

Business Technology Certificate electives (Select 9 credit hours):

BA051	Accounting Procedures 1	4
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BA052	Accounting Procedures 2	4
BA053	Accounting Procedures 3	4
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BT090	Bookkeeping	3
BT110	Business Grammar and Punctuation Review	3
BT111	Business Letters and Memo Writing Review	3
BT280	Cooperative Work Experience	2-3
CA091	Computerized Bookkeeping	3
CA117A,B,C	Microsoft Publisher 1, 2, 3	1 each
CA118E	Current Office Software-Electronic Messaging Systems	1
CA118F	Current Office Software-Microsoft PowerPoint	1
CA119	Exploring Office Desktop Publishing	3
CA202D	Word Processing Procedures 2	3
CA203	Advanced Formatting	1
CA205	Desktop Publishing 1-PageMaker	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
CA225A,B,C	Machine Transcription 1A, 1B, 1C	1 each
MTH062	Business Applications Using Mathematics (or higher)	4

Business Software Certificate

This certificate offers students the opportunity to earn a one-year certificate in Business Technology primarily through distance delivery methods such as telecourses, online courses and CTV courses.

In addition to tuition, estimated costs for students who complete the bookkeeping specialization required courses listed below are books, \$896; fees \$865 (on-line telecourse); equipment and supplies-access to a computer with a modem and appropriate software. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion in the one-year program by successfully completing 47 required credit hours. These include the 25 credit hours listed under Business Software core requirements, and 22 credit hours of Business Software electives. Successful completion requires that you earn a grade of C or better in all courses.

Business Software core requirements (25 credit hours):

Course	Title	Credit Hours
CA115	Introduction to Office 2000	4
CA118A	Current Office Software-Operating Systems/Utilities*	1
CA118D	Current Office Software-Internet	1
CA201D	Word Processing Procedures 1	3
CA202D	Word Processing Procedures 2	3
CS101	Introduction to Microcomputer Applications*	3
MTH062	Business Applications Using Mathematics (or higher)	4
PSY100	Introduction to Psychology (or higher)	3
SP100	Introduction to Communication	3
WR121	English Composition-Exposition (or higher)	3

Business Software electives: (Select 22 credit hours):**

BT110A,B,C	Business Grammar and Punctuation Review A,B,C	1-3
BT111A,B,C	Business Letters and Memo Writing Review A,B,C	1-3
BT280B,C	Cooperative Work Experience	2-3

CA091	Computerized Bookkeeping	3
CA117A,B,C	Microsoft Publisher 1, 2, 3	.1 each
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA118F	Current Office Software-Microsoft PowerPoint	1
CA204D	Advanced Word Processing	3
CA205	Desktop Publishing 1-PageMaker	3
CA206	Desktop Publishing 2-PageMaker	3
CA210	Office Microcomputer Applications	3
CS105	Introduction to MS Windows	3
CS125A	Micro Database Software-Access	3
CS125E	Excel-Workbooks	4
CS178I	Introduction to the Internet/World Wide Web	3

*In order to be most successful, take CA118A and CS101 prior to other CA and CS courses in your program.

**Other electives may be permitted. Before registering for a course not listed, contact your advisor for approval.

Two-Year Degree Programs

Chemeketa's Business Technology two-year program is designed for a person who wants to become an administrative assistant, business support specialist, accounting assistant, medical assistant, office coordinator or manager or other administrative support specialist.

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 four options: Administrative Assistant, Business Support Specialist, Accounting Administrative Assistant and Medical Administrative Assistant. 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 an 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 will become skilled in areas such as keyboarding, document production, composition, machine transcription, computers and operating business machines. You will gain knowledge of records management, word processing, data processing, desktop publishing and office procedures.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,644; class fees, \$108; equipment and supplies, \$88. Contact the Financial Aid Office at 503-399-5018 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. These include the 46 credit hours listed under Administrative Assistant first-year core requirements, and 53 credit hours from the second-year core requirements. Successful completion requires that you earn a grade of C or better in all courses.

Administrative Assistant first-year core requirements (46 credit hours):

Course	Title	Credit Hours
BT085	Business English 2	3
BT061	Electronic Calculators	2
BT086	Personal and Professional Development	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
CA118A	Current Office Software-Operating Systems/Utilities	1
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA118D	Current Office Software-Internet	1
CA122	Keyboard Skillbuilding	3
CA201D	Word Processing Procedures 1	3
CA210	Office Microcomputer Applications	3
CS101	Introduction to Microcomputer Applications	3
	Administrative Assistant electives*	9

Administrative Assistant second-year core requirements (53 credit hours):

Course	Title	Credit Hours
BA051	Accounting Procedures 1	4
	or	
BA211	Financial Accounting 1	4
	or	
BT090	Bookkeeping	3
BA251	Office Management	3
CA119	Exploring Office Desktop Publishing	3
CA118E	Current Office Software-Electronic Messaging Systems	1
CA202D	Word Processing Procedures 2	3
CA203	Advanced Formatting	1
CA204D	Advanced Word Processing	3
CA205	Desktop Publishing 1-PageMaker	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
CA225A,B,C	Machine Transcription 1A, 1B, 1C	.1 each
CA230	Executive Office Simulation	3
MTH062	Business Applications Using Mathematics (or higher)	4
WR227	Technical Writing	3
	Humanities/Fine Arts elective	3
	Social Science elective	3
	Speech elective	3
	Administrative Assistant electives*	8

*Administrative Assistant electives:

BA177	Payroll	4
BT280	Cooperative Work Experience	3
CA091	Computerized Bookkeeping	3
CA117A,B,C	Microsoft Publisher 1, 2, 3	3
CA118F	Current Office Software-Microsoft PowerPoint	1
CA206	Desktop Publishing 2-PageMaker	3
CS125E	Excel-Workbooks	4

Getting Started

Program requirements have changed. See "Getting Started" heading on page 56 for details.

Business Support Specialist Option

The Business Support Specialist 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 current operating systems and software applications, and the Internet and World Wide Web.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,758; class fees, \$108; equipment and supplies, \$88. Contact the Financial Aid Office at 503-399-5018 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. These include the 46 credit hours listed under Business Support Specialist first-year core requirements, and 50 credit hours from the second-year core requirements. Successful completion requires that you earn a grade of C or better in all courses.

Business Support Specialist first-year core requirements (46 credit hours):

Course	Title	Credit Hours
BT061	Electronic Calculators	.2
BT085	Business English 2	.3
BT086	Personal and Professional Development	.3
BT099	Proofreading/Editing	.3
BT116	Office Procedures	.3
BT120	Professional Communication Skills	.4
BT128	Introduction to Records Management	.3
CA118A	Current Office Software-Operating Systems/Utilities	.1
CA118B	Current Office Software-Worksheets	.1
CA118C	Current Office Software-Database	.1
CA118D	Current Office Software-Internet	.1
CA122	Keyboard Skillbuilding	.3
CA201D	Word Processing Procedures 1	.3
CA210	Office Microcomputer Applications	.3
CS101	Introduction to Microcomputer Applications	.3
	Business Support Specialist electives*	.9

Business Support Specialist second-year core requirements (50 credit hours):

Course	Title	Credit Hours
BA051	Accounting Procedures 1	.4
	or	
BA211	Financial Accounting 1	.4
	or	
BT090	Bookkeeping	.3
BA214	Business Communications	.3
BA238	Sales and Persuasion	.3
BA251	Office Management	.3
BT280	Cooperative Work Experience	.2-3
CA091	Computerized Bookkeeping	.3
CA118E	Current Office Software-Electronic Messaging Systems	.1
CA119	Exploring Office Desktop Publishing	.3
CA205	Desktop Publishing 1-PageMaker	.3
CA208	Computer Presentations for the Workplace-MS PowerPoint	.3
CS125E	Excel-Workbooks	.4
MTH062	Business Applications Using Mathematics (or higher)	.4

Humanities/Fine Arts elective	.3
Social Science elective	.3
Speech elective	.3
Business Support Specialist electives*	.6

*Business Support Specialist electives:

BA177	Payroll	.4
BA204	Teamwork Dynamics	.3
BA223	Principles of Marketing	.3
BA226	Business Law 1	.3
BA277	Business Ethics	.3
CA117A,B,C	Microsoft Publisher	.3
CA118F	Current Office Software-Microsoft PowerPoint	.1
CA202D	Word Processing Procedures 2	.3
CA204D	Advanced Word Processing	.3
CA206	Desktop Publishing 2-PageMaker	.3
CS125A	Micro Database Software-Access	.3
CS178I	Introduction to the Internet/World Wide Web	.3
WR227	Technical Writing	.3

Getting Started

Program requirements have changed. See "Getting Started" heading on page 56 for details.

Medical Administrative Assistant Option

The Medical Administrative Assistant 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.

Getting Started

Program requirements have changed. See "Getting Started" heading on page 56 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,683; class fees, \$216; equipment and supplies, \$134. Contact the Financial Aid Office at 503-399-5018 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. Successful completion requires that you earn a grade of C or better in all courses.

Course	Title	Credit Hours
Term 1		
BT085	Business English 2	.3
CA122	Keyboard Skillbuilding	.3
CS101	Introduction to Microcomputer Applications	.3
HM110	Health Information Systems Procedures 1	.4
HM120	Medical Terminology/Systems 1	.3
Term 2		
BT116	Office Procedures	.3
CA118A	Current Office Software-OS/Utilities	.1
CA118B	Current Office Software-Worksheets	.1
CA118C	Current Office Software-Database	.1
CA118D	Current Office Software-Internet	.1
CA201D	Word Processing Procedures 1	.3
HM114	CPT-IV Coding/Reimbursement	.3
HM121	Medical Terminology/Systems 2	.3

Term 3

BT120	Professional Communication Skills	4
CA202D	Word Processing Procedures 2	3
CA210	Office Microcomputer Applications	3
HM101	Medical Law and Ethics	3
HM115	ICD-9-CM Coding/Reimbursement	3

Term 4

BA051	Accounting Procedures 1	4
	or	
BA211	Financial Accounting 1	4
BI071	Body Structure and Function 1	3
	or	
BI231	Human Anatomy and Physiology	4
BT061	Electronic Calculators	2
BT128	Introduction to Records Management	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication	3

Term 5

BA214	Business Communications	3
BI072	Body Structure and Function 2	3
	or	
BI232	Human Anatomy and Physiology	4
BI233	Human Anatomy and Physiology	4
BT099	Proofreading/Editing	3
HM140	Medical Transcription	3

Term 6

BT086	Personal and Professional Development	3
CA203	Advanced Formatting	1
CA225A,B	Machine Transcription 1A, 1B	1 each
CA230	Executive Office Simulation	3
MTH062	Business Applications Using Mathematics (or higher)	4
	Social Science elective	3

Getting Started

Program requirements have changed. See "Getting Started" heading on page 56 for details.

Accounting Administrative Assistant Option

The Accounting Administrative Assistant option prepares you for office positions where accounting tasks are heavily emphasized and for positions such as accounting clerk, payroll clerk or full-cycle bookkeeper.

This option provides you with a broad range of training in accounting, both manual and computerized, in addition to training in office skills such as information processing, office procedures, records management and office management.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,699; class fees, \$175; equipment and supplies, \$134. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these required 96 credit hours. Successful completion requires that you earn a grade of C or better in all courses.

Course	Title	Credit Hours
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Term 1

BA051	Accounting Procedures 1	4
	or	
BA211	Financial Accounting 1	4
BT061	Electronic Calculators	2
BT085	Business English 2	3
CS101	Introduction to Microcomputer Applications	3
MTH062	Business Applications Using Mathematics (or higher)	4

Term 2

BA052	Accounting Procedures 2	4
	or	
BA212	Financial Accounting 2	4
BT120	Professional Communication Skills	4
CA118A	Current Office Software-OS/Utilities	1
CA118B	Current Office Software-Worksheets	1
CA118C	Current Office Software-Database	1
CA118D	Current Office Software-Internet	1
CA122	Keyboard Skillbuilding	3
CA201D	Word Processing Procedures	3

Term 3

BA053	Accounting Procedures 3	4
	or	
BA213	Managerial Accounting	4
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT128	Introduction to Records Management	3
CA210	Office Microcomputer Applications	3

Term 4

BA214	Business Communications	3
CA208	Computer Presentations for the Workplace-MS PowerPoint	3
CS125E	Excel-Workbooks	4
MTH070	Elementary Algebra (or higher)	4
	Humanities/Fine Arts elective	3
	or	
	Science/Applied Science elective	3

Term 5

BA251	Office Management	3
CA119	Exploring Office Desktop Publishing	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communications	3
	Social Science elective	3
	Business elective (BT280 CWE recommended)*	3

Term 6

BA177	Payroll	4
BA228	Computer Accounting Applications	3
BT086	Personal and Professional Development	3
CA203	Advanced Formatting	1
CA230	Executive Office Simulation	3

*Business elective: BA226, BA277, BT280, CA117A,B,C, CA118F, CA205, CS125A

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry (UO also accepts CH121 and 121R, 122 and 122R, 123 and 123R)	5	5	5
Mathematics per placement test; EOU requires through MTH253 Series Calculus; OSU requires through MTH254 Vector Calculus 1; SOU requires MTH251 Differential Calculus and MTH252 Integral Calculus; PSU requires MTH254 Vector Calculus 1; WOU requires MTH251, 252, 254)	4-5	4-5	4-5
Arts and Letters/Humanities electives* (PSU recommends a Foreign Language, particularly for students planning on graduate studies)	3-4	3-4	3-4
Second Year	4	5	6
PH211, 212, 213 Physics for Engineers and Scientists (UO students may substitute PH201, 202, 203)	4-5	4-5	4-5
Social Science courses*	3	3	3
**CH241, 241B, 242, 242B, 243, and 243B Organic Chemistry	5	5	5
Mathematics/Computer Science (EOU requires CS161 Computer Science 1; OSU requires BI101 General Biology; WOU requires MTH254 and CS162; OSU requires MTH254 Vector Calculus 1 and MTH256 Applied Differential Equations; UO requires MTH256)	4-5	4-5	4-5

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry	5	5	5
Mathematics per placement test through MTH111 College Algebra and MTH112 Trigonometry	5	5	
WR121 English Composition-Exposition and six hours from JNL216 Newswriting, SP111 Fundamentals of Public Speaking, SP112 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* (21 credit hours of electives needed)	3-6	3	6
Second Year	4	5	6
ZOO201, 202, 203 Zoology or BI231, 232 Human Anatomy and Physiology and one course in Zoology (BI231, 232 recommended)	4	4	4
PH201, 202, 203 General Physics or			

PH211, 212, 213 Physics for Scientists	4	4	4
CH241, 241B, 242, 242B, 243, 243B Organic Chemistry	5	5	5
Approved Humanities or Social Science electives* (from Anthropology, Art History, Economics, Literature (ENG), Fine Arts, Geography, HD220, 221, Human Development and Family Studies, History, Humanities, Journalism, Music, Philosophy, Political Science, Religion, Sociology, Speech, Theater Arts, Writing, Women's Studies; Art, Music, and Theater Arts classes must be theory-based.)	6	3	3

Civil Engineering Technology

The Civil 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 subdivision design in addition to surveying 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. 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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SSP051	Studying for College	3
WR040	Writing Skills	3

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

Survey Technology Certificate

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 at 503-399-5018 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		
BLD268	Foundations, Excavation and Grading	3
CVL143	Introduction to Civil Survey	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to Hewlett Packard Computers	2
DRF112	Sketching	1
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra	5
Term 2		
COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition	3
CVL161A	Plane Survey 1-Lecture	2
CVL161B	Plane Survey 1-Lab	2
DRF102	Print Reading	2
DRF136	Advanced AutoCAD	3
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry	5
Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
CVL162A	Plane Survey 2-Lecture	2
CLV162B	Plane Survey 2-Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125E	Worksheets-Excel	4
PSY100	Introduction to Psychology (or higher)	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 at 503-399-5018 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 these required 96 credit hours:

Course	Title	Credit Hours
Term 1		
BLD268	Foundations, Excavation and Grading	3
CVL143	Introduction to Civil Survey	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to Hewlett Packard Computers	2
DRF112	Sketching	1
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5

Term 2

COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition (or higher)	3
CVL161A	Plane Surveying 1-Lecture	2
CVL161B	Plane Surveying 1-Lab	2
DRF102	Print Reading	2
DRF136	Advanced AutoCAD	3
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5

Term 3

COM053	Technical Report Writing	3
	or	
WR227	Technical Writing (or higher)	3
CVL162A	Plane Surveying 2-Lecture	2
CVL162B	Plane Surveying 2-Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125E	Excel-Workbooks	4
	Humanities/Fine Arts elective	3
	or	
	Social Science elective	3

Term 4

BLD263	Structural Inspection—Concrete	3
CVL230	Applied Statics	3
DRF241	Structural Drafting	3
DRF245	Civil Drafting and Design	3
PH081	Applied Physics (or higher)	4

Term 5

CVL231	Applied Strength of Materials	4
CVL260	Survey Project Planning	3
CVL261	Environmental and Sanitary Engineering	4
DRF220	GIS ArcView	2
DRF230	Introduction to MicroStation PC	3

Term 6

CVL263A	Construction and Route Surveying-Lecture	2
CVL263B	Construction and Route Surveying-Lab	2
DRF165	CAD System Administration	3
DRF221	GIS ArcCAD	3
DRF231	Advanced MicroStation	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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

RD090	College Textbook Reading	3
CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
WR115	Introduction to Composition	3

If you have questions about the requirements, call Counseling and Career Services 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, \$1,560; class fees, \$150; equipment and supplies, \$285. Contact the Financial Aid Office at 503-399-5018 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
CIS120	Computer Information Science 1	4
CIS121	Computer Information Science 2	4
WR121	English Composition-Exposition (or higher)	3
Term 2		
BA211	Financial Accounting 1	4
CS133C	COBOL 1	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 3	4
CS233C	COBOL 2	4
CS244	Systems Analysis 1	3

SP111	Fundamentals of Public Speaking (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 2	3
CS280C	Cooperative Work Experience	3
	or	
	Computer Science elective*	3

MTH105	Introduction to Contemporary Mathematics (or higher)	4
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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 Programming Techniques	4
CS280C	Cooperative Work Experience	3
PSY104	Psychology in the Workplace	4
	Computer Science electives*	6

*Computer Science elective: Choose courses with CS or CIS prefixes above CS105. (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, \$1,820; class fees, \$180; equipment and supplies, \$335. Contact the Financial Aid Office at 503-399-5018 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
CIS120	Computer Information Science 1	4
CIS121	Computer Information Science 2	4
WR121	English Composition-Exposition (or higher)	3
Term 2		
BA211	Financial Accounting 1	4
CS125A	Micro Database Software-Access	3
CS133C	COBOL 1	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 3	4
CS125E	Excel-Workbooks	4
CS140U	UNIX/LINUX	3
CS244	Systems Analysis 1	3
WR227	Technical Writing	3

Term 4

CS133VB	Visual Basic-Event-Driven Programming	4
CS179	Introduction to Windows NT	3
CS240	Advanced Operating Systems	3
MTH105	Introduction to Contemporary Mathematics (or higher)	4
	Humanities/Fine Arts elective	3
	or	
	Science/Applied Science elective	3

Term 5

CS145	Microcomputer Hardware	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

CS060	Techniques of User Training	2
CS279	Network Management	5
CS280C	Cooperative Work Experience	3
	or	
	Computer Science elective*	3
SP111	Fundamentals of Public Speaking (or higher)	3
PSY104	Psychology in the Workplace	4

*Computer Science elective: Choose course with CS or CIS prefixes above CS105. (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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
CS160 Introduction to Computer Science (required co-requisite for Chemeketa's CS161), CS161, 162, 260 Computer Science 1, 2 and 3 (required by all except OSU, UO and EOU; recommend CS161, 162 for EOU and OSU)	4	4	4
Mathematics per placement test* (MTH111 prerequisite for CS161; MTH251 Differential Calculus and higher required at most colleges; MTH231, 232 Discrete Mathematics required at OSU and UO; MTH231 or 252 or 253 for WOU)	4	4	4
Science courses to meet college and Computer Science major requirement* (PH211, 212, 213 Physics for Engineers and Scientists and four hours Biological Science for OSU; PH211, 212, 213 Physics for PSU; science sequence for WOU)	4-5	4-5	4-5
WR121, 122 and/or 123 English Composition and/or WR227 Technical Writing* (WR121, 227 and SP111 Fundamentals of Public Speaking or SP112 Fundamentals of Persuasion for OSU; WR121, 122, 227 for SOU; WR121 and WR227 for PSU; WR121 and WR122 or 123 for UO; WR121 and Speech elective for WOU)	3	3	(3)
It is recommended that students planning to attend PSU and UO transfer after completing one year. UO students should plan on taking required CS courses at UO.			
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 OSU and PSU; CS133C COBOL for SOU; CS236 Advanced Language Microcomputers, CS285 Fourth-Generation Language-SQL and CS171 Computer Organization required at WOU)	3-4	3-4	3-4
Mathematics to meet major requirements MTH251 and 252 Calculus for EOU; MTH251 and 252, MTH253 Series Calculus and Linear Algebra, and MTH254 Vector Calculus I for OSU and PSU; MTH251, 252, 253 for UO; MTH231 or MTH252 for WOU; MTH251 for SOU	4-5	4-5	4-5
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 and 221R, 222 and 222R, 223 and 223R 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 or 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 9-1-1 telecommunications, 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 a 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 Career and Counseling Services 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.

There are several topical seminars offered during the calendar year. Please consult program chair about specific seminar content. Students should refer to the schedule of classes for these seminars as well as for specific criminal justice courses that are offered on-line.

Chemeketa's Criminal Justice program also offers a one year (47 credit hour) certificate in Juvenile Corrections, for information refer to page 96.

Students with current or prior professional experience and training in the criminal justice career field should contact the program chair to see if they are eligible for Credit for Professional Certification college credits.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's pre-placement test and meeting with counseling and advising staff. You may need to complete pre-program courses.

Students should contact program chair regarding waiver of CJ050. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
CJ050	Criminal Justice Foundations	3
MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3
	or	
COM051	Communication Skills 1	3

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

Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,200. Contact the Financial Aid Office at 503-399-5018 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
SP218	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 1: 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
CJ123	Survival Spanish for Law Enforcement	.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 2: Crimes vs. Property	.3
CJ212	Police Report Writing	.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

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

CA121	Keyboarding	.3
HDF226	A Time To Grow	.3
HDF260	Child Abuse and Neglect	.3
HE262	Cardiopulmonary Resuscitation Instruction	.2
PE185PA	Personal Defense	.1
PSY201	General Psychology-Biological	.3
PSY202	General Psychology-Cognitive	.3
PSY203	General Psychology-Clinical/Social Emphasis	.3
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

**Suggestions for students: Due to current bilingual hiring preferences, students are urged to take SPN111, 112, 113 for Humanities sequence. Law enforcement and adult corrections students are urged to take PSY201, 202, 203 for Social Science sequence.

Criminal Justice

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Criminal Justice are Western Oregon University (degree in Law Enforcement, Corrections, or Community Crime Prevention), Southern Oregon State College (degree in Criminology) and Portland State University (degree in Administration of Justice).

The two-year program outlined below is designed to meet lower division general education requirements at these institutions. Students who complete all the courses outlined below will be eligible for an Associate of Arts Oregon Transfer degree from Chemeketa.

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 a Chemeketa advisor in your program. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in the program.

Refer to the Associate of Arts Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 English Composition	3	3	
WR123 English Composition or WR227 Technical Writing			3
Social Science course (WOU requires a sequence other than Psychology)	3	3	3
Humanities courses (WOU requires	3	3	3
ENG104, 105, 106 Introduction to Literature or ENG107, 108, 109 World Literature)			
CJ100 Survey of Criminal Justice System (required at PSU and SOU)	3		
CJ101 Criminology (required at SOU)	3		
CJ110 Introduction to Law Enforcement (required at PSU and SOU)	3		
CS101 Introduction to Microcomputers	3		
SP111 Fundamentals of Speaking or SP112	3		

Fundamentals of Persuasion or SP219 Fundamentals of Small Group Communication or SP218 Interpersonal Communication (SP115 Introduction to Intercultural Communication required at PSU) Humanities elective in discipline other than Humanities sequence (PHL203 Elementary Ethics required at PSU; Philosophy or Religion course required at WOU)	3			
Second Year	4	5	6	
MTH105 Introduction to Contemporary Mathematics or MTH111 College Algebra			4-5	
Science Courses (WOU requires at least two courses in same discipline)	4-5	4-5	4-5	
Social Science electives* (SOC204 General Sociology required at PSU)	3	3	3	
HPE295 Health and Fitness or HE250	3			
Personal Health or 3 credits of PE185 Activity Courses*				
HPE295 required at WOU	(1)	(1)	(1)	
Humanities or Science or Math elective* other than in discipline taken for sequence (PHL203 Elementary Ethics required at PSU) CJ206 Crime and Delinquency		3-4		
(CJ210 and 211 Introduction to Criminal Investigation 1 and 2 required at PSU and SOU)	3			
CJ215 Criminal Justice Administration (take CJ220 Introduction to Substantive Law and Criminal Code for PSU and SOU)			3	
CJ226 Introduction to Constitutional Law (required at SOU)			3	
Electives (courses numbered 100 or above)	3	3		

*See page 35 in current catalog for acceptable sequences and courses for AAOT degree and pages 38-44 for 4-year institution general education requirement.

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, 211 East Chicago Avenue, Chicago, Illinois 60611-2678. The telephone number is (312) 440-2500. The internet address is [Cwww.ada.org](http://www.ada.org).

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 Enrollment Services (Admissions) Office at 503-399-5006.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

BI060	Basic Science for Dental Assistants	3
CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
SP100	Introduction to Communication (or higher) or	3
SP218	Interpersonal Communication (preferred)	3
SSP112	Study Skills	3
WR115	Introduction to Composition	3

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

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available in Counseling and Career Services, Admissions, and program offices.

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, \$365; class fees, \$120; equipment and supplies, \$675; test fees, \$410; physical examination/immunizations, \$200. Contact the Financial Aid Office at 503-399-5018 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		
DEN050	Dental Sciences	3
DEN051	Introductory Concepts in Dental Assisting	3
DEN052	Dental Head and Neck Anatomy	3
DEN053	Dental Materials 1	3
DEN054	Preventive Dentistry	1
DEN070	Dental Office Management	2
Term 2		
DEN060	Dental Specialties	3
DEN061	Dental Assisting Practicum 1	3
DEN062	Intermediate Clinical Skills	3
DEN063	Dental Materials 2	3
DEN064	Dental Radiology 1	3
Term 3		
DEN071	Dental Assisting Practicum 2	9
DEN072	Expanded Functions	3
DEN074	Dental Radiology 2	2
DEN080	Dental Assisting 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institute to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
ZOO201, 202, 203 General Zoology strongly recommended for OHSU	(4)	(4)	(4)
CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry (CH104 and 1104R, 105 and 105R, 106 and 106R Chemistry for Allied Health may be substituted**)	4-5	4-5	4-5
PSY201 General Psychology-Biological Emphasis	3		
ATH103 Cultural Anthropology for OHSU; Psychology elective for OIT			3
WR121, 122 English Composition and WR227 or 123 Technical Writing for OIT; WR121 and 122, or 123, or 227 for OHSU	3	3	(3)
SP111 Fundamentals of Public Speaking or SP112 Fundamentals of Persuasion for OHSU; SP219 Fundamentals of Small Group Communication for OIT			3
CS101 Introduction to Microcomputer Applications 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	4	4	4
Humanities electives* (six hours for OIT and SP115 Introduction to Intercultural Communication; six hours from Art (non-studio classes), Literature (ENG), Humanities, Music (not performance classes), Philosophy, Speech, Theater Arts, or second-year Foreign Language for OHSU)	3	3	3
BI234 Microbiology (not required but strongly recommended for OHSU)			4
SOC204 General Sociology-Introduction	3		
Electives (additional electives to bring total transferable credits to 91 for OHSU)	3-6	6-9	3-6

*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 503-399-5181 or 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.

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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications	.3
MTH070	Elementary Algebra	.4
SSP051	Studying for College	.3
WR040	Writing Skills	.3

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

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 at 503-399-5018 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 1	3
	or	
WR121	English Composition-Exposition (or higher)	3
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to Hewlett Packard Computers	2
DRF112	Sketching	1
DRF114	Drafting Orientation	2
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
CVL161A	Plane Surveying 1-Lecture	2
CVL161B	Plane Surveying 1-Lab	2
DRF136	Advanced AutoCAD	3
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry	5
PH081	Applied Physics (or higher)	4
Term 3		
DRF137	AutoCAD 3-D	3
DRF140	Advanced Technical Graphics	3
DRF150	Architectural Drafting 1	3
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CS125E	Excel-Workbooks	4
Term 4		
CVL230	Applied Statics	3
DRF210	Parametric Design	3
DRF241	Structural Drafting	3
DRF242	3-D Studio	3
DRF245	Civil Drafting and Design	3
DRF256	AutoLISP Programming	3
Term 5		
CVL261	Environmental and Sanitary Engineering	4
DRF220	GIS ArcView	2

DRF230	Introduction to MicroStation PC	3
DRF240	Architectural Drafting 2	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
DRF221	GIS ArcCAD	3
DRF231	Advanced MicroStation	3
DRF243	Architectural Design	3
DRF255	Technical Illustration	3

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 at 503-399-5018 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		
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to Hewlett Packard Computers	2
DRF112	Sketching	1
DRF114	Drafting Orientation	2
	or	
GE101	Engineering Orientation	3
MFG111	Industrial Safety Seminar	1
MFG130	CNC Machine Setup/Operation	3
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
DRF136	Advanced AutoCAD	3
MFG145A	CMM/QA Applications	2
MFG145B	CMM/QA Applications-Lab	1
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
PH081	Applied Physics	4
	or	
PH201	General Physics (or higher)	4

Term 3

COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition (or higher)	3
DRF137	AutoCAD 3-D	3
DRF140	Advanced Technical Graphics	3
DRF160	Technical Software Applications	3
	or	
GE103	Engineering Computations	3
	Humanities/Fine Arts elective	3
	or	
	Social Science elective	3

Term 4

CVL230	Applied Statics	3
	or	
EGR211	Statics	4
DRF210	Parametric Design	3
DRF241	Structural Drafting*	3
DRF242	3-D Studio*	3
DRF256	AutoLISP Programming	3
ELT100	Electronics Fundamentals for Non-Majors	4

Term 5

CVL231	Applied Strength of Materials	4
	or	
EGR213	Strength of Materials	4
DRF230	Introduction to MicroStation PC*	3
DRF251	Power Transmission Design	3
DRF260	Tool Design	3
EGR248	Graphics and 3-D Modeling	3
MFG136	Geometric Dimensioning/Tolerancing	2

Term 6

COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF165	CAD System Administration*	3
DRF255	Technical Illustration*	3
DRF262	Machine Design	3
MT227A	Introduction to Hydraulics/Pneumatics	3
	or	
EGR212	Dynamics	4

*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 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 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 503-399-5181 or 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 at 503-399-5018 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		
DRF072	Introduction to AutoCAD	3
DRF110	Introduction to Hewlett Packard Computers	2
DRF112	Sketching	1
DRF114	Drafting Orientation	2
MFG111	Industrial Safety Seminar	1
MFG130	CNC Machine Setup/Operation	3
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition	3
DRF136	Advanced AutoCAD	3
MFG145A	CMM/QA Applications	2
MFG145B	CMM/QA Applications-Lab	1
MFG160	Programming CNC Mills	3
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
DRF137	AutoCAD 3-D	3
DRF140	Advanced Technical Graphics	3
DRF160	Technical Software Applications	3
	or	
CS125E	Excel-Workbooks	4
MFG176	Manufacturing Material and Cutting Tools	3
MFG190	Programming CNC Lathes	3
Term 4		
CVL230	Applied Statics	3
DRF210	Parametric Design	3
MFG230	CAM Applications/Mills	3
PH081	Applied Physics (or higher)	4
	or	
PH201	General Physics (or higher)	4
	Humanities/Fine Arts elective	3
	or	
	Social Science elective	3
Term 5		
CVL231	Applied Strength of Materials	4
DRF251	Power Transmission Design	3
DRF260	Tool Design Lab	3
EGR248	Graphics and 3-D Modeling	3
MFG136	Geometric Dimensioning/Tolerancing	2
MFG260	CAM Applications/Lathes	3

Term 6	
COM053	Technical Report Writing .....3 or
WR227	Technical Writing .....3
DRF165	CAD Systems Administration .....3
DRF262	Machine Design .....3
MFG290	CAD/CAM Integrations .....4
MT227A	Introduction to Hydraulics/Pneumatics .....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 the 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 preschools, day care centers, family day care homes and Head Start programs.

Participants will be enrolled in 13 credits of classroom instruction and 18 credits of Cooperative Work Experience. 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; class fees, \$5; basic first aid card, \$25; criminal records check, \$375; and conference registration, \$100. Contact the Financial Aid Office at 503-399-5018 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	
HDF247	Preschool Child Development .....3	
	or	
HDF249	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	
HDF248	Learning Experiences for Young Children .....4	

One-Year Option

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm) 1
MTH020	Basic Mathematics .....3
RD090	College Textbook Reading .....3
WR115	Introduction to Composition .....3
	or
COM051	Communication Skills 1 .....3

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

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; and conference registration, \$100. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

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	
HDF222	Family Relationships .....3	
HDF225	Prenatal, Infant and Toddler Development .....3	
HDF249	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 Childhood Educator Orientation	2
HDF247	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
HDF229	Development in Middle Childhood	3
HDF248	Learning Experiences for Young Children	4

Two-Year Option

Getting Started

Program requirements have changed. See “Getting Started” under the One-Year option heading on this page 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; and conference registration, \$100. Contact the Financial Aid Office at 503-399-5018 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
HDF222	Family Relationships	3
HDF225	Prenatal, Infant and Toddler Development	3
HDF249	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 Childhood Educator Orientation	2
HDF247	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
HDF229	Development in Middle Childhood	3
HDF248	Learning Experiences for Young Children	4
Term 4		
ECE251	Environments for Young Children	3
ECE261	Student Teaching 1, ECE	6
HDF285	Professional Issues in Early Childhood Education	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
HDF257	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 2, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, WR122 and/or 123 English Composition or WR227 Technical Writing* (WR121 for WOU)	3	3	(3)
Social Science courses*	3	3	3
Arts and Letters/Humanities courses*	3	3	3

Math or Science courses (MTH111 College Algebra and MTH241 Elementary Calculus or MTH251 Differential Calculus for OSU;** MTH111, MTH243, MTH244 Probability and Statistics 1 and 2, and MTH241 for PSU; UO requires MTH111, 241, 242, 243 or 251, 252 [MTH242 taken at UO]; SOU recommends MTH251, 252, 253 for graduate work; WOU requires MTH111 and additional math and computer science class for B.S. degree)*	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 and Applications of Economic Issues (EC203 not required at OSU, SOU, 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; CS161 or higher for WOU; WOU requires a minor; MTH243 Probability and Statistics recommended for OSU)	6-7	6-7	6-7

*To meet four-year college general education requirements; OSU students should also meet College of Liberal Arts core 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, Southern Oregon University, and University of Oregon, 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 Career and Counseling Services 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 English Composition-Exposition (recommend WR122 and 123)	3	(3)	(3)
Mathematics (per placement test through MTH211, 212, 213 Foundations of Elementary Mathematics; MTH095 prerequisite)	3-4	3-4	3-4
Literature sequence (ENG104, 105, 106 Introduction to Literature or ENG107, 108, 109 World Literature recommended)	3	3	3
HST110, 111, 112 World History or GEG105, 106, 107 Geography	3	3	3
HPE295 Health and Fitness for Life	3		
Computer Science elective*			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 (ART115 Basic Design, one MUS and one TA course)	3	3	3
Science Sequence (GS104, GS106 Physical Science and BI101 General Biology)	4-5	4-5	4-5
PE elective*	1		
Philosophy or Religion elective	3		
Social Science elective (PSY201 and 202)	3	3	
Electives ED209B Practicum: Introductory Observation and Experience (LDC) rec- ommended for those lacking verified classroom work with children GS105 Physical Science, or BI102 General Biology (see WOU catalog for elective options available)	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 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 Praxis Examination 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

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 requirements on page 37). 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 and then 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 chil-

dren who are in special education programs, or assisting in a media/technology center. Students participate in worksite practicums to gain experience and to practice skills learned in classes. You are required to maintain a grade of C or better in all courses in order to participate in any practicum.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
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 Counseling and Career Services 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, \$650; class fees, \$78; measles vaccine, \$10, and criminal history check, \$17. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

An Education Certificate is awarded upon successful completion of the 45 required credit hours listed below. These include the 24 credit hours listed under Education core requirements and 21 credit hours of Approved Education electives. Choice of appropriate electives will depend on your prior experience and desired grade level of preparation. Students should consult with the Education program advisor, Cathie Whyte, at 503-399-2694 or e-mail to whyc@chemeketa.edu for approval before enrolling in elective classes.

You may earn a Certificate of Completion by successfully completing these 45 required credit hours:

Education core requirements (24 credit hours):

Course	Title	Credit Hours
ED101	Introduction to Observation and Experience	3
ED110	Psychology of Learning	3
ED131	Teaching Techniques	3
ED133	Instructional Media and Materials	3
ED212	Schools and Society	3
ED217	Comprehensive Classroom Management	3
ED251	Overview of Students with Special Needs	3
ED258	Multicultural Education	3

Approved Education electives (Select 21 credit hours):

ED102	Practicum	3
ED103	Advanced Practicum	6
ED123	Classroom Techniques in Reading and Language	3
ED124	Classroom Techniques in Mathematics and Science	3
ED209V1-V4	Advanced Education Practicum	3-6
ED210	Professional Portfolio Development	3
ED213	Advanced Instructional Techniques in Reading	3
ED214	Advanced Instructional Techniques in Mathematics and Science	3
ED235	Instructional Technology	3

ED236	Introduction to Library / Media Technology	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
ED292	Occupational Analysis, Curriculum and Evaluation	3
ED293	Applied Integrated Academics	3

Electronics Technologies

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

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, call 503-399-5074.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	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 Counseling and Career Services at 503-399-5120 or 503-399-5248. Failure to be assessed may delay your entry into program classes.

