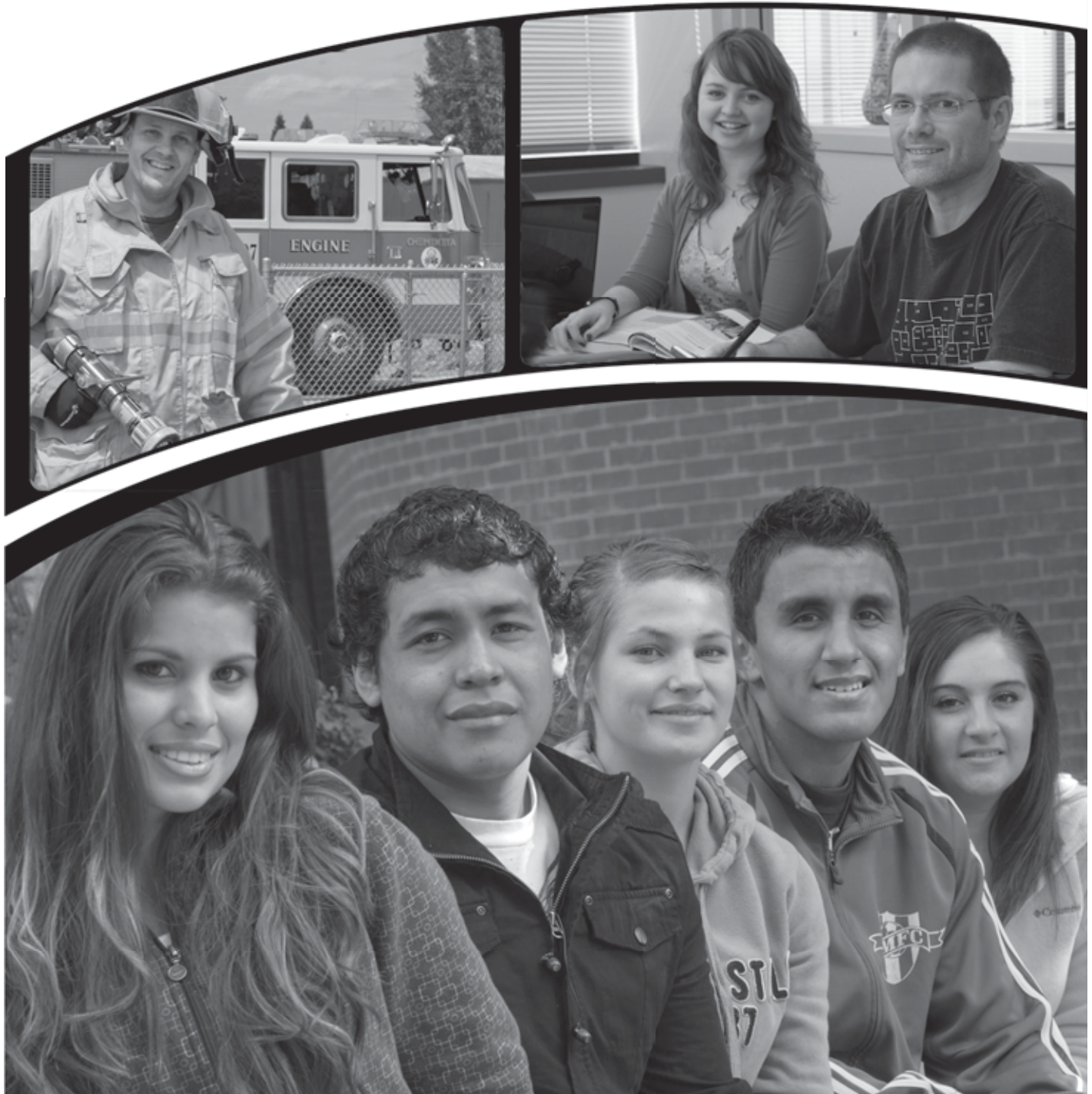


2011–2012 Chemeketa Community College Catalog



Chemeketa Community College Catalog 2011-2012



Area contact information

Admissions	503.399.5006
admissions@chemeketa.edu	
Advising and Counseling	503.399.5120
advising@chemeketa.edu	
Bookstore	503.399.5131
bookstore@chemeketa.edu	
Business Services, Cashier.....	503.399.5011
businessservices@chemeketa.edu	
Cooperative Work Experience	503.399.5028
cwe@chemeketa.edu	
Community Education.....	503.365.4773
CEInfo@chemeketa.edu	
Copy Center.....	503.399.5166
copycenter@chemeketa.edu	
Disability Services Voice and TTY Access	503.399.5192
disability@chemeketa.edu	
Distance Education.....	503.399.7873
online@chemeketa.edu	
Financial Aid.....	503.399.5018
financialaid@chemeketa.edu	
Food Services	503.399.3906
Graduation Services	503.399.6588
graduation@chemeketa.edu	
Human Resources.....	503.399.5009
humanresources@chemeketa.edu	
Job Placement.....	503.399.5026
jobplacement@chemeketa.edu	