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 (type approximately 20 wpm, be familiar with the Windows operating system, a word processor and a spreadsheet).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,747; class fees, \$340; equipment and supplies, \$90; and Intel-compatible computer, \$1,200. Contact the Financial Aid Office at 503-399-5018 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 106 credit hours:

Course	Title	Credit Hours
Term 1		
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics 1	4
NET123	Computer Operating Systems	4
WR121	English Composition-Exposition	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
Term 4		
ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Resumes and Job Search Correspondence	1
PH201	General Physics (or higher)	4
	or	
PH081	Applied Physics	4
SP111	Fundamentals of Public Speaking	3
Term 5		
CS278	Data Communications	3
ELT253	Microprocessor Systems	5
ELT254	Computer Hardware	4
PH203	General Physics (or higher)	4
	or	

PH082	Applied Physics	4
PSY104	Psychology in the Workplace	4
Term 6		
ELT122	Programming Concepts 2	4
	or	
CS140U	UNIX/LINUX	3
	or	
CS179	Introduction to Windows NT	3
ELT255	Advanced Data Communications	5
ELT256	Advanced Computer Architecture	4
ELT283	Logical Troubleshooting	5

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 must have an Intel-compatible computer (Pentium or better), and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, a word processor and a spreadsheet).

Getting Started

Program requirements have changed. See "Getting Started" heading on page 75 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,860; class fees, \$340; equipment and supplies, \$90; and Intel-compatible computer, \$1,200. Contact the Financial Aid Office at 503-399-5018 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 103 credit hours:

Course	Title	Credit Hours
Term 1		
DRF101	Basic CAD for Electronics	2
	or	
DRF136	Advanced AutoCAD	3
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics 1	4
WR121	English Composition-Exposition	3

Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4

Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3

Term 4		
ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Resumes and Job Search Correspondence	1
PH201	General Physics (or higher)	4
	or	
PH081	Applied Physics	4
SP111	Fundamentals of Public Speaking	3

Term 5		
ELT181	Antennas and Transmission Lines	2
ELT182	Telecommunications	3
ELT253	Microprocessor Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics (or higher)	4
	or	
PH082	Applied Physics	4

Term 6		
ELT283	Logical Troubleshooting	5
ELT291	Advanced Industrial Electronics	4
MTH243	Probability and Statistics 1	4
	or	
MTH241	Elementary Calculus	4
	or	
ELT122	Programming Concepts 2	4
	or	
MT227A	Introduction to Hydraulics/Pneumatics	3
PSY104	Psychology in the Workplace	4
	Approved Electronics elective*	3

*Approved Electronics electives:

CH121,121R	College Chemistry	5
CH201	Chemistry for Engineers	4
ELT254	Computer Hardware	4
ELT255	Advanced Data Communications	5
ELT256	Advanced Computer Architecture	4
ELT280	Cooperative Work Experience (For second-year students, must have prior approval of Program Chair)	
MT110	Microelectronics	3
MT223	High Vacuum Technology	3
MTH251	Differential Calculus (or higher)	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 electro-mechanical 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 must have an Intel-compatible computer (Pentium or better), and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, a word processor and a spreadsheet).

Getting Started

Program requirements have changed. See "Getting Started" heading on page 75 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,656; class fees, \$340; equipment and supplies, \$90; and Intel-compatible computer, \$1,200. Contact the Financial Aid Office at 503-399-5018 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		
DRF101	Basic CAD for Electronics*	2
	or	
DRF136	Advanced AutoCad	3
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MT110	Microelectronics	3
MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics 1	4
WR121	English Composition-Exposition	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3

Term 4

ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Resumes and Job Search Correspondence	1
PH201	General Physics (or higher)	4
	or	
PH081	Applied Physics	4
SP111	Fundamentals of Public Speaking	3

Term 5

ELT253	Microprocessor Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics (or higher)	4
	or	
PH082	Applied Physics	4
	Approved Technical electives**	3

Term 6

ELT291	Advanced Industrial Electronics	4
PSY104	Psychology in the Workplace	4
	Approved Technical electives**	9

*Approved Course Substitutions:

DRF072	Introduction to AutoCAD	3
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**Approved Technical electives:

CH121,121R	College Chemistry	5
CH201	Chemistry for Engineers	4
DRF251	Power Transmission Design	3
DRF252	Flexible Manufacturing Systems	3
MT223	High Vacuum Technology	3
MT227A	Introduction to Hydraulics/Pneumatics	3
MTH243	Probability and Statistics 1	4

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, the Oregon State Health Division and the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions.

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, \$1,368; class fees, \$565; equipment and supplies, \$535, testin fees, \$325. Contact the Financial Aid Office at 503-399-5018 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
HM120	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	3
PSY101	Psychology of Human Relations	3
	or	
HUM259	Death and Dying	3
	or	
PSY201	General Psychology-Biological Emphasis	3
SP111	Fundamentals of Public Speaking (or higher) . . .	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 1	4
BA224	Personnel Management	3
BA226	Business Law 1	3
EMT280C	Cooperative Work Experience	3
FRP050	Introduction to Fire Protection	3
FRP064	Hazardous Materials Operations	3
FRP077	Fire Service Instructor Training 1	2
FRP078	Fire Service Instructor Training 2	2
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
HM101	Medical Law and Ethics	3
HM114	CPT IV Coding/Reimbursement	3
HM121	Medical Terminology/Systems 2	3
HM122	Advanced Topics in the Language of Medicine .	3
HUM259	Death and Dying	3
MED128	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

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 Biological, 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 PSU, 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 an engineering advisor.

The two-year program outlined below is designed to meet pre-requisite requirements for OSU and PSU. 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
GE101 Engineering Orientation	3		
EGR248 Graphics and 3-D Modeling (not required for Electrical Engineering; CS161 Computer Science 1 required for Electrical Engineering)	(4)	3	
GE102 Engineering Computations		3	
CS162 Computer Science 2 (required for Electrical Engineering at OSU)		(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 (CH203/223 required for Civil/Mechanical Engineering at PSU)	4	4	(4)
Biological Science course for OSU*	4		
WR121 English Composition-Exposition		3	
WR227 Technical Writing			3
HPE295 Health and Fitness for Life (for OSU)			3
Arts and Letters/Humanities or Social Science electives*	3		3
Second Year	4	5	6
EGR211 Statics	4		
EGR212 Dynamics		4	
EGR213 Strength of Materials (not required for Electrical Engineers)			(4)
EGR201, 202 Electrical Fundamentals 1 and 2 (EGR202 not required for Civil Engineering at OSU)	4	(4)	
EGR203 Electric Control Fundamentals (not required for Mechanical or Civil Engineering)			(4)
MTH256 Applied Differential Equations		4	
MTH254 Vector Calculus 1	4		
MTH255 Vector Calculus 2 (not required for Mechanical or Civil Engineering at PSU)			(4)
PH211, 212, 213 Physics for Engineers and Scientists	5	5	5
Arts and Letters/Humanities or Social Science electives and SP111 Fundamentals of Public Speaking 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, Mechanical, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

First Year	1	2	3
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 all but 255 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; two courses from ENG107, 109, 204, 206, 253, 255 for UO; only ENG204, 205, 206 for WOU)	3	3	3
First-year Foreign Language	4	4	4
Social Science courses*	3	3	3
Science or Math* (SOU requires two 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 onecourse; UO requires ENG201 or 203; PSU requires ENG201, 202; SOU and WOU do not require any.	3	3	3
Second-year Foreign Language sequence	4	4	4
Arts and Letters/Humanities electives*	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Additional Social Science or Math/Science courses*	3-4	3-4	3-4
Additional courses to meet major requirements or electives (JNL216 Newswriting and WR241, 242, or 243 Imaginative Writing for EOU)	3	3	

*To meet four-year college general education requirements.

English as a Non-Native Language

The English as a Non-native Language program is an intensive, multi-level program designed to teach non-native English speaking students the reading, writing, listening, speaking and intercultural skills necessary for success in academic and professional work settings. The program has reading, writing, aural (listening) and oral skills entry-level prerequisites for each course. See the course descriptions for individual course prerequisites.

The length of time you will need to complete the program will depend on your skills in each of these areas. To have your language skill levels assessed for placement in any of these classes, contact the ESL office at 503-399-6298 or the Counseling and Advising Center at 503-399-5120.

Some of these courses can be transferred, as electives, to other Oregon state colleges and universities. As a student, you are responsible for learning the program requirements of the other school to which you plan to transfer.

Many of these classes are also offered on a non-credit basis. Contact the ESL office at 503-399-6298 for more information about non-credit ESL.

The courses below are designed to help students improve their English skills. They do not lead to a certificate or degree.

Oral Skills

ENL053	Listening and Speaking A	3
ENL054	Listening and Speaking B	3
ENL055	Listening and Speaking C	5
ENL102	English Pronunciation Techniques	4
ENL104	Academic Listening and Speaking	4

Reading Skills

ENL057	Reading	5
ENL058	Reading and Vocabulary	5
ENL059	Reading and Writing A	6
ENL060	Reading and Writing B	6
ENL061	American Grammar and Reading	5
ENL109	Academic Reading and Writing	4

Writing Skills

ENL065	Grammatical Sentences	4
ENL066	Writing Paragraphs	5
ENL067	Introduction to Essay Writing	5
ENL068	American College Language Skills	7
ENL107	Better Writing Through Editing	5
ENL116	Writing for College	4
ENL118	Technical Writing Research	4

Grammar Skills

ENL061	American Grammar and Reading	5
ENL113	Advanced Grammar 1	4
ENL114	Advanced Grammar 2	4

English for Specific Purposes

ENL106	American Business Language	4
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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 503-399-7759.

XAGR9800C,D,E Farm Business Management 1

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

XAGR9800F,G,H Farm Business Management 2

Monitors and assesses financial position of the farm business based upon records and analysis obtained in Farm Business Management 1. Explores computerized farm accounting and income tax management.

XAGR9800J,K,L Farm Business Management 3

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

XAGR9800M,N,P Farm Business Management 4

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.

XAGR9800Q,R,S Farm Business Management 5

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

XAGR9800T 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.

XAGR9801T Farm Business Management Workshop

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

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 and by the International Fire Service Accreditation Congress.

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 correspondence. For information about distance education call 503-399-6242.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with the department program chair. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study.

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. Dual degree students are provided with an individualized sequence of courses that may vary depending on the term in which classes are begun. 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, \$2,228; class fees, \$174; equipment and supplies, \$825. Contact the Financial Aid Office at 503-399-5018 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 1	3
FRP064	Hazardous Materials Operations	3
MTH070	Elementary Algebra (or higher)	4
Term 2		
CH111,111R	Chemistry for Fire Science and Emergency Services	5
CS101	Introduction to Microcomputer Applications	3
EMT052	Emergency Medical Technology Basic, Part 2	4
EMT280A	Cooperative Work Experience*	1
FRP052	Fire Incident Related Experience 2	3
FRP066	Building Construction for Fire Protection	3
Term 3		
FRP053	Fire Incident Related Experience 3	3
FRP054	Water Supply Operations	3
FRP058	Fire Pump Construction and Operations	3
FRP069	Fire Department Leadership	3
PH111,111R	Physical Science for Fire and Emergency Services	5
	Approved electives*	3
Term 4		
FRP060	Fundamental of Fire Prevention	3
FRP061	Fire Incident Related Experience 4	3
HPE295	Health and Fitness for Life	3
WR121	English Composition-Exposition	3
	General Education elective	3
Term 5		
FRP056	Fire Service Rescue Practices	4
FRP062	Fire Incident Related Experience 5	3
FRP072	Uniform Fire Code	3
SP111	Fundamentals of Public Speaking (or higher)	3
Term 6		
FRP063	Fire Incident Related Experience 6	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
BLD150	Introduction to Building Inspection	3
BLD151	Building Codes 1	3
BLD152	Building Codes 2	3
EMT065	Emergency Medical Technician Intermediate, Part 1	5
EMT066	Emergency Medical Technician Intermediate, Part 2	5
EMT075	Introduction to Emergency Medical Services	3
EMT280F	Cooperative Work Experience	6
FRP059	Major Emergency Strategy and Tactics	3
FRP070	Fire Fighting Tactics and Strategies	3
FRP073	Firefighters Law for Emergency Services	3

FRP074	Fire Investigation	4
FRP075	Municipal Airport Crash/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
HM120	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, \$843; class fees, \$521. Contact the Financial Aid Office at 503-399-5018 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. For information call 503-399-6241.

Course	Title	Credit Hours
Term 1		
FRP050	Introduction Fire Protection	3
	or	
ES072	Introduction to Emergency Services	4
FRP060	Fund. 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	Uniform Fire Code	3
FRP081	Fire Prevention Inspection	3
PH111,111R	Physical Science for Fire Science and Emergency Services	5
PSY101	Psychology of Human Relations (or higher)	3
Term 3		
CH111,111R	Chemistry for Fire Science and Emergency Services	5
FRP071	Fire Protection Systems and Extinguishers	3
FRP089	Fire Codes and Ordinances 2	3
SP111	Fundamentals of Public Speaking (or higher)	3
WR227	Technical Writing	3
Term 4		
BLD151	Building Codes 1	3
FRP074	Fire Investigation	4
FRP080	Hazardous Materials for Inspectors	3
FRP280C	Cooperative Work Experience	3
	Approved electives	3

Term 5

BLD152	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

BLD267	Nonstructural Plan Review	3
FRP054	Water Supply Operation	3
FRP084	Public Information for Fire Service	2
FRP087	Fire Insurance Fundamentals	3
FRP280C	Cooperative Work Experience	3
	Approved electives*	3

*Approved electives (six hours required)

BLD181	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 Service Instructor Training 2	2
FRP079	Wildland Urban Interface	3
FRP083	Incident Report Writing	2
FRP086	Advanced Detection and Protection Systems	3

Advanced Fire Officer Certificate

The Advanced Fire Officer Certificate program can help you prepare for promotion to officer positions; or if you are already a fire officer, you can gain valuable new skills and knowledge. The certificate program meets or exceeds NFPA and Oregon Standards for Fire Officer 1 and 2. To be admitted to the Fire Officer Certificate program you must be certified as Firefighter 1, or equivalent, and actively be pursuing Firefighter 2 or have an associate degree in fire protection or possess professional certificates and have experience or equivalent credentials in fire prevention, fire training, or public fire education.

To be admitted to this program you must be interviewed by the program chair, Gene Fisher, 503-399-6241, and have your training, education, and experience evaluated. An individualized program of study will be developed for you.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$200; class fees, \$75; equipment and supplies, \$20. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these required 54 credit hours:

Advanced Fire Officer Certificate requirements:

Course	Title	Credit Hours
Communications:		
BA214	Business Communications	3
BT084	Business English 1	3
	or	
COM051	Communication Skills 1 (or higher)	3
WR115	Introduction to Composition	3
WR121	English Composition-Exposition	3
WR227	Technical Writing	3

Math:
MTH052 Introduction to Algebra and Geometry
(or higher)3
Human Relations:
PSY101 Psychology of Human Relations3
SOC204 General Sociology-Introduction3
SP111 Fundamentals of Public Speaking
(or higher)3
Science:
CH111, 111R Chemistry for Fire Science
and Emergency Services5
and
PH111, 111R Physical Science for Fire Science
and Emergency Services5
or
(Any combination of one Chemistry and one
Physics course of at least four credit hours each
and include a lab component)

Term 1

Math (see requirements above)3
Communications (see above requirements)3
Human Relations (see requirements above)3
FRP069 Fire Department Leadership3
FRP073 Law for Emergency Services3
or
FRP166 Firefighter’s Law1
FRP074 Fire Investigation4
FRP077 Fire Service Instructor Training 12

Term 2

Science (see requirements above)4
FRP054 Water Supply Operations3
FRP066 Building Construction for Fire Suppression3
FRP070 Fire Fighting Tactics and Strategy3
FRP160 Incident Safety Officer1
FRP161 Fire Management Practices1
FRP162 Managing Fire Personnel1
FRP163 Planning Fire Protection1

Term 3

Science (see requirements above)4
FRP059 Major Emergency Strategy and Tactics3
FRP072 Uniform Fire Code3
FRP078 Fire Service Instructor Training 22
FRP164 Fire Department Budgets1
FRP165 Public Relations, Public Information,
and Public Education2
PS203 State and Local Government3

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 Chinese, 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 degrees 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	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 (first year) 101, 102 and 103 (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; SOU requires Cultural Anthropology)	3	3	3
HPE295 Health and Fitness for Life* or elective			3
Second Year	4	5	6
Foreign Language sequence (second year) 201, 202 and 203	4	4	4
Social Science*	3	3	3
Arts and Letters or Humanities* (PSU recommends literature, music, philosophy; UO recommends literature)	3	3	3
Science*	4	4	4
Electives (A Foreign Language sequence in addition to the one chosen for the major may be used to fulfill requirements for a B.A. degree at OSU; 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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
COM051	Communication Skills 1	3
MTH070	Elementary Algebra	4
SSP112	Study Skills	3

If you have questions about the requirements, call Counseling and Career Services 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, \$1,025; class fees, \$125; equipment and supplies, \$375. Contact the Financial Aid Office at 503-399-5018 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 104 credit hours:

Course	Title	Credit Hours
Term 1		
BI131	Environmental Science 1	4
CS101	Introduction to Microcomputer Applications	3
FT111	Introduction to Forest Resources	5
FT141A	Oregon Tree and Shrub Identification 1	3
	General Education elective	2
Term 2		
BI132	Environmental Science 2	4
FT210A	Forest Surveying 1	3
FT220	Forest Photo Interpretation	3
MTH081	Technical Mathematics 1 (or higher)	4
WR121	English Composition-Exposition (or higher)	3

Term 3

BI133	Environmental Science 3	4
FT141B	Oregon Tree and Shrub Identification 2	3
FT221	Forest Inventory	5
FT280F	Cooperative Work Experience	6
MTH082	Technical Mathematics 2 (or higher)	4

Term 4

DRF220	GIS ArcView	2
FT130	Forest Insect and Disease Management	3
FT210B	Forest Surveying 2	5
FT223	Timber Cruising/Log Scaling	5
FT270A	Silviculture 1	2

Term 5

FT120	Principles of Supervision	3
FT150	Forest Seminar	1
FT270B	Silviculture 2	3
SOC235	Society and Forestry	3
SP111	Fundamentals of Public Speaking	3
WR227	Technical Writing	3

Term 6

BI251	Principles of Wildlife Conservation	3
ES071	Work Place Safety Skills	1
FT200	Forest Contracts	3
FT230	Forest Policy	4
FT290	Forest Management Problem Solving	4

Forestry

(college transfer)

Oregon State University offers degrees in Forest Engineering, Forest Management, Forest Products and Forest Recreation Resources or Natural Resources. These programs are designed as four-year programs of 180 to 192 credit hours. Students should plan to transfer after one year at Chemeketa.

The program suggested below is for students wishing to transfer to OSU for Forest Engineering, Forest Management, Forest Products or Forest Recreation Resources or Natural Resources.

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
	1	2	3
First Year			
Science sequence or electives* (BI101, 102, 103 General Biology or BOT201, 202 Botany and ZOO201, 202 Zoology for Natural Resources; BOT201, 202, and ZOO201, 202 for Forest Management; Biology elective for Forest Products)	4	4	4
CH121 and 121R and 122 and 122R College Chemistry for Forest Management; CH121 and 121R and PH201, 202 General Physics for Forest Engineering; CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry and PH211, 212 Physics for Engineers and Scientists for Forest Products; CH121 and 121R, 122 and 122R, 123 and 123R, and PH201, 202 accepted in one option)	5	5	(5)
Mathematics (MTH112 Trigonometry, MTH251, 252 Calculus for Forest Engineering; MTH112, MTH241 Elementary Calculus, and MTH243 Probability and Statistics 1 or MTH112, 251, 252, 254 for Forest Products depending on option; MTH243 for Forest Recreation Resources; MTH241 for Forest Management)	4-5	4-5	4-5
WR121 English Composition-Exposition and one course chosen from WR122 or 123 English Composition or WR227 Technical Writing Writing and/or Speech* (SP111 Fundamentals of Public Speaking or SP112 Fundamentals of Persuasion for Forest Management, Forest Recreation Resources and Forest Products; WR227 for Forest Products)		3	3
HPE295 Health and Fitness for Life or elective Electives* (EC201 Introduction to Microeconomics, EC202 Introduction to Macroeconomics for Forest Management and Forest Products; EC201 for Forest Recreation Resources and Forest Engineering)		3	3

*To meet four-year college general education requirements.

General Science

See Biology.

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, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 35. Chemeketa also offers an Associate of General Studies Degree. Specific requirements are listed on page 37.

	Term		
	1	2	3
First Year			
WR121, 122 and/or 123 English Composition or WR227 Technical Writing*	3	3	(3)
Social Science courses*(UO recommends at least one history course)	3	3	3
Mathematics per placement test* or Science courses* (need MTH105 Introduction to Contemporary Mathematics or MTH111 College Algebra; WOU requires MTH111 or two years foreign language)	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, or 205, or 206 Art History recommended for UO; foreign language or additional math for OSU)	0-3	0-3	0-3
Second Year	4	5	6
Arts and Letters/Humanities*	3-4	3-4	3-4
Social Science courses*	3	3	3
Science sequence or electives*	4	4	4
Electives* or courses to meet Chemeketa's A.A. degree requirements (CS101 Introduction to Microcomputer Applications and a Speech course recommended, CS101 required for SOU; UO recommends PHL201 or 202 or 203 or 204 Philosophical Problems and Elementary Ethics; WOU requires approved 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition* (WR227 for SOU)	3	3	(3)
GEG105 Physical Geography, GEG106 Cultural Geography, GEG107 Economic Geography (not all schools require all three courses; GEG106, 202 World Regional Geography: The Developing World for OSU; GEG105, 106 for UO)	3	3	(3)
Mathematics per placement test* (MTH111 College Algebra and 112 Trigonometry for OSU; MTH243 and 244 Probability and Statistics 1 and 2 for PSU; MTH243 for 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		3	
Arts and Letters/Humanities electives* (second-year Foreign Language required at UO)	3-4	3-4	3-4
Electives* (GEG206 Geography of Oregon recommended for UO; OSU requires GEO201, 202 Geology))	3		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* (Physical or Biological sequence of two courses and a Biological or Physical Science for OSU)	4	4	4
Arts and Letters/Humanities electives* (second-year Foreign Language for UO)	3-4	3-4	3-4
Electives (CS101 Introduction to Microcomputer Applications required for SOU; CIS120 and 121 or other CS programming course recommended for UO; CS161, 162 for WOU or second-year Foreign Language; additional Arts and Letters for UO)	6	6	6

*To meet four-year college general education requirements.

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, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	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; WOU requires MTH111 and 112 or 243 or two years of Foreign Language)	4-5	4-5	4-5
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry (CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry also accepted at OSU, UO and WOU; OSU requires CH123 and 123R or 223 and 223R or PH203 or 213)	5	5	5
Social Science*	3	3	3-6
Second Year	4	5	6
PH201, 202, 203 General Physics or PH211, 212, 213 Physics for Engineers and Scientists (OSU requires only 2 terms; WOU will also accept B101, 102, 103 General Biology instead of Physics)	4	4	4
GEO201, 202, 203 Geology (OSU only requires GEO201, 202)	4	4	4
HPE295 Health and Fitness for Life* or elective			3
Arts and Letters/Humanities or Social Science electives*	3	3	
Electives (OSU requires four credits of biological science; Chemeketa recommends a CS course;	3-4	3-4	3-4

*To meet four-year college general education requirements.

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

Health, Health Education

(college transfer)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health, 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 and Safety, 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 Health 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 Career and Counseling Services 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 Career and Counseling Services 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 Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition or WR227 Technical Writing* (WR121, WR227 and SP111 Fundamentals of Public Speaking or SP112 Fundamentals of Persuasion for Environmental Health and Safety at OSU; WR121 and a Speech elective for WOU)	3	3	(3)
BI231, 232, 233 Anatomy and Physiology for EOU, OSU, PSU, and SOU except Health Care Administration at OSU (BI101, 102, 103 General Biology are also required for Environmental Health and Safety at OSU; BI101 or 102 or 103 required for Health Promotion and Education at OSU; BI101 and 103 required as prerequisites at WOU)	4	4	4

Mathematics per placement test* (MTH111 College Algebra or MTH112 Trigonometry, MTH211, 212, or 213 Foundations of Elementary Mathematics for EOU; Health Care Administration at OSU requires MTH111 and MTH243 Probability and Statistics 1; Environmental Health at OSU requires MTH111 and 241 Elementary Calculus or MTH112 Trigonometry; MTH111, 243, and 244 for Health and Fitness at PSU; MTH111 and CS161 or two years of Foreign Language at WOU)	4	4	4
HPE295 Health and Fitness for Life	3		
HE250 Personal Health (required at SOU and WOU)			3
Arts and Letters/Humanities*	3	3	3
Electives** (BI234 Microbiology for OSU and WOU; EOU requires one year of chemistry as prerequisite for BI231, 232, 233; SOU and Health Promotion and Education at OSU require FN225 Nutrition)	(3-4)	(3-4)	3

Second Year

CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry (not required at PSU, SOU, and WOU or for Health Care Administration at OSU; only CH121 and 121R required for Health Promotion and Education at OSU)	5	5	5
Social Science courses to meet four-year college general education or major requirements (PSY201 General Psychology, SOC204 General Sociology required for Health Promotion at OSU; EC201, 202 Introduction to Microeconomics and Macroeconomics required for Health Care Administration at OSU; WOU requires PSY201, 202 as prerequisites for required courses)	6	6	6
Electives* to meet four-year college general education or major requirements (Some OSU options require CS101 Introduction to Microcomputer Applications; Environmental Health and Safety at OSU requires PH201 General Physics and CH241 and 241B, 242 and 242B, 243 and 243B; 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 one-year and two-year training for students on a career ladder in health care services. The one-year program allows you to be trained as a health information technician. The two-year programs includes 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. Students must earn grades of C or better on all required courses.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

AH112A	Health Care Systems and Professions	2
CA121A	Keyboarding A (if less than 25 wpm)	1
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 Counseling and Career Services at 503-399-5120 or 503-399-5114. Failure to be assessed may delay your entry into program classes.

One-Year Program Health Information Technology

As a graduate of the Health Information Technology program, you may become a health information technician or a medical biller. You may continue in this program to earn your Associate of Applied Science degree in Health Services Management or continue on to Public Health or Health Care Administration at four-year institutions.

As a health information technician, your duties may include maintaining and using a variety of health record indexes, special registries, storage and retrieval systems; inputting and retrieving computerized health data; administering medical office duties; abstracting medical information for correspondence purposes; and assisting in compiling, analyzing and preparing information needed by the health facility or external agencies. Graduates can also work in areas of coding and insurance billing in outpatient settings.

If you plan to transfer to Central Oregon Community College or Portland Community College to earn an associate degree as an associate records technician, you must meet college graduation requirements including general education, math and English competencies as well as CA210 Office Microcomputer Applications, or an equivalent. Consult a program advisor for help in planning general education classes.

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$604; class fees, \$98; equipment and supplies, \$300. Contact the Financial Aid Office at 503-399-5018 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 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM102	Professional Development A	1

HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology/Systems 1	3
WR121	English Composition-Exposition (or higher)	3

Term 2

BI072	Body Structure and Function 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM103	Professional Development B	1
HM112	Health Information Systems Procedures 2	5
HM114	CPT-IV Coding/Reimbursement	3
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology/Systems 2	3

Term 3

HM104	Professional Development C	1
HM115	ICD-9-CM Coding/Reimbursement	3
HM122	Advanced Topics in the Language of Medicine	3
HM130	Health Information Systems Office Practice	5
HM131	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 transfer courses will give you a wide variety of options.

Students must earn grades of C or better in all required courses and be eligible for graduation in order to participate in the practicum.

Getting Started

Program requirements have changed. See "Getting Started" heading on page 87 for details.

In addition to tuition, estimated costs for students who complete the entire second year listed below are books, \$1,610; class fees, \$155; equipment and supplies, \$300. Contact the Financial Aid Office at 503-399-5018 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 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM110	Health Information Systems Procedures 1	4

HM120	Medical Terminology/Systems 1	3
WR121	English Composition-Exposition (or higher)	3

Term 2

BI072	Body Structure and Function 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM112	Health Information Systems Procedures 2	5
HM114	CPT-IV Coding/Reimbursement	3
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology/Systems 2	3

Term 3

BA206	Business Management Principles	3
HM115	ICD-9-CM Coding/Reimbursement	3
HM122	Advanced Topics in the Language of Medicine	3
MTH070	Elementary Algebra (or higher)	4
WR227	Technical Writing	3

Term 4

BA202	Personal Effectiveness	3
HM210	Introduction to Health Services	3
HM250	Health Services Management 1	3
MTH095	Intermediate Algebra (or higher)	4
	or	
BA211	Financial Accounting 1	4
	Social Science elective (200 or higher)	3

Term 5

CS103	Microcomputer Skills Problem Solving (or higher)	3
FE205A	Job Search Preparation	1
	or	
FE205B	Resumes and Job Search Correspondence	1
	or	
FE205C	Interviewing for Success	1
HM251	Health Services Management 2	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
HM216	Health Care Data and Statistics	3
HM230	Health Services Externship	6
HM231	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 be eligible for graduation in order to participate in the practicum.

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

Getting Started

Program requirements have changed. See "Getting Started" heading on page 87 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,610; class fees, \$178; equipment and supplies, \$201. Contact the Financial Aid Office at 503-399-5018 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 1	3
	or	
BI231	Human Anatomy and Physiology	4
BT085	Business English 2	3
HM101	Medical Law and Ethics	3
HM102	Professional Development A	1
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology/Systems 1	3
Term 2		
BI072	Body Structure and Function 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM103	Professional Development B	1
HM112	Health Information Systems Procedures 2	5
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology/Systems 2	3
HM140	Medical Transcription	3
Term 3		
BA214	Business Communications	3
BT099	Proofreading/Editing	3
CA201X	Word Processing Procedures 1 (or higher)	3
	or	
CA201D	Word Processing Procedures 1 (or higher)	3
HM104	Professional Development C	1
HM122	Advanced Topics in the Language of Medicine	3
HM141	Advanced Medical Transcription 1	3
Term 4		
CA202X	Word Processing Procedures 2 (or higher)	3
	or	
CA202D	Word Processing Procedures 2 (or higher)	3
HM142	Advanced Medical Transcription 2	3
HM210	Introduction to Health Services Organization	3
HM250	Health Services Management 1	3
MTH070	Elementary Algebra (or higher)	4
	or	
BA211	Financial Accounting 1*	4
Term 5		
BA202	Personal Effectiveness	3
HM143	Advanced Medical Transcription 3	3
HM251	Health Services Management 2	3
SP218	Interpersonal Communication	3
	Humanities/Fine Arts elective	3

Term 6

HM144	Medical Transcription Seminar	.....1
HM216	Health Care Data and Statistics	.....3
HM280L	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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition	3	3	(3)
HST110, 111, 112 World History (not required by UO)	3	3	3
Science courses*	4	4	4
Arts and Letters/Humanities courses* (Foreign Language required at UO and recommended by OSU and SOU; often required for graduate work)	3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective	3		
Electives (EOU requires CS101 Introduction to Microcomputer Applications or CA201D Word Processing Procedures 1; SOU and WOU require CS101; UO requires Arts and Letters courses in addition to Foreign Language)		3	6
Second Year	4	5	6
HST201, 202, 203 History of the United States (not required by UO)	3	3	3
Mathematics per placement test* (WOU requires a minimum of one math beyond MTH105 Introduction to Contemporary Mathematics and CS161 Computer Science 1 or second-year Foreign Language; EOU requires MTH105 or higher; OSU requires MTH105 and MTH111 College Algebra or two years Foreign Language)	4	4-5	

Arts and Letters/Humanities* (SOU recommends second-year Foreign Language for graduate work; UO requires second-year Foreign Language)	3-4	3-4	3-4
Social Science courses other than history*	3	3	3
Additional Arts and Letters/ Humanities or Social Sciences or electives* (OSU requires 6 credits in non-European, non-U.S. History)	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; 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. (For some options, it may be to your advantage to transfer after one year at Chemeketa.) 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at OSU to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121 English Composition-Exposition	3		
WR122 or 123 English Composition or 227 Technical Writing, 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	
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; FN225 required in some)	3-4		

SP111 Fundamentals of Public Speaking or SP112 Fundamentals of Persuasion or SP218 Interpersonal Communications depending upon option selected	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, including FN225, Art courses, or additional science courses. It is important to work carefully with a home economics advisor to meet OSU's 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 are 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 HTM280 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 HTM280 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 at 503-399-5018 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		
HTM104	Introduction to the Travel and Tourism Industry	.3
HTM114	Travel Destination Geography 1	.3
HTM117	Travel Agency Basics	.3
HTM121	Travel Agency Sales and Marketing	.3
Term 2		
HTM115	Travel Destination Geography 2	.3
HTM122	Travel Agency Management	.3
HTM123	Computer Reservation Systems	.3
SP219	Fundamentals of Small Group Communication	.3
	or	
SP218	Interpersonal Communication	.3
	or	
SP115	Introduction to Intercultural Communication	.3
Term 3		
FE205A	Job Search Preparation	.1
HTM116	Travel Destination Geography 3	.3
HTM280I	Cooperative Work Experience	.9

Hospitality and Tourism Management

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
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 503-399-5296. 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 at 503-399-5018 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		
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		
HTM102	Hotel, Restaurant and Travel Law	.3
HTM105	Introduction to the Food and Beverage Industry	.3
HTM123	Computer Reservations Systems	.3

PSY101	Psychology of Human Behavior	3
	or	
PSY104	Psychology in the Workplace (or higher)	4
	(PSY201 is required for lower division transfer)	
	Foreign Language sequence	4

Term 3

HTM106	Introduction to the Lodging Industry	3
HTM107	Sanitation and Safety for Managers	3
MTH070	Elementary Algebra (or higher)	4
SP218	Interpersonal Communication (or higher)	3
	Foreign Language sequence	4

Term 4

HTM280I	Cooperative Work Experience	9
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Term 5

BA211	Financial Accounting 1	4
CA208	Computer Presentations for the Workplace - MS PowerPoint	3
	Approved elective*	3
	Foreign Language sequence	4

Term 6

BA212	Financial Accounting 1	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
HTM114	Travel Destination Geography 1	3
HTM115	Travel Destination Geography 2	3
HTM116	Travel Destination Geography 3	3
HTM117	Travel Agency Basics	3
HTM119	Introduction to Casino Management	3
HTM126	Meeting and Event Planning	3
SP111	Fundamentals of Public Speaking	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 Associate of Arts Oregon 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 Career and Counseling Services or a Chemeketa advisor in your program.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with Chemeketa’s Counseling center or the Chemeketa advisor in your program. You should also make early contact with an advisor at the institutions to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

Course	Title	Credit Hours
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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 2	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 Public Speaking	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, each of which is at least two terms long. Students specialize in one of two options: Addiction Studies or Social Services.

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

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

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 in-patient and outpatient programs.

The curriculum includes courses in alcohol and drug information, family dynamics, case management, and basic and group counseling skills.

Getting Started

The first step to entering the two-year program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

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

If you have questions about the requirements, call Counseling and Career Services 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, \$1,269; class fees, \$20; equipment and supplies, \$123; measles vaccine, \$10. Contact the Financial Aid Office at 503-399-5018 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	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
SSC150	Ethnic Cultures of the Northwest United States	3
	or	
SSC206	Dealing with Diversity	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		
HS203	Practice of Addiction Treatment	4
HS211	HIV/TB Infectious Diseases	1
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
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking	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, \$702; class fees, \$20; equipment and supplies, \$65; measles vaccine, \$10. Contact the Financial Aid Office at 503-399-5018 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		
HS103	Ethics for Human Service Workers	2
HS203	Practice of Addiction Treatment	4
HS211	HIV/TB Infectious Diseases	1
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 service 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.

Getting Started

Program requirements have changed. See "Getting Started" under the Addiction Studies option heading on page 92 for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,269; class fees, \$20; equipment and supplies, \$127; measles vaccine, \$10. Contact the Financial Aid Office at 503-399-5018 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.

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	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
SSC150	Ethnic Cultures of the Northwest United States	3
	or	
SSC206	Dealing with Diversity	3
Term 3		
HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques	3
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		
HS211	HIV/TB Infectious Diseases	1
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

HS267	Systems Strategies	.....3
HS284S-		
HS288S	Practicum-Human Services	.....4-8
SP112	Fundamentals of Persuasion	.....3
	or	
SP130	Business and Professional Speaking	.....3
	Social Services elective*	.....3
	Humanities/Fine Arts elective	.....3
	or	
	Science/Applied Science elective	.....3

***Social Services electives (six 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.

Industrial 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 36 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 at 503-399-5018 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 in particular trades. Students generally are apprentices who are registered with the Oregon Bureau of Labor and Industries. They can also be 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, heating ventilating air conditioning (HVAC) technicians, machinists, welders and other trades, as required by local committees.

Integrated 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 micro-electronic circuits. Graduates of this program may also be employed as electronic circuit board designers and layout specialists.

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 relations skills needed for career advancement.

If you have any questions about this program or the registration process, call Counseling and Career Services at 503-399-5120 or 503-399-5248. You may also meet with the Integrated Circuit Mask Design program faculty or tour the facilities.

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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	.....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 Counseling and Career Services 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, \$1,500; class fees, \$360; equipment and supplies, \$90; and Intel-compatible computer, \$1200. Contact the Financial Aid Office at 503-399-5018 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 hours.

Term 1

DRF101	Basic CAD for Electronics*	.....2
	or	
DRF136	Advanced AutoCad	.....3
ELT111	Electronics Orientation	.....1
ELT131	Electronic Concepts 1	.....4
MT110	Microelectronics	.....3

MTH111	College Algebra (or higher)	5
	or	
MTH081	Technical Mathematics 1	4
WR121	English Composition-Exposition	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
Term 4		
ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Resumes and Job Search Correspondence	1
PH201	General Physics (or higher)	4
	or	
PH081	Applied Physics	4
SP111	Fundamentals of Public Speaking	3
Term 5		
DRF201	CMOS 1	4
ELT253	Microprocessor Systems	5
ELT262	Linear IC Applications	3
PH203	General Physics (or higher)	4
	or	
PH082	Applied Physics	4
Term 6		
CS140U	UNIX/LINUX	3
DRF202	CMOS 2	3
ELT122	Programming Concepts 2	4
	or	
	Approved Programming elective**	3
PSY104	Psychology in the Workplace	4
SP219	Fundamentals of Small Group Communication	3
	or	
WR122	English Composition-Logic and Style	3
	or	
MTH243	Probability and Statistics 1 (or higher)	4

* Other approved course substitutions: DRF072 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 concentrations 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123 English Composition* (WR227 Technical Writing for SOU)	3	3	(3)
Humanities courses* (SOU recommends two years of Literature and Foreign Language; UO requires 16 credits in Literature)	3-4	3-4	3-4
HST110, 111, 112 History of World Civilization or HST201, 202, 203 History of the United States recommended at SOU; 9 hours required for UO)	3	3	3
Mathematics per placement test*	(4)	5	(4)
JNL224 Introduction to Mass Communications for UO	3		
Electives (JNL216 Newswriting required and CA205 Desktop Publishing 1-PageMaker recommended for SOU; UO requires additional credits from the Arts and Letters requirements)**	3	3	6
Second Year			
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	3	3
Humanities or Social Science courses* (second-year Foreign Language or Literature recommended for SOU; Literature for UO)	3-4	3-4	3-4
Science courses*	4	4	4
Electives (Check SOU catalog 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 JNL224 from a community college.