Transfer Articulation.....	503.399.6589
.....	503.399.5003
evaluation@chemeketa.edu	
Library.....	503.399.5043
reference@chemeketa.edu	
Occupational Skills Training.....	503.399.7398
Placement Testing	503.399.6556
Public Safety	503.399.5023
public-safety@chemeketa.edu	
Registrar	503.399.5001
registrar@chemeketa.edu	
Student Computer Lab.....	503.399.5237
Student Life	503.399.5116
collegelife@chemeketa.edu	
Student Newspaper.....	503.399.5134
Veterans' Services.....	503.399.5004
veterans@chemeketa.edu	
Writing Center.....	503.399.7179
cwc@chemeketa.edu	

Learning Centers

Chemeketa Language Center.....	503.399.5290
Study Skills Center.....	503.399.5162
Tutoring Center.....	503.399.5190
tutor@chemeketa.edu	

Chemeketa Locations

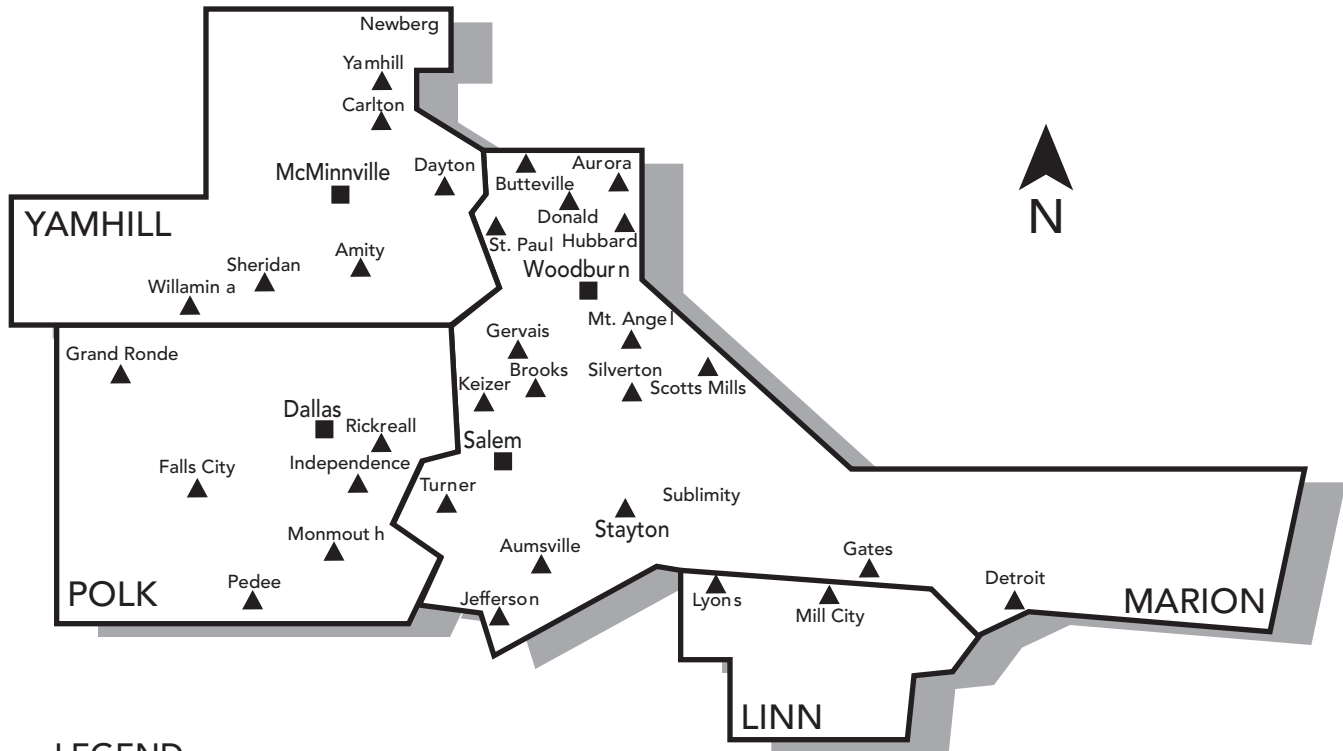
Salem Campus.....	503.399.5000
Center for Business & Industry	503.399.5181
626 High Street NE	
Dallas Center	503.623.5567
1340 SE Holman Avenue	
Yamhill Valley Campus	503.472.9482
288 NE