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 Career and Counseling Services or a Chemeketa advisor on course transferability.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
CJ050	Criminal Justice Foundations	3
MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, call Counseling and Career Services 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 are books, \$700. Contact the Financial Aid Office at 503-399-5018 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
CJ235	Youth, Drugs and Corrections	3
CJ280	Cooperative Work Experience	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

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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

BT085	Business English 2	3
CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications . . .	3
RD090	College Textbook Reading	3
MTH060	Introductory Algebra	4

If you have questions about the requirements, call Counseling and Career Services 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, \$1,524; class fees, \$36; equipment and supplies, \$88. Contact the Financial Aid Office at 503-399-5018 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 with a grade of C or better in all accounting and management courses:

Course	Title	Credit Hours
Term 1		
BA101	Business Environment	4
BA202	Personal Effectiveness	3
BA211	Financial Accounting 1*	4
MTH062	Business Applications Using Mathematics (or higher)	4
Term 2		
BA203	Interpersonal Relations in Business	3
BA212	Financial Accounting 2*	4
BA214	Business Communications**	3
MTH070	Elementary Algebra (or higher)	4
	Humanities/Fine Arts elective	3

Term 3

BA204	Teamwork Dynamics	3
BA206	Business Management Principles	3
BA213	Managerial Accounting	4
CS125A	Micro Database Software-Access	3
CS125E	Excel-Workbooks	4

Term 4

BA223	Principles of Marketing	3
BA226	Business Law 1	3
EC200	Introduction to Economics (or higher)	3
FE205C	Interviewing for Success	1
SP111	Fundamentals of Public Speaking	3
BA277	Business Ethics	3
	or	
WR227	Technical Writing	3

Term 5

BA222	Financial Management	3
BA227	Business Law 2	3
BA271	Information Technology in Business	4
SP112	Fundamentals of Persuasion	3
	Business elective*** (BA280 Cooperative Work Experience recommended)	3

Term 6

BA224	Personnel Management	3
	Business elective*** (BA280 Cooperative Work Experience recommended)	6
	Business elective***	3
	Computer Science elective****	3

*BA051, BA052, and BA053 may be substituted for BA211 and BA212. BA211 or BA051 requires concurrent enrollment in MTH062 or higher math placement.

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

***Business electives: Choose courses with prefixes BA, BT, CA, CS, CIS, EC, and RE except BT084, BT085, BA051, BA052, BA053 and CS101.

****Choose from CS133VB, CS133C, CS133E, CS133U or CA201X.

Manufacturing Engineering Technologies

The Manufacturing Engineering Technologies (MET) program offers training in manufacturing skills. A variety of jobs await graduates. Past graduates have entered the work force as Machine tool operators (manual and CNC), Machinists apprentices, CNC programmers, Inspectors, and Maintenance and Repair personnel. Many have gone on to become Shop Supervisors, Foremen, Quality control specialists, Managers, Sales personnel, Purchasing agents, Planners, Manufacturing engineers and Instructors, just to list a few.

You may enroll in the three-term Manufacturing Operations option, or you may select individual courses to meet your needs or to work toward a certificate of completion.

Other options for an Associate of Applied Science degree are possible, please ask you advisor for complete details.

You may be interested in Cooperative Work Experience (CWE). The MET. program allows you to earn college credit for on-the-job work you are doing relating to manufacturing. With the approval of the program chair, you may enroll in

MFG280 (CWE) for college credits. For more information look in the college catalog index under Cooperative Work Experience.

You may enroll in a single Manufacturing class up to 6 credits per term without taking a placement test. Please contact a Manufacturing instructor for details.

Getting Started

The first step to entering this program, is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. One or more of the following pre-program courses may be required.*

MTH020	Basic Mathematics
SSP051	Studying for College
WR040	Writing Skills

* If required, pre-program courses may be taken at the same time you are enrolled in other manufacturing courses.

If you have any questions about the requirements, call Counseling and Career Services at 503-399-5120.

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 at 503-399-5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
MFG100	Fundamentals Lab Practice*	1
MFG101	Machining Fundamentals	3
MFG111	Industrial Safety Seminar	1
MFG120	Metrology	3
MFG124	Interpreting Engineering Drawings	4
MFG130	CNC Machine Setup/Operation	3
Term 2		
MFG131	Lathe Fundamentals	3
MFG136	Geometric Dimensioning/Tolerancing*	2
MFG145A	CMM/QA Applications	2
MFG145B	CMM/QA Applications-Lab*	1
MFG151	Milling Machine Processes	3
MFG160	Programming CNC Mills	3
MTH052	Introduction to Algebra and Geometry (or higher)	3
Term 3		
COM051	Communication Skills 1	3
	or	
WR121	English Composition-Exposition** (or higher)	3

MFG161	Lathe Processes	3
MFG170	Total Quality Manufacturing	3
MFG176	Manufacturing Materials and Cutting Tools	3
MFG190	Programming CNC Lathes	3
MTH053	Introduction to Trigonometry with Geometry (or higher)	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. Oregon State University offers degrees in Mathematical Sciences and Mathematics.

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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122 and/or 123, English Composition and/or WR227 TechnicalWriting*(WR121 for WOU)	3	3	(3)
Mathematics per placement test* MTH251, 252, 253 Calculus required (EOU, OSU, PSU, SOU, and WOU also require MTH254 Series Calculus and Linear Algebra)	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; CS133U C++ Language or other higher level language for OSU; CS161 Computer Science 1 for PSU; CS161 and 162 Computer Science 1 and 2 for WOU)	4	4	4
HPE295 Health and Fitness for Life* or elective			3
Second Year	4	5	6
Mathematics through MTH255 Vector Calculus 2 (OSU also requires MTH256 Applied Differential Equations; PSU and UO require MTH256; MTH255 not required at PSU, UO, and WOU)	4	(4)	(4)

Science courses* (OSU requires PH211 Physics for Engineers and Scientists and approved courses in the physical and biological sciences for all options; 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 the practicum offered spring term.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) of the American Medical Association in collaboration with the American Association of Medical Assistants, which certifies graduates by examination. CAAHEP is located at 35 E. Wacker Drive, Chicago, Illinois. The telephone number is 312-553-9355. The internet address is www.caahep.org.

This program is a fall term entry program with special admission requirements and enrollment limits. For information, contact the Enrollment Services (Admissions) Office at 503-399-5006.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

AH112A	Health Care Systems and Professions	2
CA121A	Keyboarding A (if less than 25 wpm)	1
CS101	Introduction to Microcomputer Applications	3
MTH052	Introduction to Algebra and Geometry	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

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

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available in Counseling and Career Services, Admissions, and program offices.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$390; class fees, \$103; equipment and supplies, \$369; physical examination, \$100; measles vaccination, \$20; Hepatitis B vaccination series, \$150. Contact the Financial Aid Office at 503-399-5018 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 1	.3
HM120	Medical Terminology /Systems 1	.3
MED120	Medical Office Procedures	.5
MED124	Medical Assisting Basic Procedure	.4
Term 2		
BI072	Body Structure and Function 2	.3
FE205B	Resumes and Job Search Correspondence	.1
HM121	Medical Terminology /Systems 2	.3
MED125	Medical Assisting, Advanced Procedures	.6
PSY100	Introduction to Psychology	.3
Term 3		
BT090	Bookkeeping	.3
MED128	Introduction to Medical Science	.3
MED130	Medical Assisting Practice	.5
MED131	Medical Assisting Seminar	.1
	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
HE250	Personal Health	.3
HM101	Medical Law and Ethics	.3
HM115	ICED-9-CM Coding/Reimbursement	.3
HM140	Medical Transcription	.3
HS101	Addiction Pharmacology and Physiology	.4
MS259	Death and Dying	.3
PE	Physical education	.3
SPN101	First Year Spanish, Term 1 (or higher)	.4

Network Technology

The Network Technology program offers hands-on training in a rapidly growing field. Graduates of this program will be able to design, install, administer and maintain computer networks for hardware and software.

Students entering this option must have an Intel-compatible computer (Pentium or better) and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, a word processor and a spreadsheet).

To successfully complete the Network Technology program, 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 relating to your program. For more information, look under Cooperative Work Experience in the catalog index.

If you are already employed in the field or have a degree (master's, bachelor's, associate's), some of your education and training may transfer into this program. Contact Gary Boyington at 503-399-5218 for an appointment to assess your education/training.

Some high schools that have been certified by Chemeketa can offer selected courses to students while they are in high school. Check with your high school counselor or contact Laurie Adams, 503-399-5239, to see if your high school is certified.

For a tour of the Network Technology laboratory, call 503-399-5074.

This program is a fall term entry program and has special admission procedures and requirements. For information, contact the Enrollment Services (Admissions) Office at 503-399-5006.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	.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 Counseling and Career Services at 503-399-5120 or 503-399-5218. 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, \$1,625; class fees, \$340; equipment and supplies, \$120; and Intel-compatible computer, \$1,200. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 106 required credit hours:

Course	Title	Credit Hours
Term 1		
ELT100	Electronics Fundamentals for Non-Majors	.4
MTH111	College Algebra (or higher)	.5
	or	
MTH081	Technical Mathematics 1	.4
NET123	Computer Operating Systems	.4
NET151	Network Essentials	.5
NET152	Network Router Configurations	.5
Term 2		
CS145	Microcomputer Hardware	.4
	or	

ELT254	Computer Hardware	4
CS178I	Introduction to the Internet/World Wide Web	3
	or	
CIS122	Computer Information Science 3	4
NET120	Network Media Fundamentals	4
NET153	LAN's and Internetwork Design	5

Term 3

CS140U	UNIX/LINUX	3
CS179	Introduction to Windows NT	3
NET154	WAN Design	5
SP111	Fundamentals of Public Speaking	3
WR121	English Composition-Exposition	3

Term 4

CS288	Windows NT Server	4
NET251	Advanced Routing Configuration	5
NET252	Remote-Access Networks	5
WR227	Technical Writing	3
	Approved Programming elective*	3

Term 5

CS279	Network Management	5
FE205B	Resumes and Job Search Correspondence	1
NET253	Multi-Layer Switching	5
PSY104	Psychology for the Workplace	4

Term 6

CS286	Web Server Configuration and Management	4
CS289	Advanced Network Application Support	4
NET254	Network Troubleshooting	5
	Approved Network Technology elective**	3

*Approved Programming electives:

ELT121	Programming Concepts 1	4
CS133U	C++ Language	4
CS133VB	Visual Basic-Event-Driven	4
CS161	Computer Science 1	4
ELT280	Cooperative Work Experience (see program chair)	max. 6

**Approved Network Technology electives:

CS125A	Micro Database Software-Access	3
CS162	Computer Science 2	4
CS240	Advanced Computer Operating Systems	3
CS260	Computer Science 3-Data Structures	4
ELT253	Microprocessor Systems	5
ELT280	Cooperative Work Experience (see program chair)	max. 6
	Continuing education unit (see program chair)	max. 6

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. The telephone number is 212-989-9393. The internet address is www accrediting-comm-nlnac.org.

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 five 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 and 110R or 104 and 104R or 121 and 121R or 221 and 221R 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.
5. Medical Terminology / Systems 1, HM120 or equivalent.

These courses must be completed by the end of spring term of the application year with a grade of C or better, and within five years prior to entering the Nursing Program (except for HM120).

In addition to the five 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 Career and Counseling Services. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact the Enrollment Services (Admissions) Office at 503-399-5006, or Career and Counseling Services 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, \$935; class fees, \$138; equipment and supplies, \$395; testing fee, \$200. Contact the Financial Aid Office at 503-399-5018 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 (LPN).

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, \$425; class fees, \$67; equipment and supplies, \$167; testing fee, \$200. Contact the Financial Aid Office at 503-399-5018 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 usually in February. 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

	Term		
	1	2	3
First Year			
CH104 and 104R, 105 and 105R, 106 and 106R Chemistry for Allied Health or CH121 and 121R, 122 and 122R, 123 and 123R General Chemistry	5	5	5
MTH111 College Algebra (begin Math per placement test)	5		
MTH243 Probability and Statistics 1		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 recommended; ART101, 204, 205, 206 Art History; HUM251, 252, 253, 259 and SP111, 112, 113 also accepted; a total of 12 Humanities electives required)	3-4	3-4	3-4
Second Year	4	5	6
BI231, 232, 233 Anatomy and Physiology	4	4	4
BI234 Microbiology		4	
Humanities elective			3
SOC204 General Sociology-Introduction (SOC205 or SOC206 General Sociology may be substituted)	3		
PSY201 General Psychology-Biological Emphasis	3		
PSY237 Life Span Development		3	
Literature elective			3
SP111 Fundamentals of Public Speaking or SP218 Interpersonal Communication	3		
SP219 Fundamentals of Small Group Communication			3
ATH103 Cultural Anthropology			3
Social Science electives (Recommend courses with prefixes BA, EC, or PS and SSC206 Dealing with Diversity)			3
Electives (to total 91 transferable credit hours; CS101 Introduction to Microcomputer Applications recommended)	3	3	3

Occupational Skills Training

The Occupational Skills Training program offers students the opportunity to earn college credit for worksite-based training at approved community training sites throughout the state. 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 of up to \$150 per term for books and supplies, if related classes are taken. Additional travel fees may be charged for out-of-district students. Consult with your sponsoring agency counselor (if applicable) regarding funding or contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

Some training programs may require the purchase of specialized tools/equipment or payment for taking required certifications or licensing exams. These will be determined at the beginning of the program.

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 (if applicable).

You may earn a Certificate of Completion by successfully completing up to 60 credits 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 Associate of Arts Oregon 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.

Non-credit options (such as On-the-Job Evaluation and Veteran's Independent Living) are also available to evaluate potential sites as well as student skills and career potential.

Interested agencies or students should contact an Occupational Skills Training Coordinator in Building 20, 503-399-5028, 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	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 and WOU require 12 credits in Computer Science, Mathematics, and Quantitative Studies for B.S. degree or two years of Foreign Language for B.A. degree; UO requires two years of Foreign Language)	3-4	3-4	3-4

Second Year	4	5	6
Humanities courses* (PHL201 Philosophical Problems: Metaphysics and PHL203 Elementary Ethics required at PSU; PHL201 recommended for OSU; PHL203 required and PHL201, 202 recommended for UO; PHL201, 203, 204 for WOU)	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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121 and/or WR122 or 123 English Composition or SP111 Fundamentals of Public Speaking*	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 College Algebra, MTH112, 211, 212, or 213 for EOU; MTH111 for WOU)	(4)	4-5	4-5
Arts and Letters/Humanities courses*	3	3	3
PE194 Professional Activities (not required at most schools, except OSU 1 credit in PE194)	2	2	2
CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry or CH221 and 221R, 222 and 222R, 223 and 223R 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 (PE185DM Aerobics-Beginning for WOU)			(3)

Second Year	4	5	6
Social Science courses (PSY201 General Psychology-Biological Emphasis for OSU and UO; PSY201 and 202 for Athletic Training option at SOU and recommended for WOU)*	3	3	3
HPE295 Health and Fitness for Life* (EOU, OSU, SOU, WOU)			3
HE250 Personal Health (not required at EOU, OSU, or UO)	3		
Science courses* (BI231, 232, 233 Human Anatomy and Physiology for EOU, OSU, and SOU; PH201, 202, 203 General Physics required at UO; BI101 and 102 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)	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 Career and Counseling Services 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 Career and Counseling Services or a

Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

First Year	Term		
	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 requires Math through MTH254; SOU requires MTH251 and 252)	4-5	4-5	4-5
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry (CH121 and 121R, 122 and 122R, 123 and 123R 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 Physics for Engineers and Scientists (PSU and SOU 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 1; PSU requires other approved courses in a related area of science or Computer Science; Chemeketa recommends CS161, 162 Computer Science 1 and 2; OSU requires one approved course in computer programming)	(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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. It is advisable for you to make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

First Year	Term		
	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 and MTH112 Trigonometry, or MTH241 or 251 Calculus for B.S. degree for OSU. MTH111 and CS161 Computer Science I for WOU or second year Foreign Language)	4	4	4
Electives (Foreign Language for B.A. degree, Computer Science, and Math for BS degree required at OSU; CS101 Introduction to Microcomputer Applications for SOU and WOU; Foreign Language or MTH105 Introduction to Contemporary Mathematics, 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 and UO; PS201 for WOU; PS201, 202 not required at PSU)	3	3	
PS203 State and Local Government and/or PS205 International Relations recommended (both required at WOU; and fulfills requirement at UO; PS205 required at OSU and SOU)			(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 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 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
	1	2	3
First Year			
WR121, 122, and/or 123 English Composition or approved Communications course*	3	3	3
CH221 and 221R, 222 and 222R, 223 and 223R General Chemistry (CH121 and 121R, 122 and 122R, 123 and 123R College Chemistry if not qualified for CH221, 221R-223, 223R)	5	5	5
Mathematics (per placement test through MTH252 Calculus)	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 Oregon's public high schools. Additional upper division coursework is required for a bachelor's degree and basic teaching certificate.

The one-year certificate option offers training for those who wish to apply through a school district for a special three-year non-renewable professional-technical certificate. Students who complete the two-year Associate of Applied Science degree, combined with one year of successful teaching, will be eligible to apply through a school district for a five-year renewable professional-technical teacher certificate.

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, \$420; class fee, \$70; measles vaccination, \$10, criminal history check, \$17. Contact the Financial Aid Office at 503-399-5018 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 1	6
ED217	Comprehensive Classroom Management	3
ED292	Occupational Analysis, Curriculum and Evaluation	3
Term 3		
ED209D	Professional Technical Practicum 2	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, \$695; class fee, \$75; measles vaccination, \$10, criminal history check, \$17. Contact the Financial Aid Office at 503-399-5018 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 Public Speaking	3
SP218	Interpersonal Communication (or higher)	3
WR121	English Composition-Exposition (or higher)	3
	Professional-Technical electives*	6
Term 5		
HPE295	Health and Fitness for Life	3
	Science elective	3
	Approved Social Science elective*	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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition (WR227 Technical Writing required by SOU; WOU only requires WR121)*	3	3	(3)
PSY201, 202, 203 General Psychology (PSY201, 202 for OSU, SOU, and WOU; PSY201 for UO)	3	3	3
Mathematics per placement test* (Mathematics through MTH111 College Algebra required by EOU; MTH111 and 112 or 241 for BS degree at OSU; PSU requires MTH241 Elementary Calculus and MTH243 and 244 Probability and Statistics; UO requires MTH111, 243 and one additional Math course; WOU requires MTH111 and CS161 Computer Science I or second year Foreign Language and MTH105 Introduction to Contemporary Mathematics)	(4)	4-5	(4)
Arts and Letters/Humanities courses* (second year Foreign Language required for B.A. degree at OSU, UO, WOU)	3	3	3
HPE295 Health and Fitness for Life* or elective			3
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* (UO requires Biology, Chemistry or Physics; PSU recommends BI101, 102, 103)	4-5	4-5	4-5
Electives (SOU requires CS101 Introduction to Microcomputer Applications; Chemeketa recommends CS101 or other Computer Science courses for all schools)	6	6	6

*To meet four-year college general education requirements.

Real Estate

The goal of the Real Estate program is to prepare students for a wide variety of jobs which require knowledge of the complexities of real estate. The required courses cover factors affecting the value, control, use, appreciation, responsibilities and privileges associated with real property. You may select individual courses to meet your needs, state license requirements, or you may work toward an Associate of Applied Science degree.

With this technical training, you may fill a variety of jobs in county assessors or county recorders offices, city planning departments, the Federal Housing Administration, veterans 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.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
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 Counseling and Career Services 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, \$1,800-2,100; class fees, \$50; equipment and supplies, \$100. Contact the Financial Aid Office at 503-399-5018 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		
BA101	Business Environment	4
BA260	Real Estate Principles	3
EC200	Introductions to Economics (or higher)	3
MTH062	Business Applications Using Mathematics (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	Excel-Workbooks	4
MTH070	Elementary Algebra (or higher)	4
Term 3		
BA211	Financial Accounting 1	4
BA262	Real Estate Practices	3
PSY101	Psychology of Human Relations (or higher)	3
WR227	Technical Writing	3
Term 4		
RE161	Basic Appraisal Principles and Practices	3
RE171	Property Management	3
RE267	Real Estate Investment Analysis	3
	Computer elective*	3
	Humanities/Fine Arts elective**	3
	or	
	Science/Applied Science elective**	3
Term 5		
MTH105	Introduction to Contemporary Mathematics	4
	or	
	Introduction to Business Statistics	3
BA232	Applied Residential Appraisal	3
RE162	Income Property Appraisal Principles and	
RE164	Methodology	3
RE170	Zoning, Subdivision and Community Planning	3
RE266	Uniform Standards and Professional Appraisal Practice (USPAP)	2
	Business elective*** (RE280 Cooperative Work Experience or BA226 Business Law or BA238 Sales and Persuasion recommended)	6
Term 6		
BLD154	Dwelling Construction Under the UBC	3
RE169	Elements of Design and Construction	3
RE265	Applied Income Property Appraisal	3
	Business elective***	
RE280	Cooperative Work Experience recommended)	9

*Computer elective (select three): CA118A, CA118C, CA118D, CA118E.

**Students may choose among the following electives: Art, Foreign Languages, Philosophy, General Science, Geology, Physical Science and Physics.

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

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, record keeping 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
	1	2	3
First Year			
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 and SOU require only SOC204; OSU accepts a maximum of 12 credit hours of lower division Sociology; EOU requires SOC204 or 205)	3	3	3

Mathematics or Science* (EOU requires a statistical class at EOU; OSU requires MTH111 and 112 or 241 for BS degree; PSU requires Math through MTH243 Probability and Statistics I; WOU requires MTH111 College Algebra for the B.S. degree; UO requires three math courses for B.S.)	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 ATH101, 102, 103 Human Evolution, Archeology, Introduction to Cultural Anthropology; SOU requires ATH103 Introduction to Cultural Anthropology)	3	3	3
Arts and Letters/Humanities electives* (Second year Foreign Language required for BA degree at OSU, UO, and WOU)	3	3	3
Science courses*	4	4	4
HPE295 Health and Fitness for Life* or elective	3		
Electives* (CS101 Introduction to Microcomputer Applications for SOU; CS101 for BA degree and CS161 Computer Science 1 for B.S. degree at WOU; Computer Science recommended for OSU)	3	6	6

See WOU catalog for Interdisciplinary electives.

*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. Oregon State University offers an option in Theatre Arts. 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 Career and Counseling Services 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 Career and Counseling Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer Degree information in the Degrees, Diplomas, Certificates and Transfer Information section of this catalog beginning on page 32.

	Term		
First Year	1	2	3
WR121, 122, and/or 123 English Composition	3	3	(3)
SP111 Fundamentals of Public Speaking	3		
SP112 Fundamentals of Persuasion (SP100 required at PSU; not required at SOU or WOU)		3	
SP219 Fundamentals of Small Group Communication (not required at OSU, PSU, or WOU)			3
SP218 Interpersonal Communication			3
Arts and Letters/Humanities courses*	3	3	3
Social Science courses*	3	3	3
Math or Science* (MTH111 College Algebra, MTH243 Probability and Statistics and CS161 Computer Science I required for B.S. degree at WOU; OSU requires MTH111 and 112 or 241 and/or Computer Programming for B.S. degree)	4	4	4
Second Year	4	5	6
Social Science electives*	3	3	3
Arts and Letters/Humanities electives* (Second year Foreign Language for B.A. degrees at OSU, UO, and WOU)	3	3	3
Science courses*	3-4	3-4	3-4
HPE295 Health and Fitness for Life* or elective	3		
Electives (SOU requires SP115 Introduction to Intercultural Communications and recommends PHL203 Elementary Ethics and PHL204 Critical Thinking and Logic for Human Communications majors and JNL224 Introduction to Mass Communication for Broadcasting majors; WOU requires CS101 Introduction to Microcomputer Applications and 15 hours of electives in Journalism, Speech and Writing)	3	6	6

*To meet four-year college general education requirements.

Vineyard Management

Vineyard Management training includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in the cool-climate wine industry as a vineyard manager. Training is appropriate for employees or potential employees of vineyards or for persons wanting to establish such a business. Practical skills will also be emphasized and students will gain on-the-job work experience through the Cooperative Work Experience Program.

For more information about this program contact Al MacDonald at 503-399-5066 or D. Craig Anderson at 503-399-6565.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

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

In addition to tuition, costs for students who complete the entire program listed below may vary. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 93 required credit hours:

Course	Title	Credit Hours
Term 1		
CH115	Consumer Chemistry (or higher)	4
CH172	Chemical Methods for Analysis of Musts and Wines	3
CS101	Introduction to Microcomputer Applications (or higher)	3
SPN111	Beginning Spanish Conversation 1 (or higher) . . .	3
VMW101	General Viticulture	3
Term 2		
CS125A	Micro Database Software-Access (or higher) . . .	3
MTH052	Introduction to Algebra and Geometry (or higher)	3
PSY101	Psychology of Human Relations (or higher) . . .	3
VMW105	Spanish in the Vineyard	3
	or	
SPN112	Beginning Spanish Conversation 2 (or higher) . . .	3
WR121	English Composition-Exposition (or higher)	3
Term 3		
CS125E	Excel Workbooks (or higher)	4
VMW250	Agricultural Supervisor Training	4
	or	
PSY104	Psychology in the Workplace	4
WR227	Technical Writing (or higher)	3
	General Education elective	3
Term 4		
VMW113	Summer Vineyard Practices	4
Term 5		
VMW110	Fall Vineyard Practices	4
VMW280D	Cooperative Work Experience	4
	General Education elective	3
	General Education elective	3
Term 6		
VMM111	Winter Vineyard Practices	4
VMW121	Wine Production 1	3
VMW261	Vine Physiology	4
VMW280D	Cooperative Work Experience	4
Term 7		
VMW112	Spring Vineyard Practices	4
VMW252	Vineyard Management	3
VMM260	Soil and Plant Nutrition	4
VMW280D	Cooperative Work Experience	4

Vineyard Operations

Course work for the Vineyard Operations Certificate includes instruction and hands-on training in the basic knowledge and practical skills required for successful employment as a vineyard technician or for persons wanting to establish a vineyard.

For more information about this program contact Al MacDonald at 503-399-5066 or D. Craig Anderson at 503-399-6565.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	.1
MTH020	Basic Mathematics	.3
RD090	College Textbook Reading	.3
WR040	Writing Skills	.3

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

In addition to tuition, costs for students who complete the entire program listed below may vary. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 40 required credit hours:

Course	Title	Credit Hours
Term 1		
CS101	Introduction to Microcomputer Applications (or higher)	.3
VMW101	General Viticulture	.3
VMW110	Fall Vineyard Practices	.4
WR115	Introduction to Composition (or higher)	.3
Term 2		
MTH052	Introduction to Algebra and Geometry (or higher)	.3
VMW111	Winter Vineyard Practices	.4
VMW261	Vine Physiology	.4
Term 3		
VMW112	Spring Vineyard Practices	.4
VMW260	Soil and Plant Nutrition	.4
VMW250	Agricultural Supervisor Training	.4
	or	
PSY104	Psychology in the Workplace	.4
Term 4		
VMW113	Summer Vineyard Practices	.4

Visual Communications

The Visual Communications program is constantly changing, reflecting the rapid growth in the field of graphic arts in a digital age. The logo you design may be printed on a T-shirt and animated on a web page. The photograph you take might be printed in a four-color book or used as part of a multimedia

collage. Never before have there been so many opportunities in a variety of media. As part of the Visual Communications program, you will work in both classroom and live production settings to learn not only the technical skills, but also the teamwork and creative problem solving essential to a lifelong career in graphic arts. You will develop skills in graphic design, layout, typography, traditional and digital photography, image assembly, electronic imaging and prepress. Students will produce both a traditional and digital portfolio of work including a personal letterhead and resume in preparation for entering the job market. A class portfolio show is held in spring term prior to graduation.

The Visual Communications program offers a two-year Associate of Applied Science degree that emphasizes Graphic Design. Additional coursework is available for further study in web design, illustration, photography and digital imaging. The program has special admissions prerequisites, requirements and enrollment limits. You are required to earn a grade of C or better in all required classes to continue in the program.

This is a hands-on, intensive program, which can lead to numerous career options. Because most courses are only offered once a year, it will take two full years from the fall that you enter to complete the program. If you are entering in winter or spring we will advise you on which courses to take while waiting to begin the fall sequence of required courses. Interested students are encouraged to come to Building 4, Room 284 or call 503-399-5070 and ask to speak with an instructor. For additional information, contact the Enrollment Services (Admissions) Office at 503-399-5006.

Special Note: Apply early. There is a required pre-program introductory course, VC080 (A, B and C), that takes place in early September prior to fall term. All VC classes take place in a Macintosh lab. Students will be required to take CA100 or demonstrate proficiency on the Macintosh as a prerequisite for admission into the program.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA100	Microcomputer Basics (Macintosh Version)	.3
CA121A	Keyboarding A (if less than 25 wpm)	.1
COM051	Communication Skills 1	.3
MTH020	Basic Mathematics	.3
SSP014	A, B, C Spelling Rules	.3
SSP051	Studying for College	.3
VC080A	Introduction to Visual Communications	.1
VC080B	Introduction to Graphic Processes	.1
VC080C	Introduction to Macintosh Graphics	.1

If you have questions about the requirements, call Counseling and Career Services 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 average \$300 per term. These costs include photographic supplies, books, high resolution output, mounting supplies and zip disks. A 35 mm camera, approximately \$300, is required for the photography courses. A portfolio, at a cost of up to \$200, is required for graduation. Class fees total an additional \$525.

Although not required, home computer and digital computer availability greatly enhances a student's ability to successfully complete course work and learn new software. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
ART131	Introduction to Drawing 1 (or higher)	4
ART261	General Photography	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
MTH060	Introductory Algebra (or higher)	4
SP111	Fundamentals of Public Speaking (or higher)	3
VC100	Special Topics in Visual Communications	1
VC121	Layout and Design 1	3
VC151	Electronic Imaging 1	3
Term 3		
ART116	Basic Design	3
ART262	Technical Photography	4
PSY100	Introduction to Psychology (or higher)	3
VC100	Special Topics in Visual Communications	1
VC122	Layout and Design 2	3
VC145	Print Production 1	3
Term 4		
ART221	Graphic Design 1	4
ART224	Type Design 1	4
VC221	Layout and Design 3	3
VC251	Electronic Imaging 2	3
VC280B	Cooperative Work Experience	2
	or	
VC272	Studio Practices	2
Term 5		
ART222	Graphic Design 2	4
ART225	Type Design 2	4
VC183	Business of Graphic Arts	3
VC222	Layout and Design 4	3
VC237	Web Design 1	3
Term 6		
ART223	Graphic Design 3	4
ART264	Digital Photography	4
FE205B	Resumes and Job Search Correspondence	1
VC184	Portfolio Preparation	3
VC238	Web Design 2	3
VC273	Studio Practices	3
Approved electives:		
ART238	Introduction to Illustration	3
ART239	Introduction to Computer Illustration	3
ART263	Intermediate Photography	4
CA205	Desktop Publishing 1-Page Maker	3
CA206	Desktop Publishing 2-Page Maker	3
JNL215	Publications Lab	2
JNL226	Editing/Design	3
VC100	Special Topics in Visual Communications	1

VC130	Beginning PhotoShop	2
VC131	Advanced PhotoShop	2
VC133	Page Layout with QuarkXPress	2
VC137	Web Graphics 1	2
VC138	Web Graphics 2	2
VC139	Beginning Freehand	2
VC171-179	Special Projects	1-9
VC200	Advanced Topics in Visual Communications	1
VC230	Painter	2
VC237	Web Design 1	3
VC238	Web Design 2	3
VC246	File Prep	2
VC271-273	Studio Practices	1-3

Welding

The Welding program offers two options. The three-term Welding Technology program combines training with classes in the background knowledge needed by workers in welding occupations. You practice and develop your welding skills in the laboratory and may take an examination for certification in arc MIG 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 (TIG) and metallic inert gas processes (MIG) 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 (MIG) welders, arc welders, oxyacetylene welders, semiautomatic welding equipment operators and (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, \$612; certification test, \$200 (optional). Contact the Financial Aid Office at 503-399-5018 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		
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 1	.2
PSY100	Introduction to Psychology (or higher)	.3

Term 3

COM051	Communications Skills 1	.3
WLD053	Advanced Arc Welding	.3
WLD058	Weld Shop Problems	.7
WLD063	Advanced Gas Metal Arc Welding (MIG)	.3
WLD082	Welding Metallurgy 2	.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 third 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, \$871; class fees, \$544; equipment and supplies, \$612; certification test, \$200 (optional). Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
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 1	.2
Term 3		
COM051	Communication Skills 1	.3
WLD053	Advanced Arc Welding	.3
WLD058	Weld Shop Problems	.7
WLD063	Advanced Gas Metal Arc Welding (MIG)	.3
WLD082	Welding Metallurgy 2	.2

Term 4

GS104	Physical Science (or higher)	.4
MFG101	Machining Fundamentals	.3
MFG130	CNC Machine Setup/Operation	.3
MFG205	CAD for CAM	.3
MFG223	Industrial Systems	.3

Term 5

MFG131	Lathe Fundamentals	.3
MFG151	Milling Machine Processes	.3
MFG160	Programming CNC Mills	.3
MTH053	Introduction to Trigonometry with Geometry (or higher)	.3
WFB087	Fabrication Practices 3	.3

Term 6

COM052	Communication Skills 2 (or higher)	.3
MFG161	Lathe Processes	.3
PSY100	Introduction to Psychology (or higher)	.3
WFB088	Fabrication Practices 4	.3
WFB096	Shop Projects	.2

Winemaking

The two-year Winemaking program includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in the cool-climate wine industry as a winemaker. Training is appropriate for employees or potential employees of wineries or for persons wanting to establish such a business. Practical skills will also be emphasized and students will gain on-the-job work experience through the Cooperative Work Experience Program.

For more information about this program contact Al MacDonald at 503-399-5066 or D. Craig Anderson at 503-399-6565.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	.1
MTH060	Introductory Algebra	.4
RD090	College Textbook Reading	.3
WR115	Introduction to Composition	.3

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

In addition to tuition, costs for students who complete the entire program listed below may vary. Contact the Financial Aid Office at 503-399-5018 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		
CH121, 121R	College Chemistry (or higher)	5
CS101	Introduction to Microcomputer Applications (or higher)	3
MTH070	Elementary Algebra (or higher)	4
VMW101	General Viticulture	3
VMW131	Wine Appreciation	3
Term 2		
CH122, 122R	College Chemistry (or higher)	5
CS125A	Micro Database Software Access (or higher)	3
PSY101	Psychology of Human Relations	3
VMW121	Wine Production 1	3
VMW132	Wines of the World	3
Term 3		
CH123, 123R	College Chemistry (or higher)	5
CS125E	Excel-Workbooks (or higher)	4
VMW133	Cool Climate Wines	3
VMW250	Agricultural Supervisor Training	4
	or	
PSY104	Psychology in the Workplace	4
WR121	English Composition-Exposition (or higher)	3
Term 4		
CH172	Chemical Methods for Analysis of Musts and Wines	3
VMW241	Winery Operations 1	10
VMW280D	Cooperative Work Experience	4
Term 5		
CH272	Fundamentals of Wine Chemistry and Microbiology	3
VMW242	Winery Operations 2	2
VMW280D	Cooperative Work Experience	4
WR227	Technical Writing (or higher)	3
Term 6		
VMW221	Wine Production 2	3
VMW232	Sensory Evaluation of Wine	3
VMW243	Winery Operations 3	2
VMW251	Winery Management	3
VMW280D	Cooperative Work Experience	4

Winemaking Certificate

Coursework for the Winemaking certificate includes instruction and hands-on training in the basic knowledge and practical skills required for successful employment as a winery technician or for persons wanting to establish a winery.

For more information about this program contact Al MacDonald at 503-399-5066 or D. Craig Anderson at 503-399-6565.

Getting Started

The first step to entering this program is to take part in an assessment process which includes taking the college's free placement test and meeting with counseling and advising staff. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	3
RD090	College Textbook Reading	3
WR040	Writing Skills	3

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

In addition to tuition, costs for students who complete the entire program listed below may vary. Contact the Financial Aid Office at 503-399-5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 42 required credit hours:

Course	Title	Credit Hours
Term 1		
CH172	Chemical Methods for Analysis of Musts and Wines	3
VMW241	Winery Operations 1	10
Term 2		
CS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry (or higher)	3
VMW101	General Viticulture	3
VMW121	Wine Production 1	3
VMW242	Winery Operations 2	2
Term 3		
VMW221	Wine Production 2	3
VMW232	Sensory Evaluation of Wine	3
VMW243	Winery Operations 3	2
VMW250	Agricultural Supervisor Training	4
	or	
PSY104	Psychology in the Workplace	4
WR115	Introduction to Composition (or higher)	3

Zoology

See Biology.

Course Descriptions

Chemeketa Community College



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 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), **JNL** (Journalism), **SP** (Speech), **WR** (Writing), plus these specific classes: **BA214**, **BT120**, **HD112**, **RD115**, **RD116**, **RD117A**, **B**, **C**, and **RD120**.

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), **REL** (Religion), **RUS** (Russian), **SPN** (Spanish), **TA** (Theater Arts).

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

Social Science Electives: **ATH** (Anthropology), **CLA** (Chicano/Latino Studies), **EC** (Economics), **GEG** (Geography), **HST** (History), **HDF** (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*

BSD:	Basic Skills Development
MTH:	Mathematics
RD:	Reading
SSP:	Study Skills Program
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
AUM:	Automotive Technology
BC:	Building Construction Skills
BLD:	Building Inspection Technology
BT:	Business Technology
CA:	Computer Applications
CJ:	Criminal Justice
COM:	Communication Skills
CPL:	Credit for Prior Learning
CS:	Computer Science
CVL:	Civil Engineering Technology
CWE:	Cooperative Work Experience
DEN:	Dental Assisting
DRF:	Drafting Technology
ECE:	Early Childhood Education
ED:	Education
ELT:	Electronics Technologies
EMT:	Emergency Medical Technology
ENL:	English as a Non-Native Language
ES:	Emergency Services
FE:	Field Experiences
FRP:	Fire Protection Technology
FT:	Forest Resources Technology
HDF:	Human Development and Family Studies (numbered less than 100)
HM:	Health Services Management
HS:	Human Services
HTM:	Hospitality and Tourism Management
MED:	Medical Office Assisting
MFG:	Manufacturing Technologies
MT:	Microelectronics/Industrial
NET:	Network Technology
NUR:	Nursing
QS:	Quality Science
RE:	Real Estate
SSP:	Study Skills Program
ST:	Occupational Skills Training
VC:	Visual Communications
VMW:	Vineyard Management/Winemaking
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)

ART:	Art
AS:	Aerospace
ASL:	American Sign Language
ATH:	Anthropology
BA:	Business Administration***
BI:	Biology***
BOT:	Botany
CG:	Counseling and Guidance***
CH:	Chemistry
CIS:	Computer Information Science
CJ:	Criminal Justice***
CLA:	Chicano/Latino Studies
CS:	Computer Science***
EC:	Economics
EGR:	Engineering
ENG:	English
FA:	Film Arts
FN:	Foods and Nutrition
FR:	French
GE:	General Engineering
GEG:	Geography
GEO:	Geology
GER:	German
GS:	General Science
HD:	Human Development
HDF:	Human Development and Family Studies
HE:	Health Education
HPE:	Health and Physical Education
HST:	History
HUM:	Humanities
JNL:	Journalism
JPN:	Japanese
MS:	Military Science
MTH:	Mathematics***
MUP:	Music Performance
MUS:	Music
OC:	Oceanography
PE:	Physical Education
PH:	Physics***
PHL:	Philosophy
PS:	Political Science
PSY:	Psychology
RD:	Reading***
REL:	Religion
RUS:	Russian
SOC:	Sociology
SP:	Speech
SPN:	Spanish
SSC:	Social Science
TA:	Theater Arts
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, Medical Office Assisting and Nursing.

AH080 Crisis Intervention

3 class hrs/wk, 3 cr.

Provides a theoretical background for understanding crisis. Offers practical guidelines in assessment and proper management in a variety of crisis events. Assists emergency services workers by providing a framework for understanding and coping with their own reactions. **F, Sp, offered as needed.**

AH112A Health Care Systems and Professions

2 class hrs/wk, 2 cr.

Introduces health care systems and related professions. Includes health care delivery systems and trends, characteristics of the health care professional, societal issues influencing health care systems and health promotion and wellness. **F, W, Sp, Su**

ART

ART

See also Visual Communications.

ART101 Understanding Art

3 class hrs/wk, 3 cr.

Designed to provide students with the tools to look at, think about, and communicate ideas about the visual arts. Focuses on purposes of art; subject/form/content; media and techniques; approaches to art (critical, historical, analytical, interpretive); and artists' intentions. **Prerequisite:** College-level writing skills. **F, W, Sp, Su**

ART115, 116, 117 Basic Design

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

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: F, W, Sp, Su; 116: W, Sp, Su; 117: Sp**

ART131 Introduction to Drawing 1

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

Provides individualized instruction in practical drawing skills designed for the beginner. Introduces fundamental gesture, contour, and value approaches to drawing, utilizing a variety of monochromatic media. Covers lectures, demonstrations, and training in traditional methods of representing shape and space on a two-dimensional surface. **F, W, Sp, Su**

ART132 Introduction to Drawing 2

6 lab 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 lab 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 1-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 2-Beginning Wheel Throwing

6 lab hrs/wk, 3 cr.

Basic techniques for producing pottery on the potter's wheel. Emphasis is on forming, trimming, decorating, glazing and firing of projects, as well as visual and functional form considerations. Class fee \$9. **F, W, Sp**

ART156 Pottery 3-Intermediate Techniques

6 lab hrs/wk, 3 cr.

Designed to expand on the basic wheelthrowing skills acquired in ART155 through a series of intermediate projects. Includes production of lidded containers, teapots, combined forms, altered forms; study of kiln theory and design; development and testing of glazes; and the use of alternative firing techniques. **Prerequisite:** ART154 and 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. Course may be repeated as desired. Students should consult the transfer institution they wish to attend for limitations. **Prerequisite:** Consent of instructor. **Offered as needed.**

ART204 Introduction to Art History

3 class hrs/wk, 3 cr.

Examines art in the Western tradition from the Prehistoric era through the Early Christian/Byzantine period. **F**

ART205 Introduction to Art History

3 class hrs/wk, 3 cr.

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

ART206 Introduction to Art History

3 class hrs/wk, 3 cr.

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

ART210 Topics in Art History

3 class hrs/wk, 3 cr.

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

ART221 Graphic Design 1

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

Applies the basic design concepts, terms, and elements to the process of creating solutions to graphic design challenges. Introduces the use of illustration software on the Macintosh as a production tool. **Prerequisite:** ART115, ART116, and demonstrated ability to work with computers. Class fee \$20. **F, offered as needed.**

ART222 Graphic Design 2

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

Continues the exploration of graphic design using illustration software on the computer as a design and production tool. Emphasis is on symbol and logo design and includes corporate identification. **Prerequisite:** ART221. Class fee \$20. **W, offered as needed.**

ART223 Graphic Design 3

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

Continues exploration of graphic design with advanced projects. Includes work in packaging. **Prerequisite:** ART221, ART222. Class fee \$20. **Sp, offered as needed.**

ART224 Type Design 1

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

Introduces the study of letterforms and their importance in the design of visual communications. **Prerequisite:** VC114, VC121, and VC122, or consent of instructor. Class fee \$20. **F, offered as needed.**

ART225 Type Design 2

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

Continues the study of typography as a design element. **Prerequisite:** ART224 or consent of instructor. Class fee \$20. **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. **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. **F, W, Sp, Su**

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. **F, W, Sp, Su**

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. **F, W, Sp, Su**

ART238 Introduction to Illustration

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

Introduces concepts of illustration and offers training in traditional (non-digital) illustration technique for students with strong skills in drawing and/or painting. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART131 or 200 level drawing or painting course or demonstrated experience in drawing and/or painting. ART115, ART116, Art History and experience with color media recommended. Class fee \$5. **W, offered as needed.**

ART239 Introduction to Computer Illustration

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

Introduces the basics of illustration using the computer and graphic arts software. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART221, VC139 and VC130 or previous experience in graphics software. ART238 is recommended. Class fee \$15. **Sp, 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 puttying using both lead came and copper foil. Students produce original designs based on sources selected by the student. Class fee \$9. **F, W, Sp, 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, Sp, 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 4-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, 4 cr.

Introduces 35mm black and white photography. Topics include camera equipment, exposure calibrations, film processing, darkroom techniques and presentation of enlargements. 35mm camera required. Class fee \$25. **F, W, Sp, Su, offered as needed.**

ART262 Technical Photography

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

Introduction to studio and technical photography. Topics include lighting, color transparency, copy-stand work and art direction. 35mm camera required. **Prerequisite:** ART261. Class fee \$25. **Sp, offered as needed.**

ART263 Intermediate Photography

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

Topics include darkroom work, infrared black and white, toning techniques, and multiprinting and work with color. Emphasizes the freedom to experiment with photographic techniques. 35mm camera required. **Prerequisite:** ART261, ART262, or consent of instructor. Class fee \$30. **Offered as needed.**

ART264 Digital Photography

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

Adds digital imaging and manipulation to traditional photographic skills in the study of photo illustration for print or web design. A 35mm camera required. **Prerequisite:** ART262 and VC151 or VC130, or consent of instructor. Class fee \$15. **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, W, Sp**

ART271 Introduction to Printmaking: Press Processes 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, Sp**

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. **W, 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, ART272. Class fee \$9. **W, 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. **F, W, Sp**

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. **F, W, Sp**

ART281 Painting

6 lab hrs/wk, 3 cr.

Introduces traditional approaches to and techniques of painting. Includes introduction to materials, color theory and historical perspectives. For beginning painters who have strong fundamental drawing skills. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART131 or consent of instructor based upon demonstration in drawing. ART115 and ART116 recommended. **Offered as needed.**

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. **Offered as needed.**

ART285 Intermediate Watercolor

6 lab hrs/wk, 3 cr.

Emphasizes skill building and technical control of the medium. **Prerequisite:** ART284 or consent of instructor. **Offered as needed.**

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. **Offered as needed.**

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 characteristics and potential of clay as a sculptural material. 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. **Corequisite:** 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. **Corequisite:** AS211, 212 and 213. **Offered as needed.**

ASL

AMERICAN SIGN LANGUAGE

ASL101 American Sign Language 1

3 class hrs/wk, 3 cr.

Introduces American Sign Language (ASL) and the culture and diversity of the deaf community. Covers the study and application of ASL vocabulary and grammar to real life contexts. **F, W, Sp, Su**

ASL102 American Sign Language 2

3 class hrs/wk, 3 cr.

Continues ASL101 and the culture and diversity of the deaf community. Reviews ASL vocabulary and grammar and offers increased depth of experience. **Prerequisite:** ASL101 or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. **F, W, Sp, Su**

ASL103 American Sign Language 3

3 class hrs/wk, 3 cr.

Continues ASL102 and the culture and diversity of the deaf community. Incorporates ASL vocabulary and grammar. **Prerequisite:** ASL102 or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. **Sp, Su**

ASTRONOMY

See Physics.

ATH

ANTHROPOLOGY

ATH101 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**

ATH102 Archaeology

3 class hrs/wk, 3 cr.

An overview of human 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**

ATH103 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. Examines the

problem of controlling culture and managing society. **F, Sp**

ATH153 Introduction to Field Archaeology

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

An introduction to the methods and goals of American archaeology. Students will learn the basic techniques of scientific field archaeology in the classroom and at on-site archaeological digs and labs. **Offered as needed.**

ATH180 The Nature of Language

3 class hrs/wk, 3 cr.

Introduction to anthropological linguistics. Includes the history of linguistics and written language, descriptive linguistics, sociolinguistics, language and thought, language acquisition and the biology and physiology of language development. Also includes bilingualism and multiculturalism and written language development in both the old and new world. **Offered as needed.**

ATH207 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.**

ATH208 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.**

ATH209 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:** ATH207 and ATH208 recommended. **Offered as needed.**

ATH212 Aztec Civilization/La Civilización Azteca

3 class hrs/wk, 3 cr.

Presents an overview of Aztec institutions and demonstrates examples present in contemporary Mexican culture. Focuses on the daily life, culture, religion, philosophy, literature, social, political, and economic structures of the Aztecs. Students will analyze and compare Aztec concepts of life, death, the sacred, time, space, property, and education with American mainstream concepts. **Offered as needed.**

ATH214 Contemporary Mexican Culture

3 class hrs/wk, 3 cr.

Provides an understanding of Mexican culture by focusing on the main historical events that have shaped the identity of the Mexican. Explores the mixture of cultural institutions in modern Mexico from pre-Columbian indigenous cultures through European conquest and the Revolution. **Offered as needed.**

ATH231 Native American Studies

3 class hrs/wk, 3 cr.

Focuses on the Northeastern and Southeastern Native American cultures from earliest times to the present. Contrasts the Algonkian and Iroquois confederacies, as well as the Five Civilized Tribes; evaluates differences in tribal strategies adapting to Europeans while struggling to retain tribal sovereignty. Covers native identity, intertribal culture, and contemporary issues. **Offered as needed.**

ATH232 Native American Studies

3 class hrs/wk, 3 cr.

Focuses on the Prairie-Plains (Northern and Southern Plains) and Southwestern Native American cultures from earliest times to the present, emphasizing environmental adaptive strategies; explores Lakota and Kiowa relations with Euroamericans while struggling to retain tribal sovereignty. Surveys intertribal powwows, religious rights, urban migration, culture loss and retention, and changing gender roles. Outlines environmental impact on traditional and contemporary Navajo and Hopi cultures. **Offered as needed.**

ATH233 Native American Studies

3 class hrs/wk, 3 cr.

Focuses on the Northwestern Native American cultures from earliest times to the present. Contrasts the various cultures west of the Rockies, with particular emphasis on women's changing roles. Explores Oregon coastal (Coos) and California (Pomo) tribal cultures and their adaptations to Europeans while struggling to retain tribal sovereignty. Covers Kwakiutl and Haida masking arts and contemporary potlatch. **Offered as needed.**

AUM

AUTOMOTIVE TECHNOLOGY

AUM086A Automotive Air Conditioning and Heating

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

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.**

AUM086B Automotive Air Conditioning and Heating

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

Designed to familiarize the student with the theory and operation of automotive heating, air conditioning, and engine cooling systems. Methods for service and repair of heating and

air conditioning will be covered, along with troubleshooting techniques. Class fee \$10. **Offered as needed.**

AUM150 Introduction to Automotive Technology

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

Covers the automotive mechanic's duties. Explores current and future job opportunities. Emphasizes the complex and rapidly changing role of an auto mechanic. **Su**

AUM151 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**

AUM152 Automotive Machine Shop

2 class and 6 lab hrs/wk, 4 cr.

Covers the methods, technical aspects, theory, checks and procedures used to recondition internal combustion engines and related components. Introduces the precision measuring tools, torque wrenches and machining equipment used daily by automotive machinists. Discusses procedures, precision measuring devices and special tools, as well as theories of leverage, pressure/volume, expansion, momentum, inertia and work related to engines. **Prerequisite:** AUM151 or consent of instructor. Class fee \$30. **W**

AUM156 Automotive Shop Safety

1 class hr/wk, 1 cr.

Covers safety guidelines in the automotive industry. Focuses on the rules, regulations and methods to maintain and use automotive shop equipment and work areas. **F, W, Sp**

AUM157 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**

AUM158 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**

AUM161 Manual Drive Trains and Axles 1

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**

AUM168 Automotive Electrical Systems 1

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

An introduction to automotive electricity and electronics and circuitry. **Sp**

AUM188 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**

AUM189 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**

AUM190 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**

AUM192 Automotive Diesel Engines

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

Construction, working principles, and methods of servicing automotive diesel engines. **Prerequisite:** AUM151. Class fee \$5. **Sp**

AUM253 Automotive Engines 2

6 lab hrs/wk, 2 cr.

Focuses on repair and service of automotive internal combustion engines. Stresses speed and accuracy of diagnosis and repair. Builds on prior training. **Prerequisite:** Sixth-term standing in the Automotive Technology program or consent of instructor. Class fee \$15. **Sp**

AUM262 Manual Drive Trains and Axles 2

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

A continuation of AUM161 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:** AUM161. Class fee \$15. **F**

AUM263 Automatic Transmissions and Transaxles 1

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

AUM266 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

AUM267 Advanced Fuel Systems

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

Covers advanced carburetor systems and operating principles; diagnosis of system problems, and service of the electro-mechanical (feedback) carburetors. Includes the theory and principles of carburetor accessory special feature devices, and carburetor computer control operation and adjustments. Also focuses on automotive fuel injection systems, computer functions, inputs, commands, system diagnosis, causes of emissions, testing, and instrumentation studies and infrared, four-gas, and five-gas analyzer testing. **Prerequisite:** AUM266 or consent of instructor. Class fee \$5. W

AUM273 Automatic Transmissions and Transaxles 2

6 lab hrs/wk, 2 cr.

Focuses on diagnosis, repair, and service of automatic transmissions and automatic transaxles, including electronic transmissions. Emphasizes speed and accuracy in diagnosis and repair. Builds on prior training. **Prerequisite:** Sixth-term standing in Automotive Technology program or consent of instructor. Class fee \$15. Sp

AUM276 Automotive Electrical Systems 2

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

Continues DC electrical systems for the repair and service of automotive vehicles. Includes basic electrical systems, storage batteries, starters, charging systems and ignition systems. **Prerequisite:** AUM168 or consent of instructor. Class fee \$5. F

AUM277 Automotive Electrical Systems 3

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

Emphasizes testing, diagnosis, theory of ignition operations, charging, cranking systems, electronic ignitions, oscilloscope testing, meter usage, and vehicle computer systems and testing. Reviews basic electrical principles, laws and forces. **Prerequisite:** AUM168 and AUM276 or consent of instructor. Class fee \$5. W

AUM280A-L Cooperative Work Experience

See Cooperative Work Experience.

AUM281 Tune-up and Driveability

3 class and 8 lab hrs/wk, 6 cr.

Covers tuneup and diagnosis procedures of the gasoline internal combustion engine, including use of diagnostic equipment, with emphasis on tuneup of computer-controlled vehicles. Stresses diagnosis and repair of electrical and fuel systems related to tuneup and diagnosis of these systems using computer scanners, exhaust analyzers, engine analyzers and oscilloscopes. **Prerequisite:** AUM267 and AUM277, or consent of instructor. Class fee \$15. Sp

AUM282 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:** AUM168, AUM266 and AUM267, AUM276 and AUM277. Class fee \$5. W

AUM283 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:** AUM282 or consent of instructor. Class fee \$15. Sp

AUM286 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

BA

BUSINESS ADMINISTRATION

BA051 Accounting Procedures 1

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

BA052 Accounting Procedures 2

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 3

4 class hrs/wk, 4 cr.

A study of accounting for corporations, capital stock, corporate earning, corporate bonds,

investments, analysis of financial statements and manufacturing firms. For students who do not plan to attend a four-year college and/or who are not enrolled in Chemeketa's Accounting program. **Prerequisite:** BA052. Sp

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 \$126. **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 \$126. **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 \$126. **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 \$126. **Offered as needed.**

BA062F AMA What Managers Do

2.5 class hrs/wk, for 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 \$126. **Offered as needed.**

BA062G AMA Getting Results with Time Management

2.5 class hrs/wk, for 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 \$126. **Offered as needed.**

BA062H AMA How to Delegate Effectively

2.5 class hrs/wk, for 5 wks, 1 cr.

Focuses on effective delegation methods. Designed for managers and supervisors in business, industry and government. Class fee \$126. Sp

BA062I AMA A Manager's Guide to Human Behavior

2.5 class hrs/wk, for 5 wks, 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 \$126. **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 \$126. **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 \$126. **W**

BA062N AMA-Total Quality Management

2.5 class hrs/wk, for 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 \$126. **Offered as needed.**

BA062O AMA How to Make Teams Work

2.5 class hrs/wk, for 5 wks, 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 \$126. **Offered as needed.**

BA062P AMA-Effective Team-Building for Managers

2.5 class hrs/wk, for 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 methods of building trust, confidence and group work skills. Designed for managers and supervisors in business, industry and government. Class fee \$126. **W**

BA062Q First Level Leadership: Supervising in the New Organization

2.5 class hrs/wk, for 5 wks, 1 cr.

Focuses on the concepts and skills needed to manage the "new" workforce, influence others, and create and foster organizational stewardship. Emphasizes the keys to building

strong teams, defining the basics of their businesses, and gaining the tools to manage the change process. Uses case studies, assessments and focused activities to measure progress and gain the tools to lead in the new organization. Class fee \$126. **F**

BA066 Introduction to Business Studies

4 class hrs/wk, 4 cr.

Integrates reading, writing and study skills with a variety of business simulation activities to present a basic understanding of today's business environment. Includes basic concepts, resources, management and learning strategies for business studies and careers. **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.**

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. College level reading and writing recommended. **F, W, Sp, Su**

BA121 Project Management 1 - Tools and Techniques

3 class hrs/wk, 3 cr.

Covers tools and techniques associated with project management. Focuses on gathering, analyzing, formatting, and presenting specific types of information and data. **Offered as needed.**

BA122 Project Management 2 - Teams and Influencing Without Authority

2 class hrs/wk, 2 cr.

Covers team development associated with project management, including application, and how to influence others without authority. **Offered as needed.**

BA123 Project Management 3 - Estimating, Risk, Contracts and Procurement

3 class hrs/wk, 3 cr.

Covers estimating, risk, contracts and procurement. **Offered as needed.**

BA124 Project Management 4 - Simulation

2 class hrs/wk, 2 cr.

Reviews project management techniques from start-up to close-out. Brings together tools learned in the previous Project Management courses through use of a simulation. **Offered as needed.**

BA156 Intermediate Financial Accounting 1

4 class hrs/wk, 4 cr.

Studies the environment and development of accounting principles, basic theory, accounting process, statement of income and retained earnings, statement of financial position, present value, monetary assets, valuation of inventories and current liabilities. **Prerequisite:** BA213 or concurrent enrollment in BA213 or consent of instructor. **F**

BA157 Intermediate Financial Accounting 2

4 class hrs/wk, 4 cr.

Studies 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:** BA156 or consent of instructor. **W**

BA158 Intermediate Financial Accounting 3

4 class hrs/wk, 4 cr.

Covers the comprehensive study of revenue recognition, accounting changes, error analysis, income taxes, pension plans, leases and cash flow statements. **Prerequisite:** BA157 or consent of instructor. **Sp**

BA160 Purchasing 1

3 class hrs/wk, 3 cr.

Discusses purchasing functions, policies, procedures, manuals, legal considerations, public relations, ethics, quality and sources of supplies, storekeeping and personnel. **Offered as needed.**

BA161 Principles of Public Contracting
4 class hrs/wk, 4 cr.

Covers principles of contract management and administration within the State of Oregon including authority to contract; preparing and awarding contracts for personal/professional services, architects and engineers, goods and services and public (works) improvements; preparation for audits; and ethical, legal and risk management considerations. **Offered as needed.**

BA173 Public Relations in Business

3 class hrs/wk, 3 cr.

Explains the basic theories and principles involved in the practice of public relations and provides practical information needed to develop or to implement public relations activities in the business environment. **Offered as needed.**

BA177 Payroll

4 class hrs/wk, 4 cr.

Offers a comprehensive overview to both federal and State of Oregon payroll practices and procedures. Includes computing and recording gross wages, withholding amounts, and net wages. Introduces computerized and manual systems to 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. **Prerequisite:** CS101 and BT090 or BA051 or BA211 or consent of instructor. Class fee \$12. **W, Sp**

BA200K Conflict Resolution at Work

1 class hr/wk, 1 cr.

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

BA201 Community Leadership

1 class hr and 7 lab hrs/wk, 3 cr.

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**

BA203 Interpersonal Relations in Business

3 class hrs/wk, 3 cr.

Covers 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. 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. 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. College level reading and writing recommended. **F, W, Sp, Su**

BA210 Professional Development and Leadership

3 class hrs/wk, 3 cr.

Covers issues related to organizational leadership, including organization structure, culture, funding, performance measures and planning. Emphasizes professional growth planning and development within the organization. **Offered as needed.**

BA211 Financial Accounting 1

4 class hrs/wk, 4 cr.

Covers the complete accounting cycle for service and merchandising firms including recording transactions, adjustments, financial statements, worksheets, number closing entries, cash and accounts receivable, notes and interest, and accounting for inventories. Designed for students enrolled in the Accounting program and students transferring to four-year institutions. **F, W, Sp, Su**

BA212 Financial Accounting 2

4 class hrs/wk, 4 cr.

Studies liabilities associated with payrolls, recording payroll transactions, special payroll records and forms, accounting for and pricing inventories, costing of capital assets, and current and long-term liabilities. Covers partnerships and the 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:** BA211 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**

BA214 Business Communications

3 class hrs/wk, 3 cr.

Applies principles of written, oral and non-verbal communication. Covers preparation of good news, bad news and persuasive messages in applied situations using letters, memoranda and reports, using proper format. Includes development of resumes, job application letters and job interviews. Emphasizes written and oral assignments that require individual and group work. **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. **Offered as needed.**

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**

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, 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 1

3 class hrs/wk, 3 cr.

An introduction to the nature and function of the law in our society. The study of contracts, the formation of contracts, the right of contracts, and the obligations of contracts. **F, W, Sp, Su**

BA227 Business Law 2

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:** BA212 and BA213, CS125E or equivalent microcomputer experience. 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, hypothesis 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. **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. **Offered as needed.**

BA240 Governmental/Non-Profit Accounting 1

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. **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.**

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 1

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 2

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**

BA258 Budgeting in the Public Sector

3 class hrs/wk, 3 cr.

Provides an overview of the techniques and politics of budget preparation, modification and implementation in the public sector. Topics include history, decision-making process, various budgeting methods and implementation. **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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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, bookkeeping 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 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, BA211, BA212, BA213, CS101 and CS125E. **F, W**

BA272 Analyzing Financial Statements

3 class hrs/wk, 3 cr.

Techniques necessary for the evaluation of financial conditions and operating performance of a business enterprise. Includes financial statement analysis and accounting, business funds flow, and tools and techniques for the analysis of financial statements. **Prerequisite:** BA212. **Offered as needed.**

BA273 Marketing for Bankers

3 class hrs/wk, 3 cr.

Presents bank marketing relations, advertising and personal selling. Covers concepts and philosophies of marketing specifically related to banking, including information research, target markets, the marketing mix and methods of market planning. **Offered as needed.**

BA275 Quantitative Business Methods

4 class hrs/wk, 4 cr.

Presents management decision processes utilizing statistical methods, use and application of probability concepts, sampling procedures, statistical estimation and regression. **Prerequisite:** MTH244, CS125E. **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 Cooperative Work Experience.

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. **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

BUILDING CONSTRUCTION TRAINING

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**

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**

BC060 Leader Training

3 class hrs/wk, 3 cr.

Covers team building, job skills, tool safety and integrates learning into work. Includes motivation techniques, maintaining cohesiveness and productivity, defining success and viewing the leader as a role model. Designed for people interested in supervising. **Prerequisite:** Consent of instructor. **Offered as needed.**

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. **Prerequisite:** Consent of instructor. **W**

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 Cooperative Work Experience.

BI

BIOLOGY

BI060 Basic Science for Dental Assistants

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

Designed especially for Dental Assisting program students. Presents introductory concepts of cell biology, microbiology, oral histology and embryology, and head and neck anatomy. Includes practical application of problem solving, scientific observation and measurement, use of equipment and basic laboratory techniques. Class fee \$8. **F, Sp**

BI071 Body Structure and Function 1

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 2

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

A continuation of BI071. **Prerequisite:** BI071. Class fee \$8. **Offered as needed.**

BI100 Orientation to Marine Life of the Oregon Coast

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

Presents introductory information about marine organisms including birds, mammals, fish and invertebrates native to the Oregon Coast. Includes identification of these organisms, basic knowledge about their natural history, introduction to scientific terminology, basic awareness of scientific classification and information related to the understanding of the physical exhibitory structure and life support systems to maintain these animals in an aquarium environment. **Sp**

BI101 General Biology

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

Investigates the diversity of organisms, principles of ecology, and effects and consequences of ecosystem alteration by humans. This sequence need not be taken in order, although some carryover from one term to the next does occur. Class fee \$12. **F, Sp**

BI102 General Biology

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

Investigates the principles of cell division; Mendelian, population, and molecular genetics; evolution, natural selection and origin of species; and animal behavior. Class fee \$12. **F, W, offered summer as needed.**

BI103 General Biology

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

Investigates the principles of animal structure (anatomy) and function (physiology); human (and comparative) reproductive, nervous, circulatory, immune, digestive, respiratory, and urinary systems; plant structure and function; nutrition, growth and reproduction. **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**

BI143 Marine Biology

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

An investigation of the variety of marine ecosystems, including intertidal areas, salt marshes, estuaries, and other marine environments. Examines the ecology, physiology, and morphology of marine plants and animals. Emphasizes Oregon adaptations of life forms to marine environments. **Offered as needed.**

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, BI102, 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 and CH110R, CH104 and CH104R or CH105 and CH105R (CH105 and CH105R must be taken concurrently with BI231 if not completed previously) or consent of instructor. Class fee \$12. **F, W, Sp, offered summer as needed.**

BI232 Human Anatomy and Physiology

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

Second of a three-term sequence providing an in-depth examination of the structure and function of the human body. Includes the study of the muscular, circulatory and respiratory systems. **Prerequisite:** BI231 with a grade of C or higher; CH110 and CH110R; or CH105, CH105R, CH106 and CH106R (CH106 and CH106R 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.

Brings together an in-depth examination of the structure of the human body in the third of a three-term sequence. Includes the study of the endocrine, digestive, urinary and reproductive systems. Also covers an examination of body fluids, electrolytes, pH balance and medical genetics. **Prerequisite:** BI232 with grade of C or better, 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 and CH110R; or CH104 and CH104R, CH105 and CH105R, and CH106 and CH106R.

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 TECHNOLOGY

BLD150 Introduction to Building Inspection

3 class hrs/wk, 3 cr.

Introduces history and legality of building codes. Explores and compares the performance versus specification standards. Emphasizes Uniform Building Code with Oregon amendments. **F**

BLD151 Building Codes 1

3 class hrs/wk, 3 cr.

Covers the nonstructural standards of the Uniform Building Code including occupancy classifications, building area, height and location limitations, types of construction, exits and fire resistive standards. Emphasizes one- and two-family structures. **F**

BLD152 Building Codes 2

3 class hrs/wk, 3 cr.

Continues building code studies concerning areas that present hazards in building construction such as vertical shafts, treatment of exterior and interior surfaces, detailed exit requirements, fire protection systems, public property and weather protection. **Prerequisite:** BLD151. **W**

BLD153 Building Codes 3

3 class hrs/wk, 3 cr.

Provides a comprehensive review of the Uniform Building Code including pedestrian protection, permanent occupancy, prefabricated construction, fire systems, energy conservation and architectural barriers. **Prerequisite:** BLD151 and BLD152. **Sp**

BLD154 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 and roof and wall coverings. **Sp**

BLD155 Building Department Administration

3 class hrs/wk, 3 cr.

Discusses purpose and procedures of building department administration. Examines laws and principles that affect building department personnel and code compliance. **Sp**

BLD159 Materials of Construction

2 class hrs/wk, 2 cr.

Covers materials and processes regulated by the Uniform Building Code. Reviews testing standards as a quality control of traditional and nontraditional building materials. Class fee \$10. **W**

BLD161 Structural Inspection-Wood

3 class hrs/wk, 3 cr.

Introduces basic methods of wood framing. Covers allowable stresses, loads, and fundamental design of wood products and construction systems. Emphasizes one- and two-family structures. Class fee \$10. **W**

BLD162 Structural Inspection-Masonry

3 class hrs/wk, 3 cr.

Covers the specific code requirements for all types of masonry construction, both structural and nonstructural. Includes an introduction to fireplace construction. Class fee \$10. **Sp**

BLD181 Mechanical Codes 1

3 class hrs/wk, 3 cr.

Introduces the thermodynamics of heat and how it relates to the mechanical appliance. Examines the International Mechanical Codes general code requirements for heating, venting and air conditioning equipment. Studies the fuel gas piping system from the gas meter to the appliance, and the combustion air requirements for appliances that burn gas fuel. Stresses evaluation of appliances and equipment for its listing and installation instruction for dwelling and commercial applications. **F**

BLD182 Mechanical Codes 2

3 class hrs/wk, 3 cr.

An introduction to the air distribution system that serves a central heating plant. Studies the construction and installation requirements for sheet metal ducts and the fabrication and installation requirements for factory-made air ducts. Covers the venting systems serving gas burning and solid fuel burning appliances. Examines commercial and domestic incinerators, vented decorative appliances, direct gas-fired makeup air heaters and industrial air heaters, and domestic ranges and clothes dryers. Stresses evaluation of the appliance and equipment for its listing and installation instruction for dwellings and commercial applications. **Prerequisite:** BLD181. **W**

BLD183 Mechanical Codes 3

3 class hrs/wk, 3 cr.

Provides a working knowledge of the International Mechanical Codes and its provisions for the exhaust systems, boilers, water heaters, hydronics heating systems, and process piping and refrigeration systems. **Prerequisite:** BLD181, BLD182. **Sp**

BLD193A-F Building Inspection-Lab

4 lab hrs/wk, 1 cr. each

Provides code standards and conditions typical of building inspection work for inspectors in the following areas: mechanical inspection, structural inspection, and one- and two-family dwelling codes. Stresses writing correction notices based upon field observations. **F, W, Sp**

BLD260 Fire Protection for Buildings

3 class hrs/wk, 3 cr.

Covers the installation, function, location and purpose of sprinkler systems. **Sp**

BLD263 Structural Inspection-Concrete

3 class hrs/wk, 3 cr.

Introduces concrete as a construction material and its identity as a type of construction as defined by the Uniform Building Code. Covers its physical properties including mix design, handling, storage, delivery, placement and its fire resistive qualities. Emphasizes analysis of one- and two-family structures (up to 30 percent of course). Class fee \$10. **F**

BLD264 Structural Inspection-Steel

3 class hrs/wk, 3 cr.

Introduces steel as a construction material and its identity as a construction type in light, medium, and heavy steel frame construction. Covers methods of connections, its fire resistive qualities, and manufacturing and fabrication processes. **Prerequisite:** BLD151 or consent of program chair. Class fee \$10. **W**

BLD266 Structural Plan Review

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

Covers the fundamentals of structural plan review. Includes analysis and design of beams, columns and connections. **Prerequisite:** BLD269. **W**

BLD267 Non-Structural Plan Review

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

Examines the techniques and processes of non-structural plans. Includes familiarization with plan and construction documents, specifications, and the application of fire, life and safety code requirements. **Prerequisite:** BLD151 and BLD152. **Sp**

BLD268 Foundations, Excavation and Grading

3 class hrs/wk, 3 cr.

Covers fundamentals of and the code requirements for regulating excavations and fills for any building or structure, construction of foundation and retaining structures and general grading. Presents code requirements and emphasizes application to plan review and inspection functions. Uses grading and building plans and soil reports to complement the codes. **Prerequisite:** MTH052. **F**

BLD269 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:** MTH052 or equivalent. **F**

BLD271 Plumbing Codes 1

3 class hrs/wk, 3 cr.

Investigates certain standards of the Uniform Plumbing Code. Covers the principles of plumbing design, materials and installation standards related to dwelling construction. **F**

BLD272 Plumbing Codes 2

3 class hrs/wk, 3 cr.

Covers plumbing code requirements related to water and gas distribution systems, storm and sanitary sewer systems, water heater installations and mobile home connections. **Prerequisite:** BLD271 or consent of instructor. **W**

BLD280 Cooperative Work Experience

See Cooperative Work Experience.

BLD291 One- and Two-Family Electrical Code

3 class hrs/wk, 3 cr.

Covers general wiring design, methods and equipment, as related to one- and two-family dwelling applications. **Sp**

BLD292A CABO One- and Two-Family Dwelling Code (Structural)

3 class hrs/wk, 3 cr.

Covers the structural portion of the CABO One- and Two-Family Dwelling Code as it relates to residential construction and other applicable codes. **W**

BLD292B CABO One- and Two-Family Dwelling Code (Mechanical)

3 class hrs/wk, 3 cr.

Covers the mechanical portion of the CABO One- and Two-Family Dwelling Code as it relates to residential construction and applicable codes. **Sp**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

BT099 Proofreading/Editing

3 class hrs/wk, 3 cr.

Presents 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. **Offered as needed.**

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:** BT084 or concurrent enrollment, CA121. **Offered as needed.**

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:** BT085, BT099A, CA121, or equivalent as determined by instructor. **Offered as needed.**

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:** BT085, BT099A, BT099B, CA121, or equivalent as determined by instructor. **Offered as needed.**

BT110A,B,C Business Grammar and Punctuation Review A, B, C

1 class hrs/wk, 1 cr. each

Reviews impact of grammar rules on business documents. **Part A:** Sentence types, parts of speech, nouns and pronouns; **Part B:** Verbs, verb tenses, adjectives and adverbs; **Part C:** Prepositions, conjunctions, phrases, clauses, capitalization and punctuation. BT110A,B,C will not substitute for BT084 or BT085. **Prerequisite:** Touch keyboarding skills, basic grammar skills. Class fee \$35 each. **Offered as needed.**

BT111A,B,C Business Letters and Memo Writing Review A, B, C

1 class hrs/wk, 1 cr. each

Reviews business letter and memo writing techniques. **Part A:** Style, process and product of writing, guides for effective writing; **Part B:** Includes writing positive, negative and persuasive documents; **Part C:** Includes form and goodwill/personal letters. Class fee \$35 each. **Offered as needed.**

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. **Offered as needed.**

BT120 Professional Communication Skills

4 class hrs/wk, 4 cr.

Introduces principles of written, oral and non-verbal 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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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 Cooperative Work Experience.

CA

COMPUTER APPLICATIONS

CA091 Computerized Bookkeeping

3 class hrs/wk, 3 cr.

An introduction to computerized accounting principles, including chart to 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. **Offered as needed.**

CA100 Microcomputer Basics

9 lab hrs/wk, 3 cr.

Introduces basic computer concepts and application skills using the Windows operating system. Covers word processing, spreadsheet, database and Internet applications. **Prerequisite:** Touch keyboarding skill. Class fee \$12. **Offered as needed.**

CA115 Introduction to Office 2000

4 class hrs/wk, 4 cr.

Introduces five programs within the Microsoft Office 2000 Suite, with emphasis on integration of word processing, database, spreadsheet, presentation software and desktop management. Includes exploring the Internet, managing documents and creating web pages. **Prerequisite:** Computer literacy; touch keyboarding skill; CS101 preferred. Class fee \$16. **Offered as needed.**

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 skill 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 skills 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 skill 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. 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 skill of 25 words per minute. Class fee \$4. **Offered as needed.**

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: MS Excel 97 for Windows. Includes worksheet basics and an introduction to charting. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding skill of 25 words per minute. Class fee \$4. **Offered as needed.**

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 97 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 skill of 25 words per minute. Class fee \$4. **Offered as needed.**

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:

Electronic Messaging Systems Software-Novell GroupWise 5.5 covers electronic messaging (e-mail management), use of the address book, calendar and task management, discussions (chat sessions) and remote access.

Prerequisite: Computer literacy (prior experience with computer and mouse device) and touch keyboarding skill of 25 words per minute. Class fee \$4. **Offered as needed.**

CA118F Current Office Software-Microsoft PowerPoint

1 class hr/wk, 1 cr.

Introduces presentation software with an emphasis on designing and formatting business-related presentations. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding skill of 25 words per minute. Class fee \$4. **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 skill. Class fee \$12. **Offered as needed.**

CA121 Keyboarding

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

Basic touch keyboarding skills on standard microcomputer 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. **Offered as needed.**

CA121A Keyboarding A

2 lab hrs/wk, 1 cr.

Covers basic touch keyboarding on standard microcomputers or typewriter keyboard. Class fee \$4. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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 skill of 25 words per minute; 30 wpm recommended. Course may be repeated for a maximum of six credits. Class fee \$12. **Offered as needed.**

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 keyboarding approximately 30 words per minute. **Prerequisite:** CA121 or consent of instructor. Class fee \$4 each. **Offered as needed.**

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 skill of 35 words per minute. Class fee \$12. **Offered as needed.**

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. **Offered as needed.**

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 CA201D2 or CA201X1 or CA201X2. Touch keyboarding skill is essential. Class fee \$4. **Offered as needed.**

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 CA201D2 or CA201X1 or CA201X2. Touch keyboarding skill is essential. Class fee \$4. **Offered as needed.**

CA201D Word Processing Procedures 1

3 class hrs/wk, 3 cr.

Basic training in Microsoft Word for Windows. **Prerequisite:** Touch keyboarding skill 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:** CA201D1: Touch keyboarding skill of 30 words per minute. **CA201D2:** CA201D1. **CA201D3:** CA201D2. Class fee \$4. **Offered as needed.**

CA201X Word Processing Procedures 1

3 class hrs/wk, 3 cr.

Basic word processing training in the operation of WordPerfect software on IBM-compatible equipment. **Prerequisite:** Touch keyboarding skill of 30 words per minute. Class fee \$12. **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 skill of 30 words per minute. Class fee \$4. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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 skill of 35 words per minute. Class fee \$12. **Offered as needed.**

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 skill of 35 words per minute. Class fee \$4. **Offered as needed.**

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:** CA202D1. Class fee \$4. **Offered as needed.**

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:** CA202D2. Class fee \$4. **Offered as needed.**

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 skill of 35 words per minute. Class fee \$12. **Offered as needed.**

CA202X1 Word Processing Procedures 2-Part 1

Intermediate word processing training for persons with basic skills and knowledge of WordPerfect on IBM-compatible equipment. **Prerequisite:** CA201X or equivalent and touch keyboarding skill of 35 words per minute. Class fee \$4. **Offered as needed.**

CA202X2 Word Processing Procedures 2-Part 2

Intermediate word processing training for persons with basic skills and knowledge of WordPerfect on IBM-compatible equipment. **Prerequisite:** CA201X or equivalent; CA202X1; and touch keyboarding skill of 35 words per minute. Class fee \$4. **Offered as needed.**

CA202X3 Word Processing Procedures 2-Part 3

Intermediate word processing training for persons with basic skills and knowledge of WordPerfect on IBM-compatible equipment. **Prerequisite:** CA201X or equivalent; CA202X2; and touch keyboarding skill of 35 words per minute. Class fee \$4. **Offered as needed.**

CA203 Advanced Formatting

1 class hr/wk, 1 cr.

Covers development of correct formats for personal and business letters, envelopes, tables, memorandums, reports and business forms. Develops the skill to produce documents accurately within specified timed guidelines and touch type at a minimum of 40 words per minute. **Prerequisite:** CA201 and touch keyboarding skill of 35 words per minute. Class fee \$4. **Offered as needed.**

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 skill 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 skill of 35 words per minute. Class fee \$12. **Offered as needed.**

CA205 Desktop Publishing 1—PageMaker

3 class hrs/wk, 3 cr.

A hands-on microcomputer desktop publishing course using Adobe PageMaker. Includes microcomputer use, an overview of the printing process, typography and basic design and the use of PageMaker software. **Prerequisite:** Touch keyboarding skill of 25 words per minute and previous computer experience. Class fee \$12. **Offered as needed.**

CA206 Desktop Publishing 2— PageMaker

3 class hrs/wk, 3 cr.

An advanced hands-on microcomputer desktop publishing course using Adobe PageMaker. Includes a review of PageMaker software operation, additional basic design for desktop publishing and the production of publications. **Prerequisite:** CA205 or equivalent. 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. **Offered as needed.**

CA210 Office Microcomputer Applications

3 class hrs/wk, 3 cr.

Integrated software training. Includes training in word processing, database, spreadsheet, graphics and Internet (minimal) on the microcomputer. Emphasis on integration and mailability of business documents. **Prerequisite:** CS101 and touch keyboarding skill. Class fee \$12. **Offered as needed.**

CA210M Office Micro-Macintosh

3 class hrs/wk, 3 cr.

Integrated software training using AppleWorks for Macintosh. Includes training in word processing, database, spreadsheet, graphics and communications software on the Macintosh microcomputer. Application problems will consist of using the integrated program in business-related projects. **Prerequisite:** CS101 and touch keyboarding skill. Class fee: \$35 Online Only. **Offered as needed.**

CA210W Office Micro-Windows

3 class hrs/wk, 3 cr.

Integrated software training using Microsoft Works for Windows. 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 skill. Class fee \$12. **Offered as needed.**

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:** BT099 or BT099A; CA121A, B, C or equivalent as determined by instructor; CA201D or CA201X. Class fee \$4. **Offered as needed.**

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. **Offered as needed.**

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. **Offered as needed.**

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 and CA210. Class fee \$12. **Offered as needed.**

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:** CA118ABC, CA202D and CA210. **Offered as needed.**

CA280 Cooperative Work Experience

See Cooperative Work Experience.

CG

COUNSELING AND GUIDANCE

CG003 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.**

CG090 Peer Assistance Training

3 class hrs/wk, 3 cr.

Provides training in implementing communication skills and referral techniques and in locating college and community-based resources and services as peer assistant. Students serve as resource personnel to assist and refer other students with personal, social or academic concerns. **Offered as needed.**

CG100 Preparing for College

1 class hr/wk, 1 cr.

Introduces students to techniques, strategies and information fundamental to success in the college environment. **F, W, Sp**

CG110 Career and Life Planning

1 class hr/wk, 1 cr.

Introduces students to the strategies and procedures fundamental to the identification of 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 \$15. **F, W, Sp**

CG114 Career and Life Development

3 class hrs/wk, 3 cr.

Provides strategies to integrate the personal, educational and occupational elements of career and life development. Introduces the life-long process of career planning and transitions. Includes assessment of experiences, interests, skills, values, personality, and how these can influence career choice. Covers planning for education and training, decision making, and planning short-, medium-, and long-range career plans. **Prerequisite:** None. College-level reading and writing skills; some computer and World Wide Web/Internet experience is helpful. Class fee \$15. **F, W, Sp**

CG130A Career Exploration and Planning

1 class hr/wk, 1 cr.

Uses an individualized study approach to select and explore career identification and decision-making. Includes evaluation of individual personality type, interests, skills, values and work-related preferences. **Offered as needed.**

CG130B Career Exploration and Planning

2 class hrs/wk, 2 cr.

Uses an individualized study approach to provide information and resources needed in exploring careers. Explores and assesses how interests, skills, values and personality type influence career choice. Includes career research references as well as information on job and labor market trends. **Offered as needed.**

CG130C Career Exploration and Planning

3 class hrs/wk, 3 cr.

Uses an individualized study approach to provide information, instruments and procedures useful in exploring and determining career and life decisions. Includes selection of various career components involving assessment, research, planning, and decision-making process and identification of educational or training objectives. **Offered as needed.**

CG217 Career Development Facilitator 1
4 class hrs/wk, 4 cr.

Overviews career development theory and practice. Includes application of the career development facilitator's role/scope of practice, case management, career development theorists, adult development and legal/ethical issues. Covers working with diverse populations, the career development interview and helping/assessment skills. **Prerequisite:** Consent of instructor. Class fee \$20. **Offered as needed.**

CG218 Career Development Facilitator 2
4 class hrs/wk, 4 cr.

Overviews assessment and labor market information in relation to career development. Includes hands-on use of formal and informal assessment instruments, selection criteria, administration and interpretation. Covers assessment of obstacles/opportunities and research of labor market information. **Prerequisite:** CG217 or consent of instructor. Class fee \$20. **Offered as needed.**

CG219 Career Development Facilitator 3
4 class hrs/wk, 4 cr.

Overviews career decision-making and goal setting, job search strategies and techniques, and workshop facilitation skills. Includes program design and promotion. **Prerequisite:** CG217, CG218, or consent of instructor. Class fee \$20. **Offered as needed.**

CG225 Understanding the Four-Year College Transition

2 class hrs/wk, 2 cr.

Identifies the connection between the transfer student's previous collegial institution and that of four-year colleges. Introduces students to the four-year college systems and provides strategies and information critical to both academic development and adjustment. **F, W, Sp**

CH**CHEMISTRY****CH104 and CH104R Chemistry for Allied Health**

3 class, 2 lab and 1 recitation hrs/wk, 5 cr.

First term of a three-term sequence dealing with the molecular basis for life. Designed for Nursing, Dental Hygiene, EMT and other Allied Health students who plan to pursue careers in the health science professions. Focuses on general chemistry with emphasis on the applications of chemical principles to the life sciences. Topics include structure and properties of matter; energy; atomic structure and bonding; gas laws; chemical reactions; reaction rates and equilibrium; and water, solutions, and colloids. **Prerequisite:** MTH070. **Corequisite:** CH104 with CH104R. Class fee \$8. **F**

CH105 and CH105R Chemistry for Allied Health

3 class, 2 lab and 1 recitation hrs/wk, 5 cr.

Second term of a three-term sequence dealing with the molecular basis for life. Designed for Nursing, Dental Hygiene, EMT and other

Allied Health students who plan to pursue careers in the health science professions. Topics include colloids; reaction rates and equilibrium; acids and bases and their regulation in the body; saturated and unsaturated hydrocarbons; alcohol, ethers, aldehydes, ketones, carboxylic acids and esters. **Prerequisite:** CH104 and CH104R. **Corequisite:** CH105 with CH105R. Class fee \$8. **W**

CH106 and CH106R Chemistry for Allied Health

3 class, 2 lab and 1 recitation hrs/wk, 5 cr.

Third term of a three-term sequence dealing with the molecular basis for life. Designed for Nursing, Dental Hygiene, EMT and other Allied Health students who plan to pursue careers in the health science professions. Topics include carbohydrates; lipids; proteins; enzymes, vitamins, and hormones; pathways of metabolism; and nucleic acids. **Prerequisite:** CH105 and CH105R. **Corequisite:** CH106 with CH106R. Class fee \$8. **Sp**

CH110 and CH110R Foundations of General, Organic and Biochemistry

3 class, 2 lab and 1 recitation 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. **Corequisite:** CH110 with CH110R. Class fee \$8. **F, W, Sp, Su**

CH111 and CH111R Chemistry for Fire Science and Emergency Services

3 class, 2 lab and 1 recitation 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. **Corequisite:** CH111 with CH111R. 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 students lives. Covers science vs. technology, scientific method, atomic structure and theory, nuclear chemistry, chemical bonding, nomenclature, chemical reactions, acids and bases, oxidation and reduction, and chemistry of the earth. Class fee \$8. **F**

CH116 Consumer Chemistry

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

Second of a three-term sequence for the nonscience 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 and CH121R College Chemistry

3 class, 2 lab and 1 recitation 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. **Corequisite:** CH121 with CH121R. Class fee \$12. **F, W**

CH122 and CH122R College Chemistry

3 class, 2 lab and 1 recitation 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 and CH121R. **Corequisite:** CH122 with CH122R. Class fee \$12. **W, Sp**

CH123 and CH123R College Chemistry

3 class, 2 lab, and 1 recitation hrs/wk, 5 cr.

Third in a three-term sequence. A continuation of organic chemistry including aliphatic, aromatics, function groups and their reactions, structure and chemistry of carbohydrates, lipids, proteins, and nucleic acids. **Prerequisite:** CH122 and CH122R. **Corequisite:** CH123 with CH123R. Class fee \$12. **Sp**

CH172 Chemical Methods for Analysis of Musts and Wines

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

Introduces vineyard and winery laboratory practices. Covers basic chemical principles, laboratory techniques and analytical procedures for musts and wines. **Prerequisite:** CH117 or higher. 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 and CH221R General Chemistry

3 class, 2 lab and 1 recitation hrs/wk, 5 cr.

Introduces chemical concepts and experimental techniques to students majoring in scientific, engineering and medical fields. Covers the history of chemical developments, measurements and their uncertainty, components of matter, chemical periodicity, chemical calculations using the mole concept, chemical reactions, kinetic-molecular theory of gases, energy flow, experiments on chemical systems and atomic structure. **Prerequisite:** MTH111 or consent of instructor. **Corequisite:** CH221 with CH221R. Class fee \$12. **F**

CH222 and CH222R General Chemistry

3 class, 2 lab and 1 recitation 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 and CH221R. **Corequisite:** CH222 with CH222R. Class fee \$12. **W**

CH223 and CH223R General Chemistry

3 class, 2 lab and 1 recitation 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 and CH222R. **Corequisite:** CH223 with CH223R. Class fee \$12. **Sp**

CH241 Organic Chemistry

4 class hrs/wk, 4 cr.

Introduces the principles of organic chemistry for students majoring in the 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, alkenes and alkynes. **Prerequisite:** CH123 and CH123R or CH223 and CH223R. **F**

CH241B Organic Chemistry Lab

3 lab hrs/wk, 1 cr.

Offers laboratory course to accompany CH241 Organic Chemistry for students majoring in the physical or life sciences. Emphasizes microscale laboratory experiments related to basic techniques of recrystallization, extraction, melting and boiling point determination, IR spectroscopy, extraction, chromatography and synthesis. Students requiring lecture and lab credit for transfer must take CH241 and CH241B. **Prerequisite:** CH123 and CH123R or CH223 and CH223R. Class fee \$12. **F**

CH242 Organic Chemistry

4 class hrs/wk, 4 cr.

Introduces the principles of organic chemistry for students majoring in the physical or life sciences. Emphasizes structure, nomenclature, physical properties and chemical reactivities of organic molecules. Stresses alcohols, ethers, free-radical reactions, aromatic compounds, spectroscopy, oxidation-reduction, aldehydes and ketones. **Prerequisite:** CH241. **W**

CH242B Organic Chemistry Lab

3 lab hrs/wk, 1 cr.

Offers a laboratory course to accompany CH242 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory experiments related to reaction mechanisms, kinetics, spectroscopy, gas chromatography and synthetic techniques. Students requiring lecture and lab credit for transfer must take CH242 and CH242B. **Prerequisite:** CH241B. Class fee \$12. **W**

CH243 Organic Chemistry

4 class hrs/wk, 4 cr.

Introduces the principles of organic chemistry for students majoring in the physical or life sciences. Emphasizes structure, nomenclature, physical properties and chemical reactivities of organic molecules. Stresses carboxylic acids and their derivatives, amines, condensation reactions, carboxylics, lipids, amino acids, proteins and nucleic acids. **Prerequisite:** CH242 or consent of instructor. **Sp**

CH243B Organic Chemistry Lab

3 lab hrs/wk, 1 cr.

Offers a laboratory course to accompany CH243 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory synthesis, spectroscopy, covering biological activity of organic compounds, and qualitative analysis of unknowns. Students requiring lecture and lab credit for transfer must take CH243 and CH243B. **Prerequisite:** CH242B or consent of instructor. Class fee \$12. **Sp**

CH272 Fundamentals of Wine Chemistry and Microbiology

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

Covers wine chemistry and microbiology including wine acidity (with special emphasis on ionization curves, diprotic acids and

buffers), sulfur dioxide in wine, spoilage and its treatment. Includes wine microorganisms, microbiological spoilage, stuck fermentations, sanitation, stabilization and quality assurance. **Prerequisite:** CH172. Class fee \$12. **W**

CIS

COMPUTER INFORMATION SCIENCE

CIS120 Computer Information Science 1

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 \$16. **F, W, Sp**

CIS121 Computer Information Science 2

4 class hrs/wk, 4 cr.

Second in a three-course sequence. Introduction to the fundamental logic in designing specific algorithms for processing information typified by management information systems. Concepts are reinforced in a laboratory environment. **Prerequisite:** CIS120 or concurrent enrollment, or consent of instructor. Class fee \$16. **F, W, Sp**

CIS122 Computer Information Science 3

4 class hrs/wk, 4 cr.

Serves as the third in a three-part sequence. Introduces software and languages that are used in today's network environment. Covers features of object-oriented design and programming concepts and contrasts them with structured methodology and related language. **Prerequisite:** CIS121 or consent of instructor. Class fee \$16. **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. **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. **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. **Offered as needed.**

CJ123 Survival Spanish for Law Enforcement

3 class hrs/wk, 3 cr.

A practical, learner-friendly Spanish language course for law enforcement students and personnel. Course emphasizes officer safety, increased community safety, enhanced job performance, projecting a positive image in the Hispanic community, and protection from legal liability. No prior knowledge of Spanish is necessary. **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. **Offered as needed.**

CJ150 Unarmed Private Security Operations and Procedures

3 class hrs/wk, 3 cr.

Provides the training required by the Department of Public Safety Standards and Training D.P.S.S.T. 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 D.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, and police image. Presents information on domestic violence, incest and police stress. **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. **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 including race, ethnic, gender and cultural diversity. Stresses creative thinking and problem solving through team discus-

sion and classroom presentation. **Offered as needed.**

CJ210 Introduction to Criminal Investigations 1: 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. **Offered as needed.**

CJ211 Introduction to Criminal Investigations 2: 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. **Offered as needed.**

CJ212 Police Report Writing

3 class hrs/wk, 3 cr.

Provides students with the necessary information to become knowledgeable and successful writers of narrative police reports, documenting both original crimes and follow-up investigations. Utilizes a specialized format to meet different types of investigative activities, e.g., crime scene processing, interviews with suspects and witnesses, undercover operations and the execution of search warrants. Re-emphasizes basic writing skills and spelling accuracy related to criminal justice terminology. **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 procedure formulation. **Offered as needed.**

CJ220 Introduction to Substantive Law and Oregon Criminal Code

3 class hrs/wk, 3 cr.

Origin and structure of common-law crimes and procedures, and statutory crimes. Definitions and distinctions between criminal and civil law, criminal court procedures, criminal law case reading, federal and state law, and Oregon criminal code sections. **Offered as needed.**

CJ226 Introduction to Constitutional Law

3 class hrs/wk, 3 cr.

An intensive study and analysis of the United States Constitution and court decisions which determine the admissibility of evidence in criminal cases and which affect the role of law enforcement in police procedures. Includes criminal procedures processes. **Offered as needed.**

CJ230 Introduction to Juvenile Corrections

3 class hrs/wk, 3 cr.

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

CJ253 Introduction to Penology

3 class hrs/wk, 3 cr.

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. **Offered as needed.**

CJ280 Cooperative Work Experience

See Cooperative Work Experience.

CLA

CHICANO/LATINO STUDIES

CLA201 Introduction to Chicano/Latino Studies 1: Historical Overview

4 class hrs/wk, 4 cr.

Introduces Latino history in the United States beginning with Spanish colonization and continuing with the Mexican-American War. Covers the Mexicans' role in American labor, economics, Bracero Program and the Chicano Movement. **F**

CLA202 Introduction to Chicano/Latino Studies 2: Political and Economic Overview

4 class hrs/wk, 4 cr.

Introduces the social, educational, political and economic status of Latinos in the context of United States institutions and structures. Examines demographic profiles and current issues within a Chicano/Latino perspective. **W**

CLA203 Introduction to Chicano/Latino Studies 3: Cultural Overview

4 class hrs/wk, 4 cr.

Provides an overview of the cultural heritage of Chicanos and Latinos in the United States. Draws from anthropology, folklore, literature and linguistics. Examines folk and popular culture as well as the integration of various traditions. **Offered as needed.**

COM

COMMUNICATION SKILLS

See also Human Development, Reading, Study Skills Program, Writing.

COM051 Communication Skills 1

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**

COM051A,B,C Communication Skills 1A, 1B, 1C

1 class hr/wk each, 1 cr. each

Designed to improve writing skills. Students work on writing projects intended to replicate projects in the occupational and technical fields in order to keep practical considerations in the foreground. **Prerequisite:** COM051B: COM051A; COM051C: COM051B. Class fee \$2 each. COM051A: **F**, COM051B: **W**, COM051C: **Sp**

COM052 Communication Skills 2

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. Class fee \$2. **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 learn-

ing; writing competency statements; and preparing a resume for credit evaluation. Class fee \$5. **F, W, Sp**

CS

COMPUTER SCIENCE

CS060 Techniques of User Training

2 class hrs/wk, 2 cr.

Introduces teaching methods, materials, and instructional design as related to training computer users. **Prerequisite:** Second-year standing in the Computer Programming program. **Sp**

CS061 Computer Lab Assistant

3 lab hrs/wk, 1 cr.

Hands-on experience in working with students in a microcomputer lab. **Prerequisite:** Second-year standing in Computer Programming program. Class fee \$8. **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 \$4. **Offered as needed.**

CS101 Introduction to Microcomputer Applications

3 class hrs/wk, 3 cr.

Introduces basic microcomputer hardware/software system. Covers the concept of system software and application software including word processing, spreadsheet, database and introduction to Internet. **Prerequisite:** Touch keyboarding skill 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.

Designed to improve students' ability to learn to use new computer systems and software packages. Instructional methods will be designed to foster critical thinking, teamwork and use of resources such as software documentation and help screens. **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**

CS125A Micro Database Software-Access

3 class hrs/wk, 3 cr.

A microcomputer database software course using Microsoft Access. Topics include: navigating through Windows and Access menus; PC relational database concepts; creation and updating of a relational database; simple queries, reports and forms; complex queries, reports and forms. **Prerequisite:** CS101 or consent of instructor. Class fee \$12. **F, W, Sp**

CS125E Excel-Workbooks

4 class hrs/wk, 4 cr.

A course in the use of electronic workbooks in a multi-workbook environment using Excel. **Prerequisite:** CS101 or equivalent. Class fee \$12. **F, W, Sp**

CS133C COBOL 1

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.**

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:**

CS125A, or consent of instructor. Class fee \$12. **Sp**

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**

CS140U Unix/Linux

3 class hr/wk, 3 cr.

Covers the Unix operating system using Linux. 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 \$20. **Sp**

CS145 Microcomputer Hardware

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 and the requirements for A+ certification. **Prerequisite:** CS240 or CS140B and ELT151 or NET123. Class fee \$20. **W**

CS160 Introduction to Computer Science

3 class hrs/wk, 3 cr.

Presents the history of, as well as the current and future trends in computer science, and 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 1

4 class hrs/wk, 4 cr.

The first of a three-term sequence in computer science concepts for computer science majors and other students desiring a foundation in computer programming. **Prerequisite:** Grade of C or higher in MTH111 or equivalent, and concurrent enrollment in CS160. Class fee \$12. **F**

CS162 Computer Science 2

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 lan-

guage programming and the Assembler process, RISC machines and parallel architectures. **Prerequisite:** MTH111 and 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 \$12. **F, W, Sp, Su**

CS179 Introduction to Windows NT

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, or NET123 and previous experience with Windows. Class fee \$12. **Sp**

CS233C COBOL 2

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. **Offered as needed.**

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**

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

CS240U Advanced Unix/Linux

4 class hrs/wk, 4 cr.

Offers an advanced course covering the concepts used for installing, administering and maintaining a Unix/Linux system. Students will install and manage a version of Linux in their laboratory experience. **Prerequisite:** CS140U or equivalent. Class fee \$16. Sp

CS244 Systems Analysis 1

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. Sp

CS246 Systems Analysis 2

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 3: Data Structures

4 class hrs/wk, 4 cr.

Continuation of CS162. A further analysis of topics in CS162 with additional concepts in recursion, binary trees and object-oriented programming. **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.

Designed to be broader than teaching specific database products or fourth generation languages. 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. Discusses SQL. **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 stan-

dards implemented in Local Area Networks (LAN). **Prerequisite:** Second-year standing in Computer Programming program. Class fee \$12. W

CS279 Network Management

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

A study of Local Area Network Systems (LANs) and Wide Area Network Systems (WANs) using Novell's operating system. Includes the design, construction, operation, maintenance and management of a network, including the installation of software packages, printers and adding new users. **Prerequisite:** CS145 and CS278 or NET151. Class fee \$30. Sp

CS280 Cooperative Work Experience

See Cooperative Work Experience.

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.

CS286 Web Server Configuration and Management

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

Explains the process to design and build an Intranet system. Includes establishing a multi-server environment that requires web services, Common Gateway Interfaces, E-mail services, database services and other web based applications. **Prerequisite:** CS140U and CS288. Class fee \$30. W

CS288 Windows NT Server

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

Provides hands-on experience installing, configuring, customizing, administering and maintaining a Windows NT server and network resources. **Prerequisite:** CS140B or NET123 and CS179. Class fee \$30. F

CS289 Advanced Network Application Support

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

Focuses on software and hardware troubleshooting and support required in a Local Area Network environment. **Prerequisite:** Concurrent enrollment in CS279, or consent of instructor. Class fee \$30. Sp

CVL

CIVIL ENGINEERING TECHNOLOGY

CVL143 Introduction to Civil Survey

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

Introduces a broad variety of office- and field-based activities associated with the work of a professional land surveyor. Emphasizes professional-technical development. **Prerequisite:** MTH060 or concurrent enrollment. F

CVL161A Plane Surveying I-Lecture

2 class hrs/wk, 2 cr.

Covers plane survey theory and practice. Includes measurement techniques associated with taping, leveling, topographic and boundary surveys. Emphasizes professional-technical development. **Prerequisite:** MTH081 or MTH070 and concurrent enrollment in CVL161B, or consent of instructor. W

CVL161B Plane Surveying 1-Lab

6 lab hrs/wk, 2 cr.

Covers field practices and application of equipment utilized in professional land surveying. Emphasizes tactile learning with strong team orientation. **Prerequisite:** CVL161A, concurrent enrollment in CVL161A, or consent of instructor. Class fee \$10. W

CVL162A Plane Surveying 2-Lecture

2 class hrs/wk, 2 cr.

Continuation of Plane Surveying. Studies distance and direction measurement, employing theodolites, steel tapes, traversing and associated office computations, areas, stadia, circular curves and outlines of public land surveys. Introduces electronic distance-measuring devices. **Prerequisite:** CVL161A, concurrent enrollment in MTH082 and CVL162B. Sp

CVL162B Plane Surveying 2-Lab

6 lab hrs/wk, 2 cr.

Incorporates field survey with a focus on data gathering for computerized mapping. Introduces American Land Title Association specification standards. **Prerequisite:** CVL162A, concurrent enrollment in CVL162A, or consent of instructor. Class fee \$10. Sp

CVL230 Applied Statics

3 class hrs/wk, 3 cr.

Analyzes the forces induced in structures and machines by various types of loading. **Prerequisite:** MTH082 or consent of instructor. F

CVL231 Applied Strength of Materials

4 class hrs/wk, 4 cr.

Analyzes internal stresses, deflections and deformations of structures when subjected to external forces. Covers how to design structures based on structural analysis. **Prerequisite:** CVL230 or consent of instructor. W

CVL260 Survey Project Planning

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

Covers advanced research of deed and survey data. Emphasizes preparation of equipment and labor requirement plans needed for field survey project planning. **Prerequisite:** CVL162. W

CVL261 Environmental and Sanitary Engineering

2 class and 6 lab hrs/wk, 4 cr.

Introduces elementary concepts of hydraulics, hydrology, storm collection and detention, sanitary sewer and domestic water supply designs. Applies concepts to typical design documentation. **Prerequisite:** MTH082 and DRF245. W

CVL263A Construction and Route Surveying-Lecture

2 class hrs/wk, 2 cr.

Covers design and construction of typical route survey and site construction projects. Applies state plane coordinate systems, astronomical observation, and in-process field computations. **Prerequisite:** CVL161B, MTH082, concurrent enrollment in CVL263B, or consent of instructor. **Sp**

CVL263B Construction and Route Surveying-Lab

6 lab hrs/wk, 2 cr.

Reviews field practices and applies survey techniques to construction of public and private roads and structures. Covers advanced responsibilities of a team leader with additional equipment care and use requirements. Uses advanced mapping techniques from data gathered in the field. **Prerequisite:** Concurrent enrollment in CVL263A or consent of instructor. Class fee \$10. **Sp**

CWE

COOPERATIVE WORK EXPERIENCE

Cooperative Work Experience 280A-L

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. See program advisors. **Offered as needed.**

DANCE

See Physical Education.

DEN

DENTAL ASSISTING

DEN050 Dental Sciences

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 Head and Neck Anatomy

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

Introduces the student to head and neck anatomy. Directs particular attention toward the oral cavity and its associated structures and anatomical terminology. Covers the skeletal system, head and neck anatomy, musculature, nervous and circulatory systems, and anatomical and functional structures of the oral cavity. **Prerequisite:** Enrollment in Dental Assisting program or consent of instructor. Class fee \$5. **F**

DEN053 Dental Materials 1

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

Introduces the student to the various materials and laboratory equipment used in the dental office. Includes the chemical and physical properties, manipulation, and uses of restorative materials, medications, impression materials and dental cements. Includes an overview of restorative and crown preparation procedures. **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 factor, nutritional influences, prevention products, and their uses, patient motivation, and public health programs. **Prerequisite:** Enrollment in the Dental Assisting program or consent of instructor. **F**

DEN060 Dental Specialities

3 class hrs/wk, 3 cr.

A study of the various fields of specialized dentistry recognized by the American Dental Association. Introduces applied psychology through role playing with laboratory and clinical application in the specialties. **Prerequisite:** Second-term standing in the Dental Assisting program. **W**

DEN061 Dental Assisting Practicum 1

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 the Dental Assisting program and proof of current health care provider CPR card. Class fee \$10. **W**

DEN062 Intermediate Clinical Skills

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

A presentation of the theory and practice of intermediate clinical responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration and practical application of rubber dam placement and removal; alginate impressions; bite registration; oral hygiene instruction; and dietary analysis. **Prerequisite:** Second-term standing in the Dental Assisting program. Class fee \$15. **W**

DEN063 Dental Materials 2

2 class and 3 lab hrs/wk, 3 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 1

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. One patient full-mouth radiographic series is required. 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. Class fee \$5. **Prerequisite:** CS101. **F, W, Sp**

DEN071 Dental Assisting Practicum 2

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

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

Theory and practice of legal Expanded Functions for dental assistants. Includes discussion, demonstration, and practical application of coronal polish; topical fluoride; amalgam polish; cement removal; and pit and fissure sealant placement. **Prerequisite:** Third-term standing in the Dental Assisting program. Class fee \$15. **Sp**

DEN074 Dental Radiology 2

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

A continuation of DEN064. Course allows students to take additional adult and pedodontic manikin films using low dose technique. Students then develop skills in patient management and perfect radiographic techniques by completing two 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 the panoramic x-ray unit, film duplicators and 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. **Offered as needed.**

DRF054 Drafting 1

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, Su**

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.

Focuses on reading drawings of residential and commercial construction. Covers symbol designation used in construction. Stresses construction methods, terminology and reference sources. **W**

DRF103 Advanced Print Reading

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

Focuses on advanced reading and interpreting 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 Hewlett Packard Computers

2 class hrs/wk, 2 cr.

Covers computation and presentation of technical data using the HP engineering calculator to solve typical problems in mechanical, civil and tool design, and related areas. **Prerequisite:** Concurrent registration 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**

DRF114 Drafting Orientation

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

Introduces drafting as a career option. Offers field trips to offices and job sites, guest lecturers, Internet and periodical research on cutting-edge technology. Includes creating and presenting multimedia reports. **F**

DRF121 AutoCAD R14 to 2000

3 lab hrs/wk, 1 cr.

Introduces new features and commands found in AutoCAD 2000 for current users of AutoCAD Release 14. Implements new techniques to complete a project. **Prerequisite:** Experience with AutoCAD R14. Class fee \$5. **Offered as needed.**

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.

Utilizes 3-D capabilities to generate three-dimensional models of mechanical parts. Covers surfaces, solids and rendering and projecting multiple 2-D views from models. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. **F, W, Sp**

DRF140 Advanced Technical Graphics

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

Covers fundamentals of graphics communication. Includes multi-view drawings, dimensioning, section views, auxiliary views and descriptive geometry concepts. **Prerequisite:** DRF072 or consent of instructor. Class fee \$5. **Sp**

DRF150 Architectural Drafting I

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. **F, W, Sp**

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 1

2 class and 6 lab hrs/wk, 4 cr.

Covers entry-level integrated circuit design in CMOS (Complimentary Metal Oxide Silicone) Technology. Emphasizes creating the layout for IC circuits based on logic and schematic diagrams. **Prerequisite:** DRF101 or consent of instructor; MT110. Class fee \$5. F, W

DRF202 CMOS 2

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

Covers advanced concepts of Integrated Circuit Mask design using specialized CAD tools. Focuses on producing an integrated circuit layout project as a member of a project team. **Prerequisite:** DRF201 or consent of instructor. Class fee \$5. W, Sp

DRF210 Parametric Design

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

Uses Autodesk Mechanical Desktop parametric design software to create models of parts. Produces 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, W

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, climactic and social attributes of various regions of the world. Class fee \$5. F, W

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:** DRF220 or consent of instructor. Class fee \$5. Sp

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 Advanced MicroStation

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

Uses Microstation software to produce building construction drawings. Emphasizes creating master drawings containing all building data. Includes manipulation of file contents to produce multiple drawings. Covers researching codes to develop a site plan. **Prerequisite:** DRF230, DRF241. Class fee \$5. Sp

DRF240 Architectural Drafting 2

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

Covers advanced architectural drafting techniques and methods. Includes complete plan submittal process, shearwall designs, engineered foundation wall, advanced building process, advanced construction details, complex roof systems, current building products, advanced CABO and UBC. **Prerequisite:** DRF150 or consent of instructor. Class fee \$5. F, W

DRF241 Structural Drafting

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

Covers production of working drawings using AutoCAD software. Covers drafting practices applied with the building materials of steel, CMU and concrete. Uses the steel manual 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. Class fee \$5. F

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 and Design

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

Introduces AutoCAD Land Development Desktop. Develops residential subdivision and typical utility design documentation. **Prerequisite:** DRF136 or consent of instructor. Class fee \$5. F

DRF246 Project Development

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

Covers elements of field and office survey, residential design and layout with associated utility work including an engineer's cost estimate. Incorporates preparation of all design documentation in review-ready condition. **Prerequisite:** CVL261. Sp

DRF251 Power Transmission Design

3 class hrs/wk, 3 cr.

Focuses on the design of power transmission systems. Incorporates hydraulics, pneumatics, electric motors, chains, belts, bearings and speed reducers. Analyzes system requirements, sizing of machine elements and selection of components from industrial catalogs. **Prerequisite:** MTH082 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:** MTH082 and concurrent enrollment in PH081. 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:** DRF210 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 Cooperative Work Experience.

EC**ECONOMICS****EC200 Introduction to Economics**

3 class hrs/wk, 3 cr.

A study of the concepts involving scarcity and choice, supply and demand, business cycles, unemployment, inflation, taxes, work and welfare. **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, and international development. **Prerequisite:** EC201 and EC202. Sp

ECE

EARLY CHILDHOOD EDUCATION

See also Education, Human Development and Family Studies.

ECE068A, B, C Observing Preschool Experiences

1 class hr/wk, 1 cr. each

Students observe various aspects of a preschool. In ECE068A, students observe children's development; ECE068B focuses on observing guidance; ECE068C emphasizes the classroom environment and curriculum. Each course may be repeated for a maximum of two credits. **Prerequisite:** Consent of instructor. ECE068A: **F**; ECE068B: **W**; ECE068C: **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 1 (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 2 (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.

Emphasizes music as a pleasurable medium of expression. Topics include: the value of music in the preschool setting; the role of the teacher; environments that support music and movement experiences; basic music theory and terminology; and the use of spontaneous and planned activities for young children. 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 setting and assisting with supervision of the various daily activities. **Prerequisite:** HDF249 or consent of instructor. 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 or consent of instructor. Class fee \$5. **F, W, Sp**

ECE163 Preschool Practicum

2 class and 6 lab hrs/wk, 4 cr.

Experience working with 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 HDF225, HDF249, ECE151 and ECE162. Class fee \$10. **F, W, Sp**

ECE251 Environments for Young Children

3 class hrs/wk, 3 cr.

Covers planning, implementing and evaluating environments for preschool children. Includes how to facilitate play in the environment, room arrangements, outdoor areas, equipment selection and sources, children's furniture, and scrounging for materials usable

in the preschool environment. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. **F**

ECE261 Student Teaching 1, 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 2, 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 Cooperative Work Experience.

ECE295 Administration of Early Childhood Programs

3 class hrs/wk, 3 cr.

Covers areas of administrative responsibility: finances and budget and sources of income; selection and purpose of materials and equipment; standards (local, state, federal) and regulatory agencies in regard to health, nutrition and safety. Computer simulations and software will be used to experience administrative functions. **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**

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)

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

Introduces the field of education to students exploring education as a career. **Sp, offered as needed.**

ED209C Professional Technical Practicum 1

1 class and 15 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 2

2 class and 21 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.**

ED210 Professional Portfolio Development

3 class hrs/wk, 3 cr.

Focuses on professional portfolio development to document educational experience and expertise. Provides students with an opportunity to develop a professional portfolio to document their experience and effectiveness as an educator. Includes portfolio demonstrations in seeking a licensed position. **Prerequisite:** 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 philo-

sophical 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.**

ED270 Teaching at the Community College

3 class hrs/wk, 3 cr.

Assists new, continuing, or adjunct instructors in developing and refining the skills necessary to apply successful instructional strategies in a community college classroom. Addresses shifting paradigms in teaching/learning related to diversity, brain-based teaching and student centered instruction. **F, W, Sp, Su**

ED270A Teaching at the Community College: Planning for Instruction

1 class hr/wk, 1 cr.

Assists new, continuing, or adjunct instructors in developing and refining the skills necessary to plan for and assess student-centered instruction. **F, W, Sp, Su**

ED270B Teaching at the Community College: What Every Instructor Should Know About Adult Learners

1 class hr/wk, 1 cr.

Assists new, continuing, or adjunct instructors in understanding the nature of adult learners by becoming informed about community colleges and the students who attend them, characteristics of effective instructors, student learning styles, and anti-bias classroom practices. **F, W, Sp, Su**

ED270C Teaching at the Community College: Brain-Based Teaching and Learning

1 class hr/wk, 1 cr.

Assists new, continuing, or adjunct instructors in learning about the brain's natural operational principles and how they can be applied to the teaching and learning process in a community college setting. **F, W, Sp, Su**

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, or consent of instructor. **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.**

EGR

ENGINEERING

See also General Engineering.

EGR201 Electrical Fundamentals 1

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

Studies basic electrical circuit theory, including voltage and current relationships, and cir-

cuit parameters of resistance, inductance and capacitance. Covers basic DC, AC and natural responses of circuits. **Prerequisite:** MTH252. Class fee \$10. F

EGR202 Electrical Fundamentals 2

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 EGR201. Class fee \$10. W

EGR203 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-part circuits, Boolean algebra, and basic logic gates. **Prerequisite:** MTH252, EGR201 and concurrent enrollment in MTH256. Class fee \$10. **Offered as needed.**

EGR211 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

EGR212 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:** EGR211, MTH252 and PH211. W

EGR213 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:** EGR211 and MTH252. Sp

EGR248 Graphics and 3-D Modeling

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

Covers graphic communication, multiview and pictorial representation, conceptual design, spatial analysis, and engineering design representation through use of advanced level computer tools. **Prerequisite:** DRF072 or consent of instructor. Class fee \$5. W

ELT

ELECTRONICS TECHNOLOGIES

See also Microelectronics/Industrial and Network Technology.

ELT056 Concepts of Electronics

Includes DC and AC theories, troubleshooting concepts, use of test equipment and safety. **Prerequisite:** MTH070 or equivalent. **Offered as needed.**

ELT100 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, high school Algebra II or instructor consent. **F, W**

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**

ELT121 Programming Concepts 1

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

An introduction to computer programming and computer operating systems using C+ language. **Prerequisite:** MTH081 or consent of instructor. Class fee \$8. **F**

ELT122 Programming Concepts 2

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

Offers the second course in the Programming Concepts sequence. Surveys the various professional software applications. Includes learning and demonstrating one major software application. **Prerequisite:** ELT121 or any high-level programming class. Class fee \$8. **SP**

ELT131 Electronic Concepts 1

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

Covers electrical and atomic theory applicable to the field of electronics. Introduces DC and AC theory, test equipment usage, schematic reading and construction and testing of resistive, capacitive and inductive circuits. **Prerequisite:** MTH070, high school algebra, or consent of instructor. Class fee \$16. **F, W**

ELT132 Electronic Concepts 2

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

Covers further electrical AC and DC theory applicable to resistors, capacitors and inductors. 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 3

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.

Introduces semiconductor physics and covers the fundamental principles of diodes and bipolar transistors and Field Effect transistors.

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 diode clipper, clamper, rectifier and multiplier circuits and transistor voltage regulators and current limiting circuits. Introduces the operating principles of solid-state devices such as uni-junction transistors, special purpose diodes, thyristors and optoelectronic devices. **Prerequisite:** ELT141 or consent of instructor. Concurrent enrollment in ELT133. Class fee \$12. **Sp, Su**

ELT143 Pulse Circuit Fundamentals

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

Introduces the theory and operation of discrete pulse waveform analysis, generation techniques and circuits. **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. **Corequisite:** 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.

Covers communications theory and systems. Develops practical skills and reinforces theoretical concepts through laboratory experiments and field trips. **Prerequisite:** Concurrent enrollment in ELT181. Class fee \$12. **W**

ELT244 Electronic Circuit Analysis

Covers basic electronic devices and circuit designs. Emphasizes verifying and analyzing the designs, using the "R" parameters. Includes Small-Signal Amplifiers, Bipolar Circuits, FET Circuits, Oscillators and Power Amplifiers. Some circuits are analyzed using simulation

software, while other circuits are constructed and analyzed, using laboratory test equipment.

Prerequisite: ELT141 and ELT133 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 Microprocessor Systems

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

Covers hardware and software concepts used with microcomputers. Stresses theory and laboratory application of interfacing criteria, hardware and software troubleshooting techniques, writing machine language programs and using written programs for testing hardware and system interface. **Prerequisite:** ELT244 and ELT252. Class fee \$24. **W**

ELT254 Computer Hardware

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

Covers the hardware concepts necessary to install and maintain computers and computer peripherals. Relates the interface between software and hardware. Includes the requirements for A+ certification. **Prerequisite:** CS140B, or NET123 plus ELT151. **W**

ELT255 Advanced Data Communication

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

Covers theory of data communications and concepts of information exchange between computers, via data networks. Emphasizes configuration, maintenance and management of data communication network systems. Constructs and tests multiple network hardware configurations using the Novell NetWare Operating System. **Prerequisite:** ELT253, 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:** ELT253. 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 Cooperative Work Experience.

ELT283 Logical Troubleshooting

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

Introduces and applies industry recognized standards, procedures and practices for logical-troubleshooting and analysis of electronic systems. Includes lab activities such as system-level, board-level and component-level troubleshooting and diagnosis, using live systems and real world circuit faults. **Prerequisite:** ELT244 and ELT262, or equivalent with consent of instructor. Class fee \$24. **Sp**

ELT291 Advanced Industrial Electronics

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

Covers principles and concepts of electronic and electrical control and sensing devices used in industry. Introduces electric motors, three-phase electricity, control devices and circuits, process control systems and servos, measurement transducers and programmable controllers (PLCs). **Prerequisite:** ELT141, ELT142, ELT262, or consent of instructor. Class fee \$12. **Sp**

EMT

EMERGENCY MEDICAL TECHNOLOGY

EMT051 Emergency Medical Technician Basic, Part 1

4 class and 3 lab hrs/wk, 5 cr.

Provides instruction at the level of Emergency Medical Technician Basic who is a vital link in the chain of the health care system. Includes all skills necessary for the individual to provide emergency medical care as outlined by scope of practice established by the Oregon Board of Medical Examiners. Serves as the first of the EMT-Basic course, which is part of a series of courses making up a national and state Emergency Medical Services training program. Class fee \$7. **F, offered as needed.**

EMT052 Emergency Medical Technician Basic, Part 2

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

Continues instruction at the level of Emergency Medical Technician Basic who is a vital link in the chain of the health care system. Includes all skills necessary for the individual to provide emergency medical care as outlined by scope of practice established by the Oregon Board of Medical Examiners. Serves as the second of the EMT-Basic course, which is part of a series of courses making up a national and state EMS training program. **Prerequisite:** Successful completion of EMT051 and concurrent enrollment in EMT280A. Class fee \$5. **W, offered as needed.**

EMT065 Emergency Medical Technician Intermediate, Part 1

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

Covers intermediate emergency medical procedures. Includes the roles and responsibilities of the technician, patient assessment and procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous and ECG monitoring, defibrillation, pharmacology and field protocols. **Prerequisite:** Current

Oregon EMT Basic certification and 80 percent 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.

Continues EMT065 continuing intermediate medical procedures for technicians. Gives students successfully completing Part 2 a recommendation to the Oregon Health Division for the certification process. **Prerequisite:** Successful completion of EMT065. Class fee \$25. **Offered as needed.**

EMT069 EMT Rescue

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

Covers elementary procedures of rescue practices, systems, components, support and control of rescue operations including ladder procedures and basic rescue tools. Introduces 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. **Offered as needed.**

EMT070 Emergency Communication and Patient Transportation

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

Covers ambulance operation, laws, maintenance and safety; emergency response driving and route planning; communication systems, radio types, HEAR system, code and correct techniques. Class fee \$5. **Sp, offered as needed.**

EMT075 Introduction to Emergency Medical Service

3 class hrs/wk, 3 cr.

Covers roles and responsibilities of the EMT and paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness and stress management. **Offered as needed.**

EMT096 EMT Paramedic, Part 1

11 class and 9 lab hrs/wk, 14 cr.

Offers first part of a two-term course. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; respiratory, cardiovascular, neurologic, endocrine systems; and acute abdomen emergencies. Applies didactic 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 \$266. **F, Sp**

EMT097 EMT Paramedic, Part 2

6 class and 24 lab hrs/wk, 14 cr.

Offers second part of a two-term course. Focuses on anaphylactic, toxicologic, environmental, geriatric, pediatric, obstetric, gynecologic, neonatal and behavioral emergencies; infectious diseases; and trauma care. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. **Prerequisite:** EMT096. Class fee \$220. **W, Su**

EMT280 Cooperative Work Experience

See Cooperative Work Experience.

ENG

ENGLISH

ENG104 Introduction to Fiction

3 class hrs/wk, 3 cr.

Features critical analysis and appreciation of fiction through the reading of narratives originally written in English as well as works in translation. Employs chronological, genre, stylistic, or thematic approaches to content to introduce the short story, the novel or novella and basic literary terminology and concepts. **F, W, Sp, Su**

ENG105 Introduction to Dramatic Literature

3 class hrs/wk, 3 cr.

Features critical analysis and appreciation of drama from the classical Greek to contemporary periods written by an international range of playwrights. Introduces concepts and types of dramatic literature, including comedy and tragedy as well as the elements and conventions of drama as both a literary and performing art. **F, W, Sp, Su**

ENG106 Introduction to Poetry

3 class hrs/wk, 3 cr.

Features critical analysis and appreciation of poetry originally written in English as well as works in translation by major poets from various cultural backgrounds. Introduces poetic terminology, concepts and principles, and explores a variety of the art form's structures and types. **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 Western and non-Western world of the nineteenth and twentieth centuries. **Sp**

ENG201 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

Surveys selected Shakespearean tragedies, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to explore these plays and to provide background on the nature of tragedy. **F**

ENG202 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

Surveys selected Shakespearean comedies, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to provide background on the nature of comedy. **W**

ENG203 Introduction to Shakespeare

3 class hrs/wk, 3 cr.

Surveys selected Shakespearean history plays, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays 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.

Surveys 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. Uses a chronological or thematic approach. **F**

ENG257 Native American Literature

3 class hrs/wk, 3 cr.

Introduces formal written and oral literatures by Native Americans through a wide variety of texts from different tribes, regions, and individual authors. Examines world views and major thematic currents of Native American literatures; distinctive characteristics of Native American writing; characteristics it shares with Euro-American writing; and characteristics of oral literature. **Sp**

ENG258 Latin American Literature

3 class hrs/wk, 3 cr.

Features reading and analysis of works by Latin American writers. Covers literary styles, historical background, and the unique voices and perspectives of authors from this region. Uses a chronological, regional, or thematic approach. **F**

ENG260 Introduction to Women Writers

3 class hrs/wk, 3 cr.

Focuses on the achievements and perspectives of women writers through critical analysis of their literary works and literary strategies. Uses a chronological, stylistic, or thematic approach. **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. Uses a chronological, thematic, or stylistic approach. **Sp**

ENG262 The American Western

3 class hrs/wk, 3 cr.

Features the critical reading and analysis of western fiction to determine the conventions and the variety of the genre. Focuses primarily on the novel, but may include short stories, essays, and poetry. Uses either a chronological, thematic, or stylistic approach. **W**

ENG263 Introduction to Detective Fiction

3 class hrs/wk, 3 cr.

Focuses on the genre of detective fiction, its history, and conventions through reading and critical analysis of representative works and authors. Uses a chronological, thematic, or stylistic approach. **F**

ENG269 Environmental Literature

3 class hrs/wk, 3 cr.

Emphasizes environmental literature, which addresses the relationship between human beings and the natural world, as well as the place of humans in the natural world. Uses chronological, regional, or thematic approaches. Analyzes and interprets various works. Includes field trips, recording "field notes," and writing environmental literature. **Offered as needed.**

ENGLISH AS A NON-NATIVE LANGUAGE

ENL053 Listening and Speaking A

3 class hrs/wk, 3 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 ENL055. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-49 and oral proficiency score of 30+. SPL level 5. **F, Sp, Su**

ENL054 Listening and Speaking B

3 class hrs/wk, 3 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 ENL055. Designed for non-native speakers of English preparing to take college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-49 and oral proficiency score of 30+. SPL level 5. **W**

ENL055 Listening and Speaking C

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. 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. Designed for non-native speakers of English preparing for college credit classes. **Prerequisite:** Completion of ESL level 3 or CELSA score of 40-49 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 40-49, and oral proficiency of 30+. SPL level 5. Class fee \$2. **F**

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 40-49, oral proficiency score of 30+ and a writing sample. SPL level 5. **F, Sp, Su**

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 40-49, oral proficiency score of 30+ and writing samples. SPL level 5. **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 40-49, oral proficiency score of 30+ and writing sample. SPL level 5. **Sp**

ENL065 Grammatical Sentences

4 class hrs/wk, 4 cr.

Focuses on writing accurate sentences in English. Covers parts of speech, kinds of sentences, common sentence errors, and spelling. **Prerequisite:** Course #XESL0792Y ESL Level 3 Reading and Writing, or CELSA score of 35 and writing assessment. Class fee \$2. **F, W, Sp**

ENL066 Writing Paragraphs

5 class hrs/wk, 5 cr.

Focuses on writing standard paragraphs in English. Covers paragraph structure and organization. Incorporates use of paragraphs to respond to test questions. **Prerequisite:** Successful completion of ENL065 or CELSA score of 40 and writing assessment. Class fee \$2. **W, Sp**

ENL067 Introduction to Essay Writing

5 class hrs/wk, 5 cr.

Focuses on writing simple essays with complete paragraphs and writing responses to academic reading selections. **Prerequisite:** Completion of ENL066 or CELSA score of 45 and writing assessment. Class fee \$2. **F, W, Sp, Su**

ENL102 English Pronunciation Techniques

4 class hrs/wk, 4 cr.

Focuses on production 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+. **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. Class fee \$2. **F, W, Sp, Su**

ENL106 American Business Language

4 class hrs/wk, 4 cr.

Develops 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. **W, Sp**

ENL107 Better Writing Through Editing

5 class hrs/wk, 5 cr.

Teaches students how to proofread and edit their own writing, to find and correct errors, and improve writing through skilled proofreading, editing, and revising. Focuses on spelling, grammatical sentences, and punctuation at the sentence, paragraph, and essay level. **Prerequisite:** Successful completion of ENL067 or CELSA score of 50 and writing assessment. Class fee \$2. **F**

ENL109 Academic Reading and Writing

4 class hrs/wk, 4 cr.

Presents strategies for improving specific reading skills in order to increase comprehension and ability to 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+, and oral proficiency score of 30+. SPL level 7. **F, W, Sp, Su**

ENL113 Advanced Grammar 1

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, W, Sp**

ENL114 Advanced Grammar 2

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:** ENL113 or CELSA score of 60+, oral proficiency score of 30+, and writing sample. SPL level 7. **W, Sp, Su**

ENL116 Writing for College

4 class hrs/wk, 4 cr.

A comprehensive writing course which introduces the English composition concepts of WR121. 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:** ENL114 or CELSA score of 55+, oral proficiency score of 30+ and writing sample. SPL level 7. Class fee \$2. **F, W, Sp**

ENL118 Technical Writing and Research

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:** Completion of ENL116 or CELSA score of 55+, oral proficiency score of 30+ and writing sample. **Offered as needed.**

ES

EMERGENCY SERVICES

ES071 Workplace 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: Film Styles

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

Introduces the art of cinema. Emphasizes the feature-length film. Focuses on ways in which a person can come to understand the meaning of a movie. Includes a weekly film screening lab that accompanies the lecture. Class fee \$8. **F**

FA256 Understanding Movies: The Great Film Directors

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

Analyzes films from the standpoint of the director as creator. Highlights the films of one or two directors in an effort to understand and critique the individual films as the work of an artist, especially within the context of viewing the films as an evolving body of work expressing a particular and unique view of the world. Course may be repeated for a maximum of 12 lecture and lab credits. Class fee \$8. **W**

FA257 Understanding Movies: Themes and Genres

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

Explores the meanings a film conveys within the context of a specific film genre, national movement, or thematic topic. There is a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 12 credits total. Class fee \$8. **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 Cooperative Work Experience.

FN

FOODS AND 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 1, 2, 3

4 class hrs/wk, 4 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. Instructor and students use French as the primary language of the class. **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**

FR201, 202, 203 Second Year French 1, 2, 3

4 class hrs/wk, 4 cr. each

Extensive practice in all four language skills (reading, writing, speaking, 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. All classroom interaction (both by instructor and students) takes place in French. **Prerequisite:** These classes are to be taken sequentially. **FR201:** FR103, three years of high school French, or consent of instructor; **FR202:** FR201, or consent of instructor; **FR203:** FR202, or consent of instructor. Class fee \$2 each. **FR201: F; FR202: W; FR203: SP.**

FRP

FIRE PROTECTION TECHNOLOGY

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 1

9 lab hrs/wk, 3 cr.

Provides an introductory orientation to Fire Incident Related Experience that fulfills the requirements of OR-OSHA and the Department of Public Safety Standards and Training for Entry Level 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 2

9 lab hrs/wk, 3 cr.

Provides continuing 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, refilling SCBA bottles, the use of cascade systems, live-fire attack practices, salvage operations, overhaul practices, fire cause investigation, the firefighter's responsibility, district familiarization, map book use, radio procedures, driving laws and practices, power tool operation and maintenance, ventilation principles and vertical ventilation. Includes a practicum for "Driver" certification and driving portions of "Pumper Operator." **Prerequisite:** FRP051. Class fee \$15. **Offered as needed.**

FRP053 Fire Incident Related Experience 3

9 lab hrs/wk, 3 cr.

Introduces new skills and a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for Firefighter I. Includes a practicum for "Driver" and "Pumper Operator" certification. **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.

Covers the theory of pump operation, types and features of various pumps, practical operation of fire pumps and accessories. Includes drafting, hydrant and tanker operations and rule-of-thumb fire ground hydraulic calculations. **Prerequisite:** FRP051, FRP052, or consent of instructor. **Offered as needed.**

FRP059 Major Emergency Strategy and Tactics

3 class hrs/wk, 3 cr.

Covers major emergencies and applies principles relating to incident priorities, resource management, and tactical operations to make judgments about the management of major emergencies. **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.**

FRP061 Fire Incident Related Experience 4

9 lab hrs/wk, 3 cr.

Introduces additional skills and provides a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for Firefighter 1. Includes a practicum for "Driver" and "Pumper Operator" certification. **Prerequisite:** FRP053. Class fee \$15. **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.**

FRP062 Fire Incident Related Experience 5

9 lab hrs/wk, 3 cr.

Introduces new skills and provides a practicum for Firefighter 2, "Driver," and "Pumper Operator" certifications. Assists with entering the job market and in becoming more successful in competitive fire service

entry processes. **Prerequisite:** FRP061. Class fee \$15. **Offered as needed.**

FRP063 Fire Incident Related Experience 6

9 lab hrs/wk, 3 cr.

Offers additional skills and provides a practicum for Firefighter 2, "Driver," and "Pumper Operator" certifications. Prepares students for entering the job market and assists them in becoming more successful in competitive fire service entry processes. Introduces contemporary issues regarding the furnishing of emergency services. Students completing the course will take written and task performance tests for Firefighter 2. **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.

Focuses on fire problems inherent in structural elements of buildings. Includes inspection of various building types as 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.

Emphasizes the role of fire service leaders in managing the daily operations of a fire company. Covers leadership concepts such as types of supervisors, including attitudes, cooperation, individual differences, motivation, communications, and counseling as part of the management cycle. **Prerequisite:** FRP050. **Offered as needed.**

FRP070 Fire Fighting Tactics and Strategy

3 class hrs/wk, 3 cr.

Covers the development of systematic action plans for emergency situations. Includes recognizing and prioritizing emergency scene needs and developing related strategies, tactics, and contingencies. Describes 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 Uniform Fire Code

3 class hrs/wk, 3 cr.

Interprets the Uniform Building Code, 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.**

FRP073 Law for Emergency Services

3 class hrs/wk, 3 cr.

Covers Emergency Services' legal responsibilities related to driving, inspections, emergency operations, communications, fire prevention, and provision of ambulance services. Includes employee and member's rights, duties, liabilities, and preparation for presentations in court. **Offered as needed.**

FRP074 Fire Investigation

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

Emphasizes the importance of determining the cause of fire. Studies the burning characteristics of combustibles and the effects of fire on materials, interpreting burn patterns and isolating the area and point of origin, identifying 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 Municipal Airport Crash/Rescue

1 class hrs/wk, 1 cr.

Covers preplanning activities for on airport/off airport emergencies. Includes approach, positioning, rescue procedures and the application of control techniques. **Prerequisite:** Consent of instructor. **Offered as needed.**

FRP077 Fire Service Instructor Training 1

2 class hrs/wk, 2 cr.

Introduces the beginning fire service instructor to the knowledge and skills needed to conduct instruction from prepared materials. **Offered as needed.**

FRP078 Fire Service Instructor Training 2

2 class hrs/wk, 2 cr.

Prepares fire service instructors to develop class outlines and basic instructional materials to teach the service. **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 firefighting orders, urban interface problems, fire suppression methods, and fire-ground 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.**

FRP160 Incident Safety Officer

1 class hr/wk, 1 cr.

Covers N.F.P.A. 1521 and OSHA regulations regarding utilization of an on-scene safety officer. Prepares officers and firefighters to work together to promote safety at every emergency scene. **Offered as needed.**

FRP161 Fire Management Practices

1 class hr/wk, 1 cr.

Covers the concept of fire management including the role of departments and districts in local government, funding, and selection methods for providing fire protection. **Offered as needed.**

FRP162 Managing Fire Personnel

1 class hr/wk, 1 cr.

Introduces fire department human resource management techniques. Includes hiring, supervision, and performance review procedures. **Offered as needed.**

FRP163 Planning Fire Protection

1 class hr/wk, 1 cr.

Covers the tools needed to plan a community's fire protection system. Includes analyzing a community's fire risk, establishing types of protection, and developing implementation and evaluation plans. **Offered as needed.**

FRP164 Fire Department Budgets

1 class hr/wk, 1 cr.

Covers the preparation, adoption and filing of public law, and management of a fire district budget. Includes district budget analysis methods, use of levies, budget management, and appropriation of expenditures. **Offered as needed.**

FRP165 Public Relations, Public Information, and Public Education

2 class hrs/wk, 2 cr.

Introduces the role of public relations, public information, and public education as tools to provide and enhance awareness of public safety. **Offered as needed.**

FRP166 Firefighter's Law

1 class hr/wk, 1 cr.

Covers the legal responsibilities of firefighters in driving, inspection, emergency operations, communication, fire prevention, and rights. Includes a firefighter's rights as a civil service employee. **Offered as needed.**

FRP280 Cooperative Work Experience

See Cooperative Work Experience.

FOOD SERVICE

See Hospitality and Tourism Management.

FT

FOREST RESOURCES TECHNOLOGY

FT101 Fire Suppression Skills

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

Provides a hands-on practice of various wild-fire suppression and control techniques combined with an introduction to and analysis of fire behavior and crew-building methods. Includes on-site class visits in the forested mountain areas of western or eastern Oregon. **Sp, Su**

FT111 Introduction to Forest Resources

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

Introduces the functions, structure, and management of America's forests. Includes multiple field labs that will focus on landowner goals and objectives of forests in northwest Oregon. Class fee \$10. **F**

FT120 Principles of Supervision

3 class hrs/wk, 3 cr.

Analyzes the changing job environment in forestry including an introductory study of the roles of attitude, goal setting, teamwork, and self-improvement in being a good employee, and the elements necessary to be an effective manager. **W**

FT130 Forest Insect and Disease Management

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

Studies of important pathogens and insects, their role in forest ecology, and the damage they cause in the forested lands of the northwest. **Prerequisite:** FT111, FT141B, and BI132. Class fee \$10. **F**

FT141A Oregon Tree and Shrub Identification 1

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

Focuses on identification of 29 species of evergreen trees and 12 species of evergreen shrubs in the field using the common and scientific names of each species. Class fee \$10. **F**

FT141B Oregon Tree and Shrub Identification 2

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

Covers identification of 11 species of hardwood trees, 27 species of deciduous shrubs and 12 species of forbs and grasses. Uses both common and scientific names of each species to aid in forest management. Class fee \$10. **Sp**

FT150 Forest Seminar

1 class hr/wk, 1 cr.

Covers the basic steps in organizing and presenting forestry career and work experience. Presents informative elements of career/work experience in an audio/visual presentation. Focuses on use of audio/visual techniques including computer generated graphics and text. **Prerequisite:** FT280 and CS101. **W**

FT200 Forest Contracts

3 class hrs/wk, 3 cr.

Covers the principles and specifics of preparing a forest contract, from providing the specifications to the actual writing of a legal contract. **Prerequisite:** FT223 and WR227. **Sp**

FT210A Forest Surveying 1

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

Covers basic forest surveying techniques including fundamentals of horizontal and vertical measurements. Provides field and office procedures for forest mapping. **Prerequisite:** MTH070 or concurrent enrollment. Class fee \$10. **W**

FT210B Forest Surveying 2

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

Continues Forest Surveying 1. Studies distance and direction measurement, employing transit, theodolites, electronic distance measuring (EDM), and Global Positioning Systems (GPS). **Prerequisite:** FT210A and MTH082. Class fee \$10. **F**

FT220 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 resources management. **Prerequisite:** MTH070 or concurrent enrollment. Class fee \$5. **W**

FT221 Forest Inventory

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

Introduces the basic principles of forest sampling. Includes use of survey, measurement, and statistical analysis. **Prerequisite:** FT210A, FT220, FT141B or concurrent enrollment, and MTH082 or current enrollment. Class fee \$10. **Sp**

FT223 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. Introduces the theory and principles of log scaling. **Prerequisite:** FT210B, FT221, and CS101. Class fee \$10. **F**

FT230 Forest Policy

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

Studies the acts, regulations, orders, and court decisions that define and constrain natural

resource management plans. **Prerequisite:** FT111 and FT141B. Class fee \$10. **Sp**

FT270A Silviculture 1

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

Provides an initial analysis of forest ecology, tree growth, and silvicultural practices in the management of forest lands in the Pacific Northwest. Focuses on overviews of even-aged silvicultural systems, harvesting methods, and the application of uneven-aged silvicultural systems. **Prerequisite:** FT141B, FT221. Class fee \$10. **F**

FT270B Silviculture 2

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

Analyzes forest ecology, tree growth, and silvicultural practices in the management of forest lands in the Pacific Northwest. Focuses on detailed analysis of traditional even-aged management practices and the associated thinning regimes. **Prerequisite:** FT270A. Class fee \$10. **W**

FT280 Cooperative Work Experience

See Cooperative Work Experience.

FT290 Forest Management Problem Solving

2 class and 6 lab hrs/wk, 4 cr.

Provides capstone experience for forestry students. Designed to offer real-world forest management problems in an environment of uncertainty and to build problem-solving skills based on management alternatives presented in previous classes. **Prerequisite:** FT120, FT223, FT270B, and WR227. Class fee \$10. **Sp**

GE

GENERAL ENGINEERING

See also Engineering.

GE101 Engineering Orientation

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

Introduces the engineering profession and engineering problem-solving. **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 micro computer. Programs will be developed and used by students in the solution of typical engineering problems. Structured programming techniques will be emphasized. **Prerequisite:** MTH111. **W**

GE103 Engineering Computations

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

Systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing, and 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.

Covers graphic communication, multiview and pictorial representation, graphical analysis and solutions, and computer-aided drafting. **Prerequisite:** DRF072. **Offered as needed.**

GEG

GEOGRAPHY

GEG105 Physical Geography

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

Focuses on the physical subsystems of the earth (atmosphere, biosphere, hydrosphere, and lithosphere), with emphasis on human-environment relations. Includes basic map skills, latitude/longitude, weather, climate, biogeography, volcanism, erosion, and desert landscapes. **F, W, Su**

GEG106 Cultural Geography

3 class hrs/wk, 3 cr.

Introduces the cultural elements of geography, including the study of human population, migration, language, religion, cultural landscapes, and geopolitics. **W, Sp**

GEG107 Economic Geography

3 class hrs/wk, 3 cr.

Introduces economic geography, including the study of development and underdevelopment, agriculture, industry, settlement, urban landscapes, and natural resource issues. **F, Sp**

GEG190 Geography of Natural Hazards

3 class hrs/wk, 3 cr.

Studies the causes, characteristics, and geographic distribution of natural hazards, as well as various means of preparing for and minimizing the negative effects of hazards affecting the Pacific Northwest including: earthquakes, volcanoes, debris flows, floods, forest fires, and drought. **Offered as needed.**

GEG201 World Regional Geography: The Developed World

3 class hrs/wk, 3 cr

Introduces the physical and cultural geography of the developed world (Europe, Russia, Japan, North America, and Australia). Emphasizes major geographic themes and concepts, including population change, natural resource use, environmental concerns, economic development, geopolitical conflicts, and cultural perceptions. **Offered as needed.**

GEG202 World Regional Geography: The Developing World

3 class hrs/wk, 3 cr.

Introduces the physical and cultural geography of the developing world (Middle East, Sub-Saharan Africa, Latin America, and South, East and Southeast Asia). Emphasizes regional survey of the geography of developing countries, major geographic themes and concepts, including population change, natural resource use, environmental degradation, economic development, geopolitical conflict, and cultural perceptions. **Offered as needed.**

GEG206 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.**

GEG207 Geography of U.S. and Canada

3 class hrs/wk, 3 cr.

Examines the natural and cultural environments of the U.S. and Canada including: climate, vegetation, landform regions, natural resource issues, and population and settlement patterns. **Offered as needed.**

GEO

GEOLOGY

GEO130 Dinosaurs and Life of the Mesozoic

3 class hrs/wk, 3 cr.

Describes the dinosaurs and other animal and plant groups of the Mesozoic era. Covers their origins, mode of life, evolution, and theories concerning their extinction within a plate tectonics setting. **Offered as needed.**

GEO142 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.**

GEO143 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.**

GEO144 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.**

GEO201 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**

GEO202 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**

GEO203 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**

GER

GERMAN

GER101, 102, 103 First Year German 1, 2, 3

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. Instructor and students use German as the primary language of the class. **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**

GS

GENERAL SCIENCE

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. 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

HD

HUMAN DEVELOPMENT

HD220 Life Skills Seminar 1

3 class hrs/wk, 3 cr.

Helps adults re-entering education or the workforce identify their abilities, interests and values and develop an individual career plan. Includes personal assessment, career exploration and decision-making, identification and removal of barriers to success and effective job search strategies. **Prerequisite:** Concurrent enrollment in HD221. Individual intake interview and consent of instructor required. F, W, Sp

HD221 Life Skills Seminar 2

3 class hrs/wk, 3 cr.

Helps re-entering adults develop goals, skills and support systems that promote success in education and careers. Topics include building self-confidence, balancing work and family, assertiveness communication skills, stress and time management, and development of an individual action plan. **Prerequisite:** Concurrent enrollment in HD220. Individual intake interview and consent of instructor required. F, W, Sp

HDF

HUMAN DEVELOPMENT AND FAMILY STUDIES

HDF050 Parent/Infant

1 class hr/wk, 1 cr.

Covers infant 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 toddler 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 preschooler 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

HDF222 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

HDF225 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

HDF226 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

HDF227 The Whole Child Telecourse

3 class hrs/wk, 3 cr.

Gives students, parents, teachers, and professional child care providers the tools they need to foster the growth and well-being of children in their care. Features real child care givers, working and playing together with children in ways that facilitate learning and development. Locations used during the filming include a suburban preschool, an urban infant center and preschool, an in-home family child care program, two university child care centers and Head Start classrooms. Offered as needed.

HDF229 Development in Middle Childhood

3 class hrs/wk, 3 cr.

Study of growth and development in 6-through 12-year-old children. Emphasis placed on physical, intellectual, emotional, and social growth of the school-aged child. Sp

HDF242 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

HDF247 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 5. Emphasizes physical, intellectual, emotional, and social growth in children. W

HDF248 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:** HDF225 and HDF247 or consent of instructor. Class fee \$5. Sp

HDF249 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

HDF257 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

HDF260 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**

HDF285 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**

HE204 Nutrition, Weight Control, and Physical Fitness

3 class hrs/wk, 3 cr.

Methods of maintaining or improving fitness by considering diets and dieting, obesity, types of exercise, physical testing, cardiovascular fitness, and nutritional concepts. **F, W, Sp, Su**

HE209 Human Sexuality

3 class hrs/wk, 3 cr.

Covers mental, physical, and social aspects of human sexuality. Emphasizes development of a decision-making model that enables a person to make personal choices. Class discussion 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, chiro-

practors, 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. **Offered as needed.**

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, Su**

HE262 Cardiopulmonary Resuscitation Instruction

2 lab hrs/wk, 2 cr.

Reviews theory and application of basic life support, instructional materials, and methods of use in CPR courses. Successful completion provides instructor certification or recertification by the Oregon Heart Association. **Prerequisite:** Certification in CPR by the Oregon Heart Association. Class fee \$5. **W**

HM

HEALTH SERVICES

MANAGEMENT

See also Allied Health and Medical Office Assisting.

HM101 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**

HM102, 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. **HM102: F; HM103: W; HM104: Sp**

HM110 Health Information Systems Procedures 1

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

Designed to provide the student with a fundamental knowledge of medical clinics and health-related organizations. Covers procedures used to keep any kind of medical office running efficiently. Provides entry-level skills for the Health Information Technician/Medical Transcriptionist and other students in Health Services Management and other programs to become proficient in a number of skills that are required of a professional office worker dedicated to assisting in the care of health care consumers. Class fee \$12. **F**

HM112 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:** HM110. Class fee \$5. **W**

HM113 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:** HM120 and HM121, or consent of instructor. Class fee \$15. **Offered as needed.**

HM114 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:** HM120, concurrent enrollment in HM121, or consent of instructor. **W**

HM115 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:** HM120, HM121, or consent of instructor. **Sp**

HM116 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**

HM120 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**

HM121 Medical Terminology/Systems 2 3 class hrs/wk, 3 cr.

A continuation of HM120. 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:** HM120 or consent of instructor. **F, W, Sp, Su**

HM122 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, analysis, 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:** HM120 and HM121 or consent of instructor. **Sp**

HM130 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**

HM131 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:** HM130. **Sp**

HM140 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:** HM120, touch keyboarding skill of 40 words per minute or consent of instructor. Class fee \$10. **W**

HM141 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:** HM140, HM120, concurrent enrollment in HM121, or consent of instructor. Class fee \$10. **F, W, Sp**

HM142 Advanced Medical Transcription 2 1 class and 4 lab hrs/wk, 3 cr.

Continuation of HM141. Includes transcription of comprehensive dictation in medical specialties including radiology, pathology, and

cardiology using American Association of Medical Transcriptionist course tapes.

Prerequisite: HM120, HM121, HM140, HM141, enrollment in the Medical Transcription program, touch keyboarding skill of 55 words per minute, or equivalent as determined by instructor. Class fee \$10. **F, Sp**

HM143 Advanced Medical Transcription 3 1 class and 4 lab hrs/wk, 3 cr.

Continuation of HM142. Includes transcription of 20 advanced tapes in all fields. **Prerequisite:** HM120, HM121, HM140, HM141, HM142, enrollment in the Medical Transcription program, and touch keyboarding skill of 65 words per minute or proficiency in WordPerfect at an intermediate level. Class fee \$25. **F, W, Sp**

HM144 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 HM280. **F, W, Sp**

HM210 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**

HM214 Advanced CPT-IV Coding 3 class hrs/wk, 3 cr.

Builds on previous experience or instruction to further develop ability and skills in CPT-IV coding practices and principles. Expands resources for further coding problem solving. **Prerequisite:** H114; H120, H121 or basic knowledge of medical terminology. **Sp**

HM215 Advanced ICD-9-CM Coding 3 class hrs/wk, 3 cr.

Focuses on advanced ICD-9-CM coding practices and principles as well as resources for future coding problem solving. **Prerequisite:** HM115 or basic coding experience on the job, HM120, and HM121 or basic knowledge of medical terminology. Class fee \$10. **W**

HM216 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 HM116 or consent of instructor. **Sp**

HM230 Health Services Externship 16 lab hrs/wk, 6 cr.

One hundred sixty hours of workplace experience in a health care or related setting. **Prerequisite:** HM210, HM250 and HM251, or

consent of instructor, and concurrent enrollment in HM231. Class fee \$27. **F, W, Sp**

HM231 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 HM230, or consent of instructor. **F, W, Sp**

HM250 Health Services Management 1 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**

HM251 Health Services Management 2 3 class hrs/wk, 3 cr.

Continuation of HM250. 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:** H2M50. **W**

HM280 Cooperative Work Experience See Cooperative Work Experience.

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 33.

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 Service 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, caregivers, and case managers. Class fee \$15. **Offered as needed.**

HS121 Introduction to Hospice Care

3 class hrs/wk, 3 cr.

Introduces care of terminally ill patients in the hospice environment. Covers palliative care techniques, with emphasis on social and psychological needs. Includes the practical, ethical and philosophic aspects of death, dying and bereavement. Class fee: \$8. **Offered as needed.**

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**

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 analysis of life stressors and the development of a personalized stress management plan. Class fee \$2. **F, W, 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, or pre-program students. **F, W**

HS155 Interviewing Theory and Techniques

3 class hrs/wk, 3 cr.

Provides the theory and specific techniques required for entry level interviewing in human service settings. **Prerequisite:** Grade of C or better in 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. Promotes 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, 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.

Presents the basic information regarding chemical dependency and its effects on the whole family. Focuses on the family dynamics and treatment of alcoholic/addictive families. **Prerequisite:** Grade of C or better in 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:** Grade of C or better in HS101, HS150 and HS155, or consent of instructor. Students should be enrolled in Human Services Program Practicum or have

practicum experience prior to enrolling in HS202. **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:** Grade of C or better in HS101, HS150, HS155 and HS202, or consent of instructor. Students should be enrolled in Human Services Program Practicum 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:** Grade of C or better in HS101, HS150, HS155, HS202 and HS203, or consent of instructor. Students should be enrolled in Human Services Program Practicum 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. **Offered as needed.**

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 treating the 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. **F, W, Sp, Su**

HS209 Dual Diagnosis Clients in Treatment

1 class hr/wk, 1 cr.

Covers basic information about simultaneous diagnosis of addiction and chronic mental illness in the same patient/client. Stresses the importance of assessing and treating both areas equally. **F**

HS211 HIV, TB and Infectious Diseases: Risk Assessment, Harm Reduction and Counseling

1 class hr/wk, 2 cr.

Explores the relationship between alcohol and other drug abuse and infectious diseases, including HIV/AIDS, TB, STDs and Hepatitis. Offers counseling techniques for assisting clients to personalize their risk and practice harm reduction. Also addresses special issues for women and people of color. Personal issues/discomforts arising from frankly discussing sexual behaviors of clients will be examined. **Prerequisite:** None. HS101, HS150 and HS155 recommended. **W, Su**

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 older adults. 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. **Offered as needed.**

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, controversy, and leadership. **Prerequisite:** Grade of C or better in 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:** Grade of C or better in HS150, HS155 and HS284-288, or concurrent enrollment. **F**

HS266 Case Management

3 class hrs/wk, 3 cr.

Provides theory and application in casework and interviewing applied to diverse populations and cultures in human services. Includes interviewing for assessment, problem solving, planning, monitoring and crisis intervention. **Prerequisite:** Grade of C or better in HS150, HS155, HS265 and 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:** Grade of C or better in HS150, HS155 and HS265 or HS202. **Sp**

HS284-288A, 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 at least 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:** Grade of C or better in HS150 and HS170. Class fee varies, \$3 each. **F, W, Sp (Su as needed).**

HST

HISTORY

HST110, 111, 112 History of World Civilization

3 class hrs/wk, 3 cr.

A survey of human cultural, social, economic, and political development of world civilizations. HST110 covers ancient times to 1500 C.E.; HST111 covers 1500 to 1870; HST112 covers 1870 to the present. 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 (Jacksonian era) to 1900; HST203: 1900 to the present. HST201: **F, W**; HST202: **W**; HST203: **Sp**

HST228 History of Modern Europe

3 class hrs/wk, 3 cr.

Introduces the history and culture of Europe during the twentieth century. Covers the impact of war and revolution, the end of colonialism and decline of European empires, and the search for European unification. **Offered as needed.**

HST257 Native American History

3 class hrs/wk, 3 cr.

Focuses on the history of native peoples in the United States, from prehistory to the present. Examines how a diversity of Native American societies has adapted themselves over time to a constantly changing world. Emphasizes the relationship between European Americans and Native Americans after 1492. **Offered as needed.**

HST258 African American History

3 class hrs/wk, 3 cr.

Recounts and explains experiences which lie at the heart of America's struggle to deal with its racial composition. Examines historical forces which denied African Americans the opportunity to secure meaningful first-class citizenship. Focuses on the political decisions and social institutions that determined public policy regarding Americans of African descent. **Offered as needed.**

HST259 Latino American History

3 class hrs/wk, 3 cr.

Focuses on the racial, cultural, educational, economic, and political development of Latino Americans in the United States. **Offered as needed.**

HST293 Modern Japanese History

3 class hrs/wk, 3 cr.

Covers modern Japanese history from the mid-19th century to the present. Provides an overview of modern industrialization, military ventures, U.S. occupation, and reforms leading to Japan's role as a modern-world economic power. **Offered as needed.**

HTM

HOSPITALITY AND TOURISM MANAGEMENT

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, W, Sp**

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. **W**

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. **Sp**

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

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. **Offered as needed.**

HTM113 Club Management

3 class hrs/wk, 3 cr.

Overviews club operations and leisure recreation as an essential sector of the tourism economy. Discusses the history of clubs and their organization and systems. Emphasizes organizational skills, club operations; including marketing, human resources and retail outlet operation and computers. Discusses career opportunities, current issues and future trends. Designed to promote advancement in the club industry. Class fee \$25. **Offered as needed.**

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**

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. **W**

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. **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. **F**

HTM118 Ski Area Management

3 class hrs/wk, 3 cr.

Covers ski area management and operations. Includes systems and environmental issues that impact the ski industry. Discusses current issues, future trends and career opportunities. Designed to develop competent ski industry professionals. **Offered as needed.**

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**

HTM121 Travel Agency Sales and Marketing

3 class hrs/wk, 3 cr.

Provides an overview of the travel marketing process. Covers developing and marketing travel products, identifying target audiences, utilizing effective advertising techniques to convert marketing strategies into sales. **F, W, Sp**

HTM122 Travel Agency Management

3 class hrs/wk, 3 cr.

Covers methods and techniques necessary to operate a travel agency. Includes management theory, systems, decision-making leadership relevant to travel agency business. **Sp**

HTM123 Computer Reservation Systems

3 class hrs/wk, 3 cr.

Surveys travel agency computer reservation systems (CRS) - (APOLLO, SABRE, WORLDSPAN, PARRS). Includes use of reservation system simulations to identify flights, auto rentals, lodging and associated travel information. Emphasizes problem solving in the workplace. Class fee \$25. **F, W**

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 Cooperative Work Experience.

HUM

HUMANITIES

HUM106 British Life and Culture

3 class hrs/wk, 3 cr.

Offers a broad overview of British culture and civilization. Examines traditions and institutions to help understand the British way of life in the 20th century. Lectures by British guest lecturers and related field trips. This course (taught in London) is only for students participating in the London program of the Oregon International Educational Consortium. **Sp**

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.**

JNL

JOURNALISM

JNL198 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:** JNL216 or consent of instructor. Ability to key-

board and a basic understanding of English grammar and syntax are essential. **F, W, Sp**

JNL215 Publications Lab

4 lab hrs/wk, 2 cr.

Practical application of reporting skills, photojournalism, and production principles through work on the student newspaper. **Prerequisite:** JNL224 or consent of instructor. Course may be repeated for a maximum of 12 credits. **F, W, Sp**

JNL216 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:** Familiarity with keyboarding. **F**

JNL217 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:** JNL216 or consent of instructor. Familiarity with keyboarding. **W**

JNL224 Introduction to Mass Communications

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**

JNL225 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**

JNL226 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:** JNL224 or consent of instructor. The ability to type and a basic understanding of English grammar and syntax also are strongly recommended. **Sp**

JNL227 Media 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**

JNL298A-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 1, 2, 3

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. Instructor and students use Japanese as the primary language of the class. **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.

LIB

LIBRARY STUDIES

LIB125 Internet Research Literacy

1 class hr/wk, 1 cr.

Introduces students to the use of the Internet as a research tool. Includes developing a search strategy, limitations of the Internet, types of Internet information resources, Internet search tools and searching techniques, and evaluating Internet information resources. No prior Internet experience required. W

LITERATURE

See English.

MANAGEMENT

See Business Administration.

MECHANICAL DESIGN

See Drafting Technology.

MED

MEDICAL OFFICE ASSISTING

See also Allied Health and Health Services Management.

MED120 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

MED124 Medical Assisting, Basic Procedures

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

Survey of requirements and qualities for success as a medical assistant. Techniques, methods, and procedures include assisting physician with examinations, medical and surgical aseptic procedures, observing vital signs, care of equipment, supplies, patient teaching principles and considerations, and legal and ethical implications in a medical caregiving setting. **Prerequisite:** High school graduate or equivalent. Admission to the Medical Office Assisting program. Class fee \$20. F

MED125 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

MED128 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:** HM120, HM121. Sp

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 Cooperative Work Experience.

MFG

MANUFACTURING ENGINEERING TECHNOLOGIES

MFG061 Practical Applications 1

3 lab hrs/wk, 1 cr.

Offers an open lab course 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. F, W, Sp

MFG062 Practical Applications 2

6 lab hrs/wk, 2 cr.

Provides an open lab course 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. F, W, 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:** MFG231 or completion of a basic hydraulics course. Sp

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.

MFG100 Fundamentals Lab Practice

3 lab hrs/wk, 1 cr.

Provides independent lab practice for students concurrently enrolled in MFG101. Includes benchwork related projects. **Prerequisite:** Concurrent enrollment in or must have completed MFG101. Class fee \$10. Sp

MFG101 Machining Fundamentals

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

Introduces the fundamentals of benchwork processes. Covers the use of basic hand tools, drill presses, power saws, pedestal grinders, arbor presses and basic layout and benchwork tools. Includes use of appropriate charts and tables including decimal equivalent and drill and tap selection with speed and feed calculations. Provides orientation to machine shop manufacturing with emphasis on working in teams. Class fee \$20. F

MFG111 Industrial Safety Seminar

1 class hr/wk, 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

MFG120 Metrology

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

Covers the selection and application of linear English and metric measuring and inspection tools and equipment used in manufacturing. Class fee \$20. F

MFG124 Interpreting Engineering

Drawings

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

Provides instruction and skill development in engineering print reading, sketching, basic drawing techniques and geometric constructions. Class fee \$5. F

MFG130 CNC Machine

Setup/Operation

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

Focuses on application of the Computer Numerical Control (CNC) systems used in today's manufacturing environment. Includes hands-on experiences with both personal and manufacturing specific (CNC) computers to establish basic operational skills. Class fee \$5. F

MFG131 Lathe Fundamentals

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

Introduces turning operations with emphasis on work and tool holding methods. Covers related hole-making process, facing, tapping, grooving and parting. Class fee \$20. W

MFG136 Geometric

Dimensioning/Tolerancing

2 class hrs/wk, 2 cr.

Covers practical application of geometric concepts and practices related to surface plate and coordinate measuring machine technology. Emphasizes industry standard 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

MFG145A CMM/QA Applications

2 class hrs/wk, 2 cr.

Focuses on the theory of quality assurance tools including use of X-bar and R-charts, pareto charts, histograms, cause-and-effect diagrams and other related graphical data analysis. Includes process capability studies. Discusses the theory of Coordinate Measuring Machine (CMM) application and operation. Class fee \$10. W

MFG145B CMM/QA Applications-Lab

3 lab hrs/wk, 1 cr.

Provides practical applications with hands-on measuring techniques including creation of X-bar and R-charts using the coordinate measuring machine. Emphasizes techniques in Geometric Dimensioning and Tolerancing (GDT) verification. Stresses applications to meet the demands of quality in today's manu-

facturing environment. Prerequisite: Concurrent with MFG145A and MFG136. Class fee \$10. W

MFG151 Milling Machine Processes

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

Covers basic milling, work holding methods, cutter identification, selection and use, speeds and feeds, adapters, tool holders, and application. Includes operation of vertical and horizontal milling machines, applying related operational theory. Class fee \$20. W

MFG160 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: Consent of instructor. Class fee \$15. W

MFG161 Lathe Processes

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

Covers advanced lathe theory and operations. Includes lathe settings, boring, single-point, threading, knurling, calculations, controls, taper attachments, follower rests, steady rests and advanced tooling, safety and work-holding applications. Prerequisite: MFG131 or consent of instructor. Class fee \$20. Sp

MFG170 Total Quality Manufacturing (TQM)

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

Provides the student with essential knowledge and understanding of total quality manufacturing's origin, function and application in today's working environment. Explores quality planning and systems, problem solving, management systems, data collection, continuous quality improvement, teamwork and conflict resolution. Statistical Process Control (SPC) concepts and practical applications are used to provide hands-on knowledge of TQM tools. Class fee \$5. Sp

MFG176 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. Prerequisite: MFG131, MFG151, or consent of instructor. Class fee \$20. Sp

MFG190 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

MFG200 Advanced Lab Practice

6 lab hrs/wk, 2 cr.

Provides 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. Class fee \$10. Offered as needed.

MFG205 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. Offered as needed.

MFG210A 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: MFG131, MFG151, MFG161 or consent of instructor. Offered as needed.

MFG210B 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 MFG210A or consent of instructor. Class fee \$30. Offered as needed.

MFG223 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. Offered as needed.

MFG230 CAM Applications/Mills

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

Introduces the concepts and application of computer aided manufacturing (CAM) software programs for creating CNC milling machine part programs. Prerequisite: MFG130, MFG160 or MFG190 or consent of instructor. Class fee \$20. Offered as needed.

MFG231 Hydraulics

3 class hrs/wk, 3 cr.

Covers the theory, symbols, components, systems, and troubleshooting procedures related to fluid power technology. Includes lecture and hands on instruction. Offered as needed.

MFG245A 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: MFG130, MFG131, MFG151 or consent of instructor. Offered as needed.

MFG245B Fixture Design and Manufacturing-Lab

6 lab hrs/wk, 2 cr.

Applies theory and concepts of jig, fixture and gauge design used in building functional work-holding and gauging devices for students concurrently enrolled in MFG245A. Students in teams design jigs, fixtures and gauges based on design specifications determined by part characteristics. **Offered as needed.**

MFG260 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, MFG160 or MFG190, or consent of instructor. Class fee \$20. **Offered as needed.**

MFG265 Machinery's Handbook

2 class hrs/wk, 2 cr.

Solves practical machine shop and mechanical design problems using tables, charts and formulas from the Machinery's Handbook. Includes powers and roots of numbers, segments of circles, transposition and various formulae, geometrical figures, figuring tapers, tolerances and allowances, gearing problems, bearing fits, strength of materials, pipe and pipe fittings. Also includes CNC machining applications. **Offered as needed.**

MFG270A

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. **Prerequisite:** MFG130, MFG131, MFG151 or consent of instructor. **Offered as needed.**

MFG270B

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 with MFG270A or consent of instructor. **Offered as needed.**

MFG280 Cooperative Work Experience **See Cooperative Work Experience.**

MFG290 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 and 4th axis generated parts and transfer of Computer Aided Design (CAD) generated 2-D drawings solids and parametric models to a Computer Aided Manufacturing (CAM) system for manufac-

turing purposes. **Prerequisite:** MFG230 and/or MFG260 or consent of instructor. **Offered as needed.**

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 1: 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 1: 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 2: Effective Team Building

2 class hrs/wk, 2 cr.

An examination of effective leadership, including the development of interpersonal skills using practical exercises and case studies. **Offered as needed.**

MS212 Military Science 2: American Military History

2 class hrs/wk, 2 cr.

History of the American soldier from 1775 to 1919, including weaponry and tactics of U.S. Army. Covers use of battle analysis and wargaming. **Offered as needed.**

MS213 Military Science 2: Fundamentals of Military Operations

2 class hrs/wk, 2 cr.

Presents basic U.S. Army tactics at the individual, team, and squad levels. Includes integration of military skills in offensive and defensive operations. **Offered as needed.**

MT

MICROELECTRONICS/INDUSTRIAL

MT110 Microelectronics

3 class hrs/wk, 3 cr.

Surveys the field of microelectronics. Covers an overview of the technology and manufacturing processes used and its economic and social impacts. Applies to students considering a career in Oregon's high growth semiconductor industry. **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.

Covers theory, operation and application of hydraulic and pneumatic systems. Includes diagnosis, service, maintenance repair of pneumatic components and systems. **Prerequisite:** MTH070, High School Algebra II or consent of instructor. 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 whole numbers, fractions, decimals, ratios, percentages, and geometric measurements and formulas. Emphasizes analysis and solution of application 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. Student gains a strong, fundamental background in beginning algebra through directed group activities and varied presentation styles. Covers signed numbers, elementary algebraic expression manipulation, and equation solving. Describes concepts using verbal, numerical, graphic, 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.

Covers business-related mathematics applications involving securities, profit distribution, overhead allocation, business statistics, simple interest, notes and bank discounts, compound interest, multiple payment plans, annuities, depreciation, single discount equivalents, markups, markdowns, inventory valuation and financial statement analysis with ratios. **Prerequisite:** MTH060 or equivalent as determined by the instructor. **F, W**

MTH070 Elementary Algebra

4 class hrs/wk, 4 cr.

Covers linear equations, linear systems, linear inequalities, quadratic equations, and square root equations in verbal, numerical, graphical, and symbolic forms for students with linear equation solving and elementary graphing background. Explores topics using a graphic calculator as well as traditional approaches. **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.

Offers an individualized course that may be started and completed at any time during the term. Covers the basic concepts of points, lines, planes, angles, triangles, congruence, similarity, and polygons, all from an intuitive point of view. Uses applied problems involving these concepts. **Prerequisite:** Grade of C or higher in MTH060 or equivalent. **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:** Grade of C or higher in MTH075 or equivalent. **F, W, Sp, Su**

MTH078 Applied Trigonometry

1 class hr/wk, 1 cr.

This individualized course may be started and completed at any time during the term. Covers definitions of the trigonometric ratios of sine, cosine, and tangent and how they apply to right triangles. Includes applications involving right triangles. Reviews the concepts of angles, triangle similarity, and the Pythagorean Theorem. **Prerequisite:** Grade of C or higher in MTH070, MTH075, and MTH076 or equivalent. **F, W, Sp, Su**

MTH079 Applied Trigonometry

1 class hr/wk, 1 cr.

This individualized course may be started and completed at any time during the term. Covers trigonometric ratios of obtuse angles, law of sines, law of cosines, vectors and radian measure. Includes applied problems involving these concepts. **Prerequisite:** Grade

of C or higher in MTH078 or equivalent. **F, W, Sp, Su**

MTH081 Technical Mathematics 1

4 class hrs/wk, 4 cr.

First course of a two-term technical mathematics sequence. Designed to meet the needs of technology students from various disciplines and lay the groundwork for applying mathematical concepts and problem solving in the technical fields of engineering, drafting, mechanical design, forestry and electronics. Covers fundamental algebra concepts, graphing, ratio, proportions and variation, basic right angle trigonometry, statistics and empirical methods, operations with linear, quadratic and rational expressions, solutions of linear, quadratic and rational equations. Emphasizes using mathematics and technology to solve applied problems. **Prerequisite:** Grade of C or higher in MTH070 or equivalent. **F, W**

MTH082 Technical Mathematics 2

4 class hrs/wk, 4 cr.

Offers the second course of a two-term technical mathematics sequence designed to meet the needs of technology students from various disciplines and provide the mathematical skills for solving applied problems in the technical fields of engineering, drafting, mechanical design, forestry and electronics. Covers trigonometric functions, oblique triangles, vectors, solutions of trigonometric equations and graphing of trigonometric functions, exponents and radicals, complex numbers, logarithmic and exponential functions and their applications. **Prerequisite:** Grade of C or higher in MTH081. **W, Sp**

MTH095 Intermediate Algebra

4 class hrs/wk, 4 cr.

Students actively participate in the study and applications of linear, quadratic, rational and exponential functions. **Prerequisite:** Grade of C or higher in MTH070 or equivalent. **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 of 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.

Studies functions and related inequalities using a graphing calculator. Focuses on polynomial, rational, exponential, logarithmic, and related piecewise defined functions. Includes a study of the complex number system, the algebra of functions, the applications of functions in sequences and series. High-order linear systems will be solved using a calculator. **Prerequisite:** Grade of 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 of 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 pre-calculus 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.

Introduces the first course of a three-term mathematics sequence designed for liberal arts students, especially prospective elementary teachers. Emphasizes problem solving and covers basic concepts about whole numbers, integers, sets and number theory. Uses manipulatives to deepen understanding. **Prerequisite:** Grade of C or higher in MTH095 or equivalent as determined by the instructor. **F, W**

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, Sp**

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, Su**

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**

MTH243 Probability and Statistics 1

4 class hrs/wk, 4 cr.

A first course in descriptive statistics open to all majors 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. **F, W, Sp, Su**

MTH244 Probability and Statistics 2

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. **Sp**

MTH251 Differential Calculus

5 class hrs/wk, 5 cr.

Provides the first course in 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, Sp, Su**

MTH252 Integral Calculus

5 class hrs/wk, 5 cr.

Continues 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. **F, 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 1

4 class hrs/wk, 4 cr.

First of two courses in multivariable calculus. Explores functions of many variables such as curves and surfaces in three-dimensional space, vectors, rates of change of functions of several variables, and optimization in multivariable models. **Prerequisite:** Grade C or higher in MTH253 or equivalent as determined by the instructor. **F**

MTH255 Vector Calculus 2

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 Individual Lessons

10 class hr/wk, 1 cr.

Covers pedagogy of the instrument being studied, including fundamentals of music, reading and theory, beneficial practice habits, repertoire for the instrument, interpretation, and performance techniques. Course may be repeated for a maximum of nine credits per instrument. **F, W, Sp, Su**

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 or an 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.**

MUS161 Music Appreciation

3 class hrs/wk, 3 cr.

Highlights 17th-20th century instrumental and vocal music, the growth of the orchestra, and such acknowledged masters as Mozart, Haydn, and Beethoven. **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 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**

MUS205 Introduction to Jazz History

3 class hrs/wk, 3 cr.

An exploration of jazz music with an emphasis on the historical and social perspectives of jazz as an American cultural phenomenon. **Offered as needed.**

NET

NETWORK TECHNOLOGY

See also Microelectronics/Industrial.

NET120 Network Media Fundamentals

3 class and 2 lab hr/wk, 4 cr.

Focuses on types of transmission media used in computer network environments. Covers transmission line theory and discusses the characteristics of coaxial cables, twisted-pair cables, single-mode and multi-mode fiber. Compares the specification for cables and connectors used in networking. **Prerequisite:** ELT100 or consent of instructor. Class fee \$20. **W**

NET123 Computer Operating Systems

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

Covers fundamentals of computer operating systems. **Prerequisite:** CS101 or equivalent experience. Class fee \$12. **F, W**

NET151 Networking Essentials

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

Provides the first course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Gives students with classroom and laboratory experience in current networking technology and includes network terminology, protocols, network standards, LANs, WANs, OSI model, cabling, cabling tools, safety, network topology and IP addressing. **Prerequisite:** CS101 or consent of instructor. Class fee \$40. **F**

NET152 Network Router Configurations

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

Provides the second course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology and includes network terminology and protocols, LANs, network topology and IP addressing, routers, router programming and application of routing and protocols. **Prerequisite:** NET151. Class fee \$40. **W**

NET153 LANs and Internetwork Design

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

Provides the third course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology that includes LAN segmentation using bridges, routers and switches to control network traffic. **Prerequisite:** NET152. Class fee \$40. **W**

NET154 WAN Design

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

Provides the fourth course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Covers ISDN, ATM, Frame Relay and Dial-up Services. **Prerequisite:** NET153. Class fee \$40. **F**

NET251 Advanced Internetwork Design

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

Provides the first course of a four-part sequence in the Cisco Certified Network Professional (CCNP) curriculum. Provides students with classroom and advanced laboratory experience in current networking technology. Focuses on design issues related to complex routed LANs and WANs. **Prerequisite:** NET154 or consent of instructor. Class fee \$40. **F**

NET252 Remote-Access Networks

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

Provides the second course of a four-part sequence in the Cisco Certified Network Professional (CCNP) curriculum. Provides

students with advanced experience in network design. Focuses on installation, configuration and troubleshooting of complex routed LANs, routed WANs, switched networks and Dial Access Services. **Prerequisite:** NET251 or consent of instructor. Class fee \$40. **Sp**

NET253 Multi-Layer Switching

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

Provides the third course of a four-part sequence in the Cisco Certified Network Professional (CCNP) curriculum. Provides students with advanced experience in switched multi-layer network design. Focuses on designing, installing, configuring, and troubleshooting of complex switched networks. **Prerequisite:** NET252 or consent of instructor. Class fee \$40. **W**

NET254 Network Troubleshooting

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

Provides the fourth course of a four-part sequence in the Cisco Certified Network Professional (CCNP) curriculum. Provides students with advanced experience in troubleshooting networks. Focuses on problem isolation and use of troubleshooting tools. **Prerequisite:** NET253 or consent of instructor. Class fee \$40. **Sp**

NET281 Networks for Educators 1

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

Provides the first course in a four-part sequence directed toward Cisco Certified Network Associate Certification (CCNA). Covers the history and fundamentals of computer networking, both software and hardware. Studies local, wide-area and global networks; small to medium size networks will be designed, built and maintained. Discusses issues related to teaching networking concepts. Covers networking fundamentals, ISU/OSI model and TCP/IP protocols. **Prerequisite:** One year experience in technical instruction. **Offered as needed.**

NET282 Networks for Educators 2

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

Provides the second course in a four-part sequence directed toward Cisco Certified Network Associate Certification (CCNA). Covers the history and fundamentals of computer networking, both software and hardware. Studies local, wide-area and global networks; small to medium size networks will be designed, built and maintained. Discusses issues related to teaching networking concepts. Includes router fundamentals and network topology. **Prerequisite:** NET281. **Offered as needed.**

NET283 Networks for Educators 3

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

Provides the third course in a four-part sequence directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology that includes LAN segmentation using bridges, routers and switches to control network traffic. Designed for educators/trainers to discuss issues related to teaching networking concepts. **Prerequisite:** NET282. **Offered as needed.**

NET284 Networks for Educators 4

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

Provides the fourth course in a four-part sequence directed toward the Cisco Certified Network Associate Certification (CCNA). Introduces WAN services. Covers ISDN, ATM, Frame Relay and Dial-up Services. Designed for educators/trainers to discuss issues related to teaching networking concepts. **Prerequisite:** NET283. **Offered as needed.**

NUR

NURSING

NUR060 Nursing Success Strategies

3 class hrs/wk, 3 cr.

Introduces students to basic skills that are built upon in the nursing curriculum. 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. Note: Students may repeat this course once without requiring instructor approval. **Prerequisite:** Consent of instructor. 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. **Corequisite:** BI232 and PSY201. 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. **Corequisite:** BI233 and PSY237. 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. **Corequisite:** BI234 and WR121. Clinical: Registration must be completed and TB test results and 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.

Covers concepts and skills related to the nursing care of medical/surgical patients and families and mentally ill clients. Standards of nursing care are adapted to meet the basic human needs of individual patients. Emphasizes patient/client teaching. **Prerequisite:** NUR109. **Corequisite:** CS101. 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.

Covers concepts and skills related to the nursing care of medical/surgical patients and their families with ambulatory, acute and critical needs. Emphasizes discharge planning. Synthesizes multiple standards of nursing care to meet the basic human needs of individual patients. **Prerequisite:** 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.

Emphasizes leadership and management concepts and skills 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**

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. **Sp**

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**

PE185BG Baseball-Advanced

3 lab hrs/wk, 1 cr.

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**

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. **F, W, Sp, 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.**

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.**

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. **F, W, Sp**

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**

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**

PE185SA,SC Scuba Diving-Beginning, 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:** PE185SC: 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**

PE185SR Softball-Advanced

3 lab hrs/wk, 1 cr.

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**

PE185TE,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. **F, 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. **F, W, Sp, Su**

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, Su**

PROFESSIONAL PHYSICAL EDUCATION

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.**

PE200 Coaching Youth

3 class hrs/wk, 3 cr.

Focuses on the communication, organization, and motivation skills needed for coaching youth. Emphasizes planning, teaching sports skills, training, and team management basics. **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

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. Laboratory time provides demonstrations and experiments to clarify principles and procedures covered in lectures. **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 Non-Science Students

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. **Offered as needed.**

PH111 and PH111R Physical Science for Fire Science and Emergency Services

3 class, 2 lab, and 1 recitation 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. **Corequisite:** PH111 with PH111R. 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 from the motion of planets 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:** Grade of C or higher in MTH070. Class fee \$8. **F**

PH208 Astronomy

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

A descriptive treatment of stellar coordinates and sidereal time, the nature of light and the spectroscope, and the birth and death of stars. **Prerequisite:** Grade C or higher in MTH070. Class fee \$8. **W**

PH209 Astronomy

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

A descriptive treatment of astronomical, optical, and radio telescopes; the Milky Way galaxies; the universe of galaxies; the origin of the universe and life in the universe. Laboratory demonstrations illustrate physical principles of the galactic system. **Prerequisite:** Grade C or higher in MTH070. Class fee \$8. **Sp**

PH211 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 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 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.

Offers a general survey of metaphysics, the study of the ultimate nature of reality. Emphasizes terms, theories, and an analysis of arguments in metaphysics. Serves as a foundation for other classes in philosophy, specifically Critical Thinking and Logic, Theory of Knowledge, and Elementary Ethics. **F, W, Sp, Sp**

PHL202 Philosophical Problems: Theory of Knowledge

3 class hrs/wk, 3 cr.

Focuses on the theory of knowledge, a central area in philosophy. Emphasizes terms, theories and the analysis of arguments. Introduces the nature of belief, the nature of truth, and the nature of justification. **W, Sp**

PHL203 Elementary Ethics

3 class hrs/wk, 3 cr.

Introduces ancient and modern theories of ethics with application to contemporary moral problems. Includes and applies theories to various social and personal dilemmas, and examines the strengths and weaknesses of standard arguments supporting them. Enables student to present personal philosophical and ethical views in an informed, passionate, and compassionate manner. **W, Sp**

PHL204 Critical Thinking and Logic

3 class hrs/wk, 3 cr.

Develops critical thinking to determine one's own and others' reasons for believing things and assessing those reasons. Provides the ability to sympathetically understand beliefs one does not share and the courage to subject one's own beliefs to scrutiny. Uses logic as the technique for the rational assessment of argument. Relates the formal reasons for the success or failure of arguments. **Offered as needed.**

PHL205 Biomedical Ethics

3 class hrs/wk, 3 cr.

Covers ethical decision-making in Western, Eastern, and non-traditional settings. Explores real-world health problems in light of historical and contemporary ethical theories. Analyzes professional ethical codes and obligations in order to identify the health care professional's special responsibilities in arriving at decisions which often have profound consequences. **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. 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.

Introduces U.S. state and local governments with emphasis on comparative political behavior in states and communities. Covers the political and institutional processes by which state and local governments make policy as well as the policy outputs themselves. **Offered as needed.**

PS205 International Relations

3 class hrs/wk, 3 cr.

An introduction to world politics. Deals with the nature of global conflict, nationalism, U.S. foreign policy, the role of multinational corporations in international decision making, North-South relations, and the mechanisms of conflict resolutions. Examines current global issues facing nation-states. **Offered as needed.**

PSY**PSYCHOLOGY****PSY100 Introduction to Psychology**

3 class hrs/wk, 3 cr.

Introduction to psychology. Includes perspectives in psychology; scientific methods of inquiry; biological foundations; sensation and perception; consciousness, learning, emotion, and motivation; personality theory; abnormal behavior; and therapeutic interventions. **F, W, Sp**

PSY101 Psychology of Human Relations

3 class hrs/wk, 3 cr.

Explores basic principles of psychology 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**

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 Human Potential Seminar

3 class hrs/wk, 3 cr.

Presents selected psychology theory concepts on the humanistic branch of psychology. Translates theory into practical application, and applies concepts for increasing self-determination, self-motivation, and self-affirmation to enhance life satisfaction and success. **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, psychological disorders, psychotherapy, social influence, 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.

Discusses theories, diagnosis and treatment of the major psychopathological syndromes. Covers specific disorders such as anxiety, depression, schizophrenia, psychophysiological disorders, personality disorders, and sexual variations and dysfunctions. Recommended that students take PSY201 prior to this course. **F, W, Sp**

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.**

RD

READING

See also Communication Skills, Study Skills Program.

RD090 College Textbook Reading

3 class hrs/wk, 3 cr.

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 author's purposes and strategies. Includes application of active reading skills to specific academic disciplines and career fields. **Prerequisite:** Recommendation of college placement test or consent of instructor. **F, W, Sp, Su**

RD115 Accelerated Reading Tactics 1

3 class hrs/wk, 3 cr.

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. Applies selected reading/study strategies to meet the reading demands in an academic setting. **Prerequisite:** Grade C or higher in RD090; recommendation of college placement test or consent of instructor. **F, W, Sp, Su**

RD116 Accelerated Reading Tactics 2

3 class hrs/wk, 3 cr.

Prepares students to become better critical readers and critical/creative thinkers. Focuses on reading discipline-specific materials with complex vocabulary, ideas, and structure. Includes use of online, traditional library, and computerized sources. Stresses synthesizing information to offer new perspectives, implications, insights, or consequences. **Prerequisite:** Grade of C or higher in RD115; recommendation of college placement test or consent of instructor. **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. Students will analyze the structure of arguments and their fallacies. **Prerequisite:** College placement score at or above RD115 or consent of instructor. **F, W, Sp**

RE

REAL ESTATE

RE156 Escrow Procedures

3 class hrs/wk, 3 cr.

Covers typical worksheets, forms, and procedures used by agents to conduct escrow procedures. Emphasizes the significance of the third party to real estate transactions. Includes preparation of documents required to be held on deposit between the seller and buyer until the terms of the contract are completely executed. **Prerequisite:** BA260, BA262. **Offered as needed.**

RE161 Basic Appraisal Principles and Practices

3 class hrs/wk, 3 cr.

Covers the theories, functions, and purposes of appraisal principles of valuation. Emphasizes cost factors, market and income approach techniques for determining condemnation, and insurance, loan, purchase, and sales values. Includes preparation of a residential property report. Satisfies the State of Oregon broker's license requirement for appraising. **Prerequisite:** BA260 or consent of instructor. **Offered as needed.**

RE162 Applied Residential Appraisal

3 class hrs/wk, 3 cr.

Focuses on the knowledgeable and professional use of U.R.A.R. forms. Presents and explains the appraisal products, techniques, and requirements demanded by institutional lenders and the secondary mortgage market. **Prerequisite:** RE161 and CS101. **Offered as needed.**

RE164 Income Property Appraisal Principles and Methodology

3 class hrs/wk, 3 cr.

Covers the methods and application of income property appraisal techniques using approaches to value determination, income capitalization, and reporting requirements. **Prerequisite:** RE161. **Offered as needed.**

RE168 Mass Appraising of Real Estate

3 class hrs/wk, 3 cr.

Focuses on Oregon's assessment program and appraisal standards. Includes the responsibilities of the county assessor and how mass appraisals are planned, organized, conducted, and evaluated. Meets the educational requirements for state registration. **Prerequisite:** RE161 or qualified appraisal experience. **Offered as needed.**

RE169 Elements of Design and Construction

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

Focuses on real estate design and construction terminology, architectural styles and building designs, material and labor requirements, building codes, and approximate cost estimating. Emphasizes application, labor methods, costs for representative types of construction, and site requirements. Covers the unit-in-place method of estimating. **Offered as needed.**

RE170 Zoning, Subdividing, and Community Planning

3 class hrs/wk, 3 cr.

Covers the zoning regulations, codes, restrictions, and procedures required in order to subdivide, upgrade, or change land use in the state of Oregon, county of Marion and city of Salem. Includes the cost related to developing property. **Prerequisite:** Second-year standing in Real Estate program or consent of instructor. **Offered as needed.**

RE171 Property Management

3 class hrs/wk, 3 cr.

Emphasizes residential landlord-tenant relationships, proper conduct of the firm under Oregon's property management license, owner/tenant relations, leasing procedures, and marketing and record keeping. Covers commercial and industrial leasing techniques, requirements, and expectations. **Offered as needed.**

RE263 Appraisal Report Writing

3 class hrs/wk, 3 cr.

Emphasizes methods of conveying written real estate appraisal information to the client and/or designated representative. Focuses on narrative forms of appraisal reports. Includes technical terminology, property descriptions, and estimates of value. **Prerequisite:** RE161, RE164, or consent of instructor. **Offered as needed.**

RE265 Applied Income Property Appraisal

3 class hrs/wk, 3 cr.

Focuses on methods and theories of income property appraisal techniques using indicators of value including GRM's, capitalization, and yields' rates to develop an income prop-

erty report. **Prerequisite:** RE164 or qualified appraisal experience. **Offered as needed.**

RE266 Uniform Standards of Professional Appraisal Practice (USPAP)

2 class hrs/wk, 2 cr.

Examines the Uniform Standards of Professional Appraisal Practice (USPAP) accepted by government, the public, and the appraisal industry. **Prerequisite:** RE161. **Offered as needed.**

RE267 Real Estate Investment Analysis

3 class hrs/wk, 3 cr.

Emphasizes analyzing commercial property to determine income and return on investment. Covers cash flow before and after taxes, mortgage retirement, and internal rate of return. **Prerequisite:** BA264. **Offered as needed.**

RE280 Cooperative Work Experience

See Cooperative Work Experience.

REL

RELIGION

REL201 Primitive and Far Eastern Religions

3 class hrs/wk, 3 cr.

Introduces the principal components of the dominant religions in the Far East - Hinduism, Buddhism, and Taoism. Traces the historical development, fundamental beliefs and practices, and recommended lifestyle of each. Includes how to study a religion. **F, W, Sp**

REL202 Near Eastern Religions

3 class hrs/wk, 3 cr.

Explores the principal components of the dominant monotheistic religions of the Near East - Judaism, Christianity, and Islam. Traces the historical development and fundamental beliefs and practices of each religion. **W**

REL203 American Religions

3 class hrs/wk, 3 cr.

Focuses on the dominant religions of America, both contemporary and historical. Examines the dynamic relation between American history and American faith traditions. **Sp**

RUS

RUSSIAN

RUS101, 102, 103 First Year Russian 1, 2, 3

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. Instructor and students use Russian as the primary language of class. **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 1, 2, 3

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 understanding of Russian culture. All classroom interaction (both by instructor and students) takes place in Russian. **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.

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.

Examines the nature, extent, causes, control, reaction, treatment, and rehabilitation of juvenile delinquency in contemporary American society from a sociological perspective. **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 hr/wk, 3 cr.

Survey of concepts, techniques, and approaches used in the social sciences for collecting and analyzing information scientifically. Covers a variety of procedures and strategies used in decision making and reporting information. **Offered as needed.**

SP

SPEECH

SP100 Introduction to Communication

3 class hrs/wk, 3 cr.

Surveys the areas of communication with emphasis on intrapersonal, interpersonal, group, and mass communication modes. **F, W, Sp**

SP111 Fundamentals of Public Speaking

3 class hrs/wk, 3 cr.

Covers preparation and delivery of public speeches with an emphasis on informative speaking. **F, W, Sp**

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**

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.**

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.**

SP218 Interpersonal Communication

3 class hrs/wk, 3 cr.

Introductory course in interpersonal, dyadic communication. Emphasizes increasing communication skills within personal and work settings. **F, W, Sp, Su**

SP219 Fundamentals of Small Group Communication

3 class hrs/wk, 3 cr.

Emphasizes communication skills to participate in team settings. Covers the characteristics of small groups, leadership and conflict management skills. **F, W, Sp**

SP229 Oral Interpretation

3 class hrs/wk, 3 cr.

Provides opportunities for students to explore literature through interpretive reading with emphasis on characterization, emotional response and analysis of literary structure and function. **Offered as needed.**

SPN

SPANISH

SPN101, 102, 103 First Year Spanish 1, 2, 3

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. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. **SPN101:** None; **SPN102:** SPN101, one year of high school Spanish, or consent of instructor; **SPN103:** SPN102, two years of high school Spanish, or consent of instructor. Class fee: \$2 each. **F, W, Sp, Su**

SPN111, 112, 113 Beginning Spanish Conversation 1, 2, 3

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. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. **SPN111:** None; **SPN112:** SPN111 or consent of instructor; **SPN113:** SPN112 or consent of instructor. Class fee \$2 each. **SPN111:** F; **SPN112:** W; **SPN113:** Sp

SPN121, 122, 123 Espanol para nativos (Spanish for Native Speakers) 1, 2, 3

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. **SPN121:** Native Spanish speaker. No previous college coursework in Spanish is required. However, students are expected to have had some contact with the written language; **SPN122:** SPN121 or consent of instructor; **SPN123:** SPN122 or consent of instructor. Class fee: \$2 each. **SPN121:** F; **SPN122:** W; **SPN123:** Sp

SPN150, 151 First Year Spanish, Accelerated- 1, 2

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 SPN101, 102, 103. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** **SPN150:** None. It is recommended that the student have had some experience studying a foreign language; **SPN151:** SPN150, one year of high school Spanish, or consent of instructor. Class fee \$3 each. **SPN150:** W; **SPN151:** Sp

SPN201, 202, 203 Second Year Spanish 1, 2, 3

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 understanding of Hispanic culture. All classroom interaction (both by instructor and students) takes place in Spanish. **Prerequisite:** These classes are to be taken sequentially. **SPN201:** SPN103, SPN123, three years of high school Spanish, or consent of instructor; **SPN202:** SPN201 or consent of instructor; **SPN203:** SPN202 or consent of instructor. Class fee \$2. **SPN201:** F; **SPN202:** W; **SPN203:** Sp or **SPN201-203: Summer Program in Ecuador.**

SPN211, 212, 213 Intermediate Spanish Conversation 1, 2, 3

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. All classroom interaction (both by instructor and students) takes place in Spanish. **Prerequisite:** These classes are to be taken sequentially. **SPN211:** SPN113, SPN102 or consent of instructor; **SPN212:** SPN211 or consent of instructor. **SPN213:** SPN212 or consent of instructor. Class fee \$2 each. **SPN211:** F; **SPN212:** W; **SPN213:** 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 projects 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.**

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.**

SSP

STUDY SKILLS PROGRAM

See also Reading.

SSP013A,B,C Phonics for Spelling

1 class hrs/wk, 1 cr. each

Provides instruction in phonetic principles and syllabication as an aid to spelling. In addition, students will master personal spelling lists. **Prerequisite:** Score 26 or below on in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP014A,B,C Spelling Rules

1 class hr/wk, 1 cr. each

Provides individualized instruction which includes rules of spelling and exceptions to the rules, as well as practice in pronunciation, writing of sentences and development of a personal spelling list. Spelling rules include use of final e, apostrophes and ie/ei. **Prerequisite:** Score 27 or above on in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP015A,B,C Vocabulary Building

1 class hr/wk, 1 cr each

Focuses on improving vocabulary by learning strategies for remembering new words. Determine the meanings of new words by using context clues, word parts (prefix, suffix, root) and word history. Relates these strategies to the terminology in college textbooks. **Prerequisite:** College placement score at or above RD090 or consent of instructor. **F, W, Sp, Su**

SSP030A,B,C Advanced Vocabulary Building

1 class hr/wk, 1 cr. each

Provides instruction in vocabulary analysis in order to increase general and/or technical vocabulary. A one-credit option applies word-part strategies in medical terminology. **Prerequisite:** SSP015A, B, C, or consent of instructor. **F, W, Sp, Su**

SSP051 Studying for College

3 class hrs/wk, 3 cr.

Focuses on implementing positive changes in behavior for pre-program technical students who feel challenged in getting organized and studying effectively. Provides strategies for learning effectively in a college setting. **F, offered as needed.**

SSP101 Creating College Success

3 class hrs/wk, 3 cr.

Presents strategies which contribute to success in 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**

SSP112 Study Skills

3 class hrs/wk, 3 cr.

Develops practical and efficient strategies for learning in order to succeed in college. Focuses on note-taking, listening, textbook study-reading, and time management. Covers test-taking skills, test anxiety, concentration, and memory strategies. Identifies campus resources and learning styles. **Prerequisite:** Reading placement test score at or above RD090 or consent of instructor. **F, W, Sp, Su**

ST

OCCUPATIONAL SKILLS TRAINING

ST050A-P Occupational Skills Training

40-180 lab hrs/term, variable 1-15 cr. per term

Primary component course for a site-based, short-term training program. Student receives instruction at a work site based on an individualized curriculum developed to meet student needs and skill requirements of the chosen occupation. Student must meet with an OST staff member to determine training objectives, site and curriculum. Tuition is based on number of hours working on-site. See information in the Programs of Study section of this catalog for costs and pertinent information regarding enrollment and non-credit options. **F, W, Sp, Su**

TA

THEATER ARTS

TA110 Introduction to Theater

3 class hrs/wk, 3 cr.

Covers performance interpretation using a range of mediums for presenting plays. The focus is on the student identification of dramatic conflict and on their interpretation using the current and historic symbolic language of the stage. **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. Presents 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

3-9 class hrs/wk, 1-3 cr.

Emphasizes participation on a production team for the creation, development, rehearsal, construction and performance of a theatrical production. Course may be repeated for a maximum of 10 credits. Course hours to be determined by instructor. **Offered as needed.**

TA286 Technical Theater

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

Introduces the fundamental skills in stagecraft to mount small productions and events. Covers scenery construction, safe operation of theatrical rigging, and the care, handling, and operation of lighting and sound equipment. Incorporates the skills needed for crew and house- management work. Course may be repeated for a maximum of six credits. **Offered as needed.**

TA287 Technical Theater Production

6 lab hrs/wk, 2 cr.

Prepares students to function as members of the technical production and event crews for the auditorium and to continue to develop the skills and abilities learned in TA286. Course may be repeated for a maximum of six credits. **Prerequisite:** TA286 or consent of instructor. **Offered as needed.**

VC

VISUAL COMMUNICATIONS

See also Art.

VC080A Introduction to Visual Communications

1 class hr/wk, 1 cr.

Overview of the graphic arts and the Visual Communications Program. Required for all Visual Communication students. **Prerequisite:** Assessment for the Visual Communications program; enrolled as Visual Communications pre-program student. **Offered as needed.**

VC080B Introduction to Graphic Processes

1 class hr/wk, 1 cr.

Overview of the traditional graphic arts processes. **Prerequisite:** Assessment for the Visual Communications program; enrolled as Visual Communications pre-program student. Class fee \$5. **Offered as needed.**

VC080C Introduction to Macintosh Graphics

1 class hr/wk, 1 cr.

Overview of the Macintosh Operating System for those familiar with a PC environment or for those whose knowledge of the Macintosh is self-taught or incomplete. **Prerequisite:** Assessment for the Visual Communications program; enrolled as Visual Communications pre-program student. Class fee \$5. **Offered as needed.**

VC100 Special Topics in Visual Communications

1 class hr/wk, 1 cr.

Topics will change each term and may include graphics software, papers and inks, and web page design. Course may be repeated for a maximum of six credits. Class fee \$5. **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:** CA100 or equivalent and touch keyboarding ability 25 words per minute and enrollment in the Visual Communications program. Class fee \$15. **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 \$15. **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 \$15. **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:** Computer experience or VC114. Class fee \$10. **F, 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, computer experience. Class fee \$10. **Offered as needed.**

VC133 Page Layout with QuarkXPress

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

Uses QuarkXPress to produce basic page layouts to industry standards. **Prerequisite:** VC114 or computer experience. Class fee \$10. **Offered as needed.**

VC137 Web Graphics 1

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

Covers PhotoShop for the Web and develops the techniques and skills needed to create, edit, save, and post images on the World Wide Web. **Prerequisite:** 1. Previous computer experience; 2. Basic Internet browsing experience; 3. VC130 or equivalent experience. Class fee \$10. **F, offered as needed.**

VC138 Web Graphics 2

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

Advanced graphic techniques for the Web. **Prerequisite:** VC137 or consent of instructor; Class fee \$10. **W, 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.**

VC145 Print Production 1

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

Introduces prepress and press production methods including image assembly, proofing, platemaking, and press and bindery operations. **Prerequisite:** 1. Admission into the Visual Communications program; 2. Successful completion of VC111 and VC114. Class fee \$35. **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. **Prerequisite:** VC111, VC114, ART261 or concurrent enrollment and enrollment in the Visual Communications program. Class fee \$25. **Offered as needed.**

VC171-174 Special Projects

Variable hours and 1-4 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. Class fee VC171: \$5; VC172: \$10; VC173: \$15; VC174: \$20. **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. Class fee \$5. **W, offered as needed.**

VC184 Portfolio Preparation

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

Capstone 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 \$40. **Sp**

VC200 Advanced Topics in Visual Communications

1 class hr/wk, 1 cr.

Offers a variable format discussion and demonstration class for students enrolled in the Visual Communications program. Different topics each term, for example: trapping, freelance work, preflighting, graphics software, papers and inks, web page design, or the exploration of new software. Course may be repeated for a maximum of six credits. **Prerequisite:** Second-year standing in the Visual Communications program or equivalent experience required by topic. Class fee \$10. **Offered as needed.**

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 page layout and production with an emphasis on the use of process colors. **Prerequisite:** VC121 and VC122, and second-year standing in the Visual Communications program. Class fee \$15. **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 with an emphasis on publication design. **Prerequisite:** VC221 and second-year standing in the Visual Communications program. Class fee \$15. **W, offered as needed.**

VC230 Painter

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

Offers hands-on computer painting and drawing using MetaCreations Painter. **Prerequisite:** Demonstrated ability to work with computers. Class fee \$20. **Offered as needed.**

VC232 Web Photography

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

Combines traditional photographic skills with digitizing, manipulating, and displaying images on the Internet. **Offered as needed.**

VC237 Web Design 1

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

Develops the techniques and skills needed to plan and create basic pages for the World Wide Web. **Prerequisite:** CS178I, VC130 or VC151 or equivalent, and computing and browsing basics. Class fee \$20. **F, offered as needed.**

VC238 Web Design 2

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

Continues to develop the techniques and skills needed to plan and create basic pages for the World Wide Web. **Prerequisite:** VC137 and VC237. Class fee \$20. **W, offered as needed.**

VC245 Print Production 2

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

Continues work in the basic skills of digital prepress. Multi-color work will be emphasized. **Prerequisite:** VC145 and second-year standing in the Visual Communications program. Class fee \$35. **Offered as needed.**

VC246 File Prep

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

Builds knowledge of readying digital files for film output and printing. Presents common file problems and their solutions. **Prerequisite:** Second-year status in the Visual Communications program or equivalent work experience. Working knowledge of the MAC Operating System, PhotoShop, and QuarkXPress. Class fee \$20. **Offered as needed.**

VC251 Electronic Imaging 2

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

Continues work in color correction and photo manipulation on the Macintosh. Work includes electronic imagesetting and film processor operation. **Prerequisite:** VC151. Class fee \$25. **F, offered as needed.**

VC271-279 Studio Practices

1 class and 0-8 lab hrs/wk, for variable 1-9 credits

Offers the opportunity to work with an instructor on the production of live jobs. **Prerequisite:** Second-year status in the Visual Communications program. Class fee \$5 per credit. **Offered as needed.**

VC280 Cooperative Work Experience

See Cooperative Work Experience.

VMW

VINEYARD

MANAGEMENT/WINEMAKING

VMW101 General Viticulture

3 class hrs/wk, 3 cr.

Introduces grape growing. Covers botany, fruiting and rootstock cultivars; anatomy and physiology; history and distribution of grapes; vine classification; world growing areas, including latitude, climate and soils; and common diseases and pests. **F, W, Sp**

VMW105 Spanish in the Vineyard

3 class hrs/wk, 3 cr.

Covers practical Spanish terms and phrases specific to viticulture work. Surveys cultural

information about Spanish speaking people. Includes pronunciation, technical vocabulary, greetings and basic grammar. No prior knowledge of Spanish is necessary. **W**

VMW110 Fall Vineyard Practices

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

Surveys fall vineyard management practices. Focuses on harvest practices, harvest contracts, and ripening parameters. Compares different ripening characteristics for a variety of clones and rootstocks. Covers fall canopy management, disease problems, and weather effects on ripening. Class fee \$8. **F**

VMW111 Winter Vineyard Practices

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

Surveys winter vineyard management practices. Covers training, pruning, propagation, bench grafting and simple trellis designs. Class fee \$43. **W**

VMW112 Spring Vineyard Practices

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

Surveys spring vineyard management practices. Focuses on preparing a vineyard site for planting, spring canopy management and other site issues. Covers pest and disease control. Class fee \$8. **Sp**

VMW113 Summer Vineyard Practices

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

Surveys summer vineyard management practices. Covers planting, training of young vines, disease and weed control, canopy and vineyard floor management, and nutritional applications. Class fee \$8. **Su**

VMW121 Wine Production 1

3 class hrs/wk, 3 cr.

Surveys basic winemaking principles and production practices. Covers purchase and selection of grapes, maturity analysis, harvest operations, grape processing, must preparation, yeast microbiology, fermentation and pressing. **Prerequisite:** Student must be 21 years of age. **W**

VMW131 Wine Appreciation

3 class hrs/wk, 3 cr.

Introduces wine appreciation. Includes grape varieties; wine types; sensory distinctions; food and wine combinations and the sensory evaluation of wines. **Prerequisite:** Student must be 21 years of age. Class fee \$50. **F, W, Sp**

VMW132 Wines of the World

3 class hrs/wk, 3 cr.

Introduces wines and the wine producing regions of the world. Focuses on viticultural practices and winemaking styles. Covers the influence of wine on literature, history, the economy and religion. **Prerequisite:** VMW131 or consent of instructor. Student must be 21 years of age. Class fee \$50. **W**

VMW133 Cool Climate Wines

3 class hrs/wk, 3 cr.

Introduces cool climate wine producing regions of the world and sensory evaluation of representative wines. Includes viticulture practices and winemaking styles. Covers how wine reflects geography. **Prerequisite:**

VMW131 or consent of instructor. Student must be 21 years of age. Class fee \$65. **Sp**

VMW221 Wine Production 2

3 class hrs/wk, 3 cr.

Covers practical winemaking chemistry, theory and technique. Includes fermentation microbe selection and parameters; malo-lactic fermentation; browning, fining and stabilization; filtration; and spoilage organisms. Considers bottling practices, experimental design and other wine types. **Prerequisite:** VMW121 or consent of instructor. Student must be 21 years of age. **Sp**

VMW232 Sensory Evaluation of Wine

3 class hrs/wk, 3 cr.

Focuses on advanced wine evaluation through sensory methods. Covers statistical analysis of trials, distinguishing wine styles, identification of wine faults and wine judging methods. **Prerequisite:** VMW121 and VMW131 or consent of instructor. Student must be 21 years of age. Class fee \$65. **Sp**

VMW241 Winery Operations 1

3 class and 14 lab hrs/wk, 10 cr.

Introduces the fundamentals of commercial winery operations. Covers equipment operation and maintenance, sanitation and safety practices. Includes use of laboratory data. **Prerequisite:** Consent of instructor. Student must be 21 years of age. **F**

VMW242 Winery Operations 2

6 lab hrs/wk, 2 cr.

Continues the fundamentals of commercial winery operations. Covers equipment operation and maintenance, sanitation and safety. Includes wine racking, fining and aging. **Prerequisite:** Consent of instructor. Student must be 21 years of age. **W**

VMW243 Winery Operations 3

6 lab hrs/wk, 2 cr.

Fundamentals of commercial winery operations. Covers equipment operation and maintenance, sanitation and safety. Includes wine aging, storage and bottling. **Prerequisite:** Consent of instructor. Student must be 21 years of age. **Sp**

VMW250 Agricultural Supervisor Training

4 class hrs/wk, 4 cr.

Emphasizes skills needed for supervision in agricultural settings. Covers confidence and esteem building; decision making; communication; leadership and management; and legal and safety issues. **Sp**

VMW251 Winery Management

3 class hrs/wk, 3 cr.

Introduces winery management practices. Covers annual plans; budgets; winery development; labor management; contracts; legal compliance; record keeping; and problem solving. **Sp**

VMW252 Vineyard Management

3 class hrs/wk, 3 cr.

Introduces vineyard management practices. Covers annual plans; budgets; vineyard development; labor management; contracts;

legal compliance; record keeping; and problem solving. **Sp**

VMW260 Soil and Plant Nutrition

4 class hrs/wk, 4 cr.

Introduces basic principles of soil science. Emphasizes grapevine mineral nutrition and the relationship of water and soils. Covers soil conservation and improvement. **Sp**

VMW261 Vine Physiology

4 class hrs/wk, 4 cr.

Introduces the anatomy, physiology and growth habits of grapevines. Covers plant processes responsible for patterns of growth, yield, and fruit quality in wine grapes in the context of common viticulture practices. **W**

VMW280A-L Cooperative Work Experience

See Cooperative Work Experience.

WFB

WELDING FABRICATION

WFB087 Fabrication Practices 3

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 4

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 Cooperative Work Experience.

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 proce-

dures. 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) 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.

Introduces basic skills in semiautomatic metal inert gas (MIG) welding processes. Covers principles involved in equipment, material and procedures, combined with demonstrations and supervised practical experience, using standard industrial equipment. Uses solid and flux-core 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.

Builds upon WLD061 and includes a study of and practice in welding of carbon steel. Emphasizes production in welding situations, using large diameter electrodes (solid and flux-cord) 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 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. Class fee \$20. **Offered as needed.**

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. **Prerequisite:** Current enrollment in manufacturing program or consent of program chair. **Sp**

WLD081 Welding Metallurgy 1

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 2

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 Cooperative Work Experience.

WR

WRITING

See also Study Skills Program.

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. Class fee \$2. **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, workplace visitations, and therefore blends observations with research and the writer's own opinions. **Prerequisite:** WR090 or equivalent as determined by the instructor. Class fee \$2. **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.

Emphasizes clear, detailed informative writing, clear thinking and active reading. **Prerequisite:** Ability to organize thoughts and competency in standard written English, as demonstrated by: (a) standard placement test or (b) successful completion of WR115 or (c) COM051. Class fee \$2. **F, W, Sp, Su**

WR122 English Composition-Logic and Style

3 class hrs/wk, 3 cr.

Focuses on the writing of 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. each

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; WR242: W; WR243: Sp**

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 positive, 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. Principles and concepts studied in ZOO201 will be applied to the study of the invertebrates. 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. 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—Edward Dodson

Zone Two—Marilyn Crouser

Zone Three—JoAnne Beilke

Zone Four—Dan Ostlund

Zone Five—Tom Marks

Zone Six—Gerald Watson

Zone Seven—Gwen VanDenBosch

Staff as of June, 2001

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
Agee, Steve—Instructor, Automotive Technology
Alfaqeeh, Nuri—Instructor, Mathematics
Alvarez, Maria (Cleo)—Counselor
Anderson, D. Craig—Director, Agriculture Program
Anderson, Gwen Ellyn—Counselor, Life Skills
Anderson, Kenneth—Program Chair, Mathematics
Andrea, Ara—Instructor, Forest Resources Technology
Andrews, Peggy—Instructor, Emergency Medical Technology
Annen, Jerome—Instructor, ESL/ABE
Antoine, Patricia—Instructor, Criminal Justice
Ashe, Barbara—Instructor, Corrections Education
Asher, Greg—Instructor, Psychology

B

Balyo, Mike—Instructor, History
Bannon, David—Instructor, Physical Science
Barber, Wayne—Instructor, Mathematics
Bassett-Smith, Ron—Director, Workforce Integration
Bates, Michael—Instructor, Computer Science
Beard, Tanya—Instructor, Corrections Education
Beaufait, Dorothy—Instructor, Mathematics
Beck, Sally—Instructor, Adult Basic Education and GED
Beebe, Janell—Instructor, Business Technology
Behmard, Sheeny—Instructor, Mathematics
Beigh, Marybelle—Instructor, Electronics
Bennett-Connolly, Gerri—Coordinator, Occupational Skills Training
Benson, June—Instructor, Adult Basic Education and GED
Berman, Arthur—Program Chair, Accounting and Management
Bibler, Rob—Program Chair and Instructor, Art; Instructor, Film Studies
Blodget, James—Specialist, Media Production
Bode, Betty—Program Chair, Medical Office Assisting
Bohlander, Susan—Instructor, Business Technology
Bone, Andrew—Instructor, Accounting
Booth, Karleen—Coordinator, Occupational Skills Training
Borden, Tiffany—Counselor
Bothwell, Bruce—Instructor, Electronics
Bowman, Roberta—Program Chair, Deaf Services and Study Skills and American Sign Language
Boyington, Gary—Program Chair, Electronics, Network Technology
Brase, Don—Program Chair, Communication Skills, Writing

Brooks, W. David—Instructor, Accounting
Brummond, Candis—Counselor
Buchanan, Mary Ann—Instructor, ABE/GED
Burns, Barbara—Instructor, Nursing
Bush, Lori—Project Specialist, JOBS Program
Byers, E. Maxine—Instructor, Study Skills
Bynum, Randall—Instructor, Speech

C

Cammack, Janice—Instructor, Physical Science
Campbell, Kathy—Director, Financial Aid
Campbell, Lorraine—Coordinator, Family Resource Center
Canoy, David—Instructor, Corrections Education
Carnegie, Kay—Team Coordinator, Nursing
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
Cortes-Garcia, Juan—Instructor, ABE/GED
Cox, David—Instructor, Corrections Specialist
Crandall, Sondra—Instructor, Public Speaking and Composition
Craven, Linda—Instructor, Early Childhood Education
Creelan, Tom—Instructor, Art
Crossler-Laird, Janice—Instructor, English as a Second Language
Cudmore, Wynn—Instructor, Life Science
Cullison, Joanne—Instructor, Study Skills
Culveyhouse, James—Instructor, Training and Economic Development
Currin, Cynthia—Program Coordinator, Workforce Integration

D

Darby, Sydney—Instructor, English
Davidson, Mollie—Program Chair, Human Services
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—Coordinator, Disability Services
Duncan, Nancy—Coordinator, Hospitality Programs
Dunn, Tim—Program Chair, Forest Resources Technology
Dutch, Donald—Instructor, Corrections Education

E

Edge, Barbara—Coordinator, Grants Development
Edholm, Len—Counselor
Edwards, Karen—Instructor, Business and Management
Ehlers, Deborah—Instructor and Counselor, Life Skills
Elegant, Ann—Instructor and Counselor, Life Skills
Elias, Marilyn—Program Chair, Nursing
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

Falkenstein, John—Project Coordinator
Farjami, Javad—Instructor, Electronics
Ferguson, Mark—Instructor, Mathematics
Ferry, Marjorie—Instructor, English
Finholt, James—Instructor, Computer Science
Fish, Susan—Director, Developmental Education
Fisher, Gene—Program Chair, Fire Protection
Fishfader, Randy—Instructor, Early Childhood Education
Fleming, Vickie—Director, Mid-Willamette Education Consortium
Florence, William—Instructor, Journalism;
Adviser, Student Newspaper
Ford, Edward—Program Chair, Health and Physical Education
Forest, Jacques—Instructor, Economics
Forslund, Larry—Instructor, Life Science
Frank, Andrew—Instructor, Physical Science and Geology
Franklin, Harvey—Director, Woodburn Campus
Frey, Phil—Manager, Auxiliary Services
Furr, William—Program Chair, Alternative High School

G

Gerard, Kay—Instructor, English as a Second Language
Gilbert, Jeremy—Instructor, Psychology
Gillette, David—Instructor, Mathematics
Glaser, Adam—Instructor, Emergency Medical Technology
Glennon, Barbara—Instructor, Nursing
Gohaidan, Carol Ann—Instructor, English as a Second Language
Goulard, Liz—Vice President, Chief Academic Officer
Graham, Jerry—Instructor, Adult Basic Education
Green, Constance—Dean, Chief Information Officer

H

Hanby, Stephen—Instructor, Welding Technology
Hardesty, David—Instructor, ABE/GED
Hare, Nancy—Program Chair, Clerical Technology
and Office Occupations
Harmon, Millie—Instructor, Sociology
Harvey, Jean—Program Chair, Alternative High School
Hassoun, Judith—Counselor, Life Skills
Hawkins, John—Executive Director, Chemeketa Foundation
Heater, Steven—Instructor, Welding Technology
Hilgemann, Vickie—Program Chair, Humanities
Hillyer, Rebecca—Instructor, Business Management
Hirt, Donna—Instructor, Human Services
Hodges, Gary—Instructor, Automotive Technology
Hodgson, Tracie—Instructor, History
Holmes, Darrel—Program Chair, Building Inspection
Hoobler, Tony—Instructor, Physical Science
Hopkins, Susan—Instructor, Developmental Education
Horn, Terry—Director, Business Management
and Health Services Management
Howard, Jeffrey—Instructor, Deaf and Hearing Impaired
Hudson, Meredith—Instructor, Nursing
Hulett, Ronald—Director, Training & Economic Development
Programs
Hunter, Jeri—Director, Enrollment Services
Hunter, Robert—Manager, Computer Services

I

Irving, Jan—Program Chair, Nursing
Ivey, Marion—Instructor, Custodial/Building Maintenance

J

Jacobson, Lee—Instructor, Art
Jantzi, Ron—Director, Trades and Technologies
Jasper, Sally—Program Chair, Nursing
Johnson, Robert—Program Chair, Computer Science
Jones, Anetta—Instructor, Business Technology

Jones, Lee—Instructor, Mathematics
Jordan, Carol—Program Chair, Business Technology

K

Kalb, David—Instructor, Automotive Technology
Kelly, Mike—Instructor, Architectural Drafting
Kelly, Susie—Coordinator, National Science Foundation
Kennedy, Tammy—Instructor, Corrections Education
Kizziah, John—Instructor, Welding Technology
Knab, Bernard—Director, Humanities, Communications and Social
Sciences
Knowles, Wayne—Instructor, Visual Communication
Koch, Alan—Director, College Advancement
Krahn, Greta—Coordinator, Institute for Learning in Retirement
Kuhn, Gary—Coordinator, Cooperative Work Experience
Kurz, Sandra—Instructor, Health and Physical Education

L

Lacy-Tang, Jean—Counselor
Lander, Gregg—Program Chair, Emergency Medical Technology
Lang, William—Counselor
Lavine, Phil—Instructor, Farm Business Management
Lazzara, Edward—Program Chair, Foreign Languages
Leonard, Phyllis—Instructor, Mathematics
LeRoy, Robert—Instructor, Composition and Literature
Libbon, George—Athletic Director; Instructor,
Health and Physical Education
Lightfoot, Dick—Coordinator, Career Center – Newberg
Linder, Christine—Program Chair, Visual Communications
Longshore, Glen—Specialist, Media Production
Lorenz, Virgie—Instructor, Inmate Education

M

MacDonald, Al—Instructor, Vineyard Management
MacDonald, Lucy—Instructor, Study Skills
MacInnes, Patricia—Instructor, Inmate Education
Mack, Johnny—Interim Director, Emergency Services,
Criminal Justice
Malone, Patricia—Instructor, Business Technology
Marckx, Elaine—Instructor, Nursing
Martin, Joel—Counselor
McCrary, Kelola—Instructor, ABE/GED
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
Menk, Keith—Director, Human Resources and Payroll
Merola, Joseph—Instructor, Visual Communications
Meyers, Dianne—Instructor, Nursing
Michels, John—Instructor, Mathematics
Miller, Mark—Instructor, Engineering and Math
Miller, Selania—Coordinator, Career Center—Santiam Campus
Mock, John—Instructor, Composition and Literature
Mohn-Brown, Elaine—Instructor, Nursing
Monson, Bryan—Program Chair, Business Technology, Woodburn
Campus
Moothart, Janine—Director, Santiam Campus
Morgan, Micheal—Dean, Campus-Based Instruction
Moxley, Doug—Coordinator, Institutional Effectiveness
Murphy, Lori—Director, Corrections Education, Early Childhood,
Education and Human Services
Murray, Susan—Instructor, High School Completion

N

Newton, Kristi—Instructor, Business and Management
Newton, Ronald—Instructor, Civil Engineering
Nichols, Van—Program Chair, College Transfer Engineering, Drafting Technology, and Civil-Structural Engineering Technology
Niebuurt, Kathleen—Instructor, Nursing
Nubile, Barbara—Team Coordinator, Nursing Skills Lab
Nunez, Ellen—Instructor, Cognitive Skills

O

O'Hara, Rick—Instructor, Life Science
Olheiser, Dean—Instructor, Automotive Technology
Ottaway, Carol—Program Chair, Business Education, Dallas Campus

P

Page, Fran—Director, New Workforce
Parker, Andrew—Instructor, Inmate Education
Parmeter, Stanton—Instructor, Life Science
Pearcy, Diana—Instructor, Corrections Education
Perkins, Ruth—Instructor, Corrections Education
Peters, Julie—Program Chair, Structural Drafting
Pillette-Stephens, Debra—Program Chair, Criminal Justice
Pink, Peg—Instructor, Inmate Education
Pintler, Michael—Program Chair, Welding Technology and Manufacturing
Plett, John—Director, McMinnville Campus
Poston, Susan—Program Chair, Mathematics
Pratt, Betty—Instructor, Financial Services
Prentice, Cynthia—Program Chair, Life Science
Prothero, Marilyn—Instructor, English as a Second Language

R

Radtke, Lee—Instructor, Corrections Education
Rasmussen, Douglas—Instructor, Mathematics
Rediski, Mark—Instructor, Education
Reed, Marilyn—Coordinator, Evening On-Campus and Apprenticeship Programs
Richardson, Steve—Instructor, Writing and Literature
Roelofs, Gary—Instructor, English as a Second Language
Rosen, Lois—Instructor, English as a Second Language

S

Salgado, Monica—Program Chair, Adult Basic Education
Salinas-Oliveros, Rebecca—Coordinator, Cooperative Work Experience
Sansone, Steve—Instructor, Health and Physical Education
Saxowsky, Gail—Instructor, Emergency Medical Technology
Scherf, Joan—Director, Dallas Campus
Schuetz, Gretchen—President
Scott, Janet—Director, Distance Learning
Sekafetz, Charles—Instructor, Electronics
Sessions, Patricia—Instructor, Business Technology
Skirvin, Charles—Counselor
Slemenda, Steve—Instructor, Composition and Literature
Slosser, Joseph—Instructor, Psychology
Smith, Craig—Vice President, Chief Financial Officer
Smith, Ronnie—Instructor, Inmate Education
Soliday, Peggy—Instructor, Human Services
Sprenger, John—Instructor, Adult Basic Education
Stam, Bruce—Program Chair, Early Childhood Education
Steiner, Ann—Instructor, Adult Basic Education and GED
Steiner, Jerry—Executive Dean
Stevens, Malia—Instructor, Education
Stillinger, Ken—Coordinator, Career Center
Stubbs, Dina—Instructor, Nursing

Suter, Marcia—Instructor, English, Writing, and Literature
Suter, Paul—Instructor, Writing and Literature
Swan, Tani—Instructor, Inmate Education
Swearingen, Dell—Director, Science, Mathematics, Electronics, Physical Education and athletics
Swenson, David—Instructor, Computer Science

T

Tardaewether, Virginia—Instructor/Coordinator, ABE/GED
Thorp, Anne—Instructor, Adult Basic Education and GED Downtown Learning Center
Troupe, Count—Instructor, Developmental Education and Cognitive Skills
Truesdell, Joanne—Dean, Student Development and Learning Resources
Turner, James—Instructor, Alternative High School

U

Urban, Wanda—Instructor, Human Services
Ure, Douglas—Program Chair, Life Science

V

Valdivia, Armandina—Instructor/Coordinator, ESL/ABE
Vaughn, Joyce—Instructor, Dental Assisting
Veldhuisen, Kathleen—Reference Librarian
Veliz, Anthony—Director, Camp and Trio
Vessello, Jerry—Director, Facilities and Operations
Villegas, Elias—Coordinator, High School Equivalency
Vogel, Allan—Instructor, Life Science
Vollmar, Lorene—Program Chair, Dental Assisting

W

Wachal, Ken—Program Chair, Real Estate
Wahner, Royal—Instructor, Manufacturing and Drafting Technology
Walker, Julie—Director, Business Services
Ward, H. Jill—Director, Counseling and Career Services
Waring, Pam—Coordinator, Cooperative Work Experience
Warren, John—Instructor and Counselor, Life Skills
Wasson, Barbara—Instructor, Study Skills Program
Wetle, Victoria—Program Chair, Health Services Management
Wheeler, Claire—Program Chair, Developmental Education
White, Roger—Instructor, Electronics
Whitney, John—Instructor, English as a Second Language
Whitton, Louanne—Coordinator, Opportunity Center
Whyte, Catherine—Program Chair, Education
Wieczorek, Emily—Instructor, Health Services Management
Wigginton, Barbara—Instructor, 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—Instructor, Computer Science
Wolfe, Steven—Instructor, Geography

Y

York, Robin—Instructor, Developmental Education

Z

Zolkoske, Gary—Program Chair, 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 possess any firearm, or knife with a blade exceeding four inches, or illegal weapon (see ORS Chapter 166), with or without a concealed weapon permit.
 - 2.5.3 Students shall not abuse alcohol or other drugs.
 - 2.5.4 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 Guidelines.
 - 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 perceived treatment, members of the Chemeketa community are encouraged to seek resolution directly with the individual with whom the conflict exists or his/her supervisor. If the issue involves alleged discrimination or harassment, the college's Affirmative Action Officer 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 individual's supervisor or appropriate dean should be contacted.
- 4.3 The dean has multiple informal processes to assist in resolving 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 staff trained in dispute 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 conflict resolution team, especially designed to achieve resolution. The team will be composed of members who are approved by the parties involved in the dispute.
 - 4.2.4 The dean may conduct an investigation of the situation to achieve resolution.
- 4.4 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.

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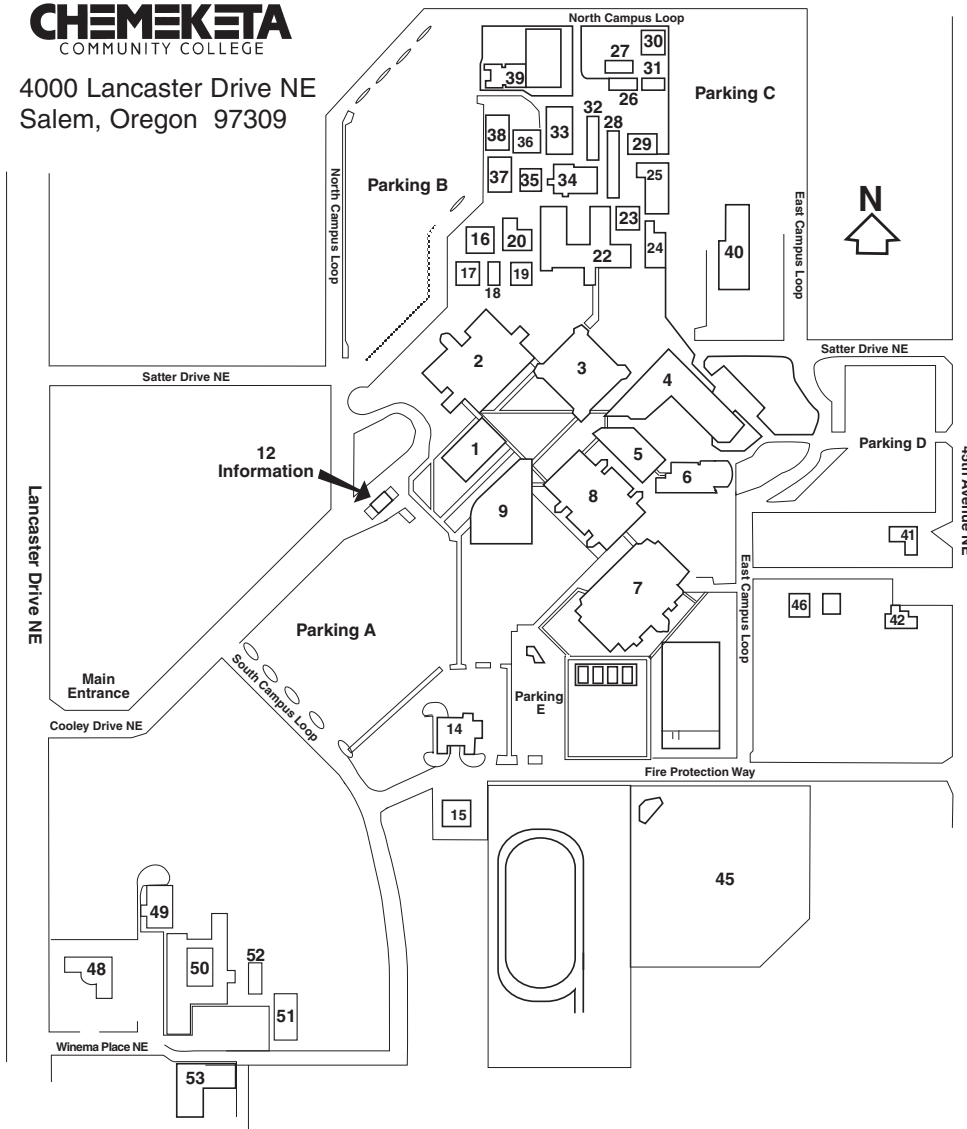
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Campus Map Legend

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2. Counseling Services, Business Office, Financial Aid, Personnel, President's Office, College Advancement, Purchasing, Registrar's Office, Student Records (Admissions) Office, Tutoring, Food Court, Disability Services, Cooperative Work Experience, Placement Resource Center
3. General classrooms, Math lab, Student Life Office
4. Technical Skills classrooms, Crossroads Cafe
5. Technical Skills and Art classrooms
6. Technology Classroom Building, Computer Lab
7. Physical Education, Gym
8. Science and Allied Health classrooms and labs
9. Learning Resource Center
12. Information and Public Safety
14. Fire Station
15. Emergency Operations and Research Facility
16. Developmental Education, Volunteer Tutor Program, Literacy Program
17. TRIO Mentor program and CAMP program
18. Classrooms
19. Classrooms
20. New Workforce Resource Center, Occupational Skills Training
22. Information Technology, ABE/GED/ESL classrooms
23. Life Skills classroom
24. Machine Shop
25. Welding Shop
26. Classrooms A-B
27. Classrooms A-B
28. Classrooms A-F
29. Staff offices and classroom
30. Classrooms
31. Classroom
32. Classrooms A-F
33. Mailing, Receiving, C Copy Plus
34. Food Service Offices & Meeting Rooms
35. Writing Center and classrooms
36. Staff offices
37. Staff offices
38. Staff offices
39. Child Development Center
40. Maintenance/Facilities Services
41. Classrooms
42. Vacant
45. Activity Field
46. Greenhouse
48. Office Building (MaPS), JOBS Program
Winema Career Center, Life Skills Center
Workforce Integration, Mid Willamette Workforce Network
49. Northwest Center (PSU/Linfield)
50. Classrooms, High School Completion, Extended Learning, Farm Business Mgmt., Apprenticeship, Family Resource Center, Chemeketa Community Child Care Center
51. Construction Skills
52. Classrooms
53. Adult and Family Services (state offices)



How to get there...

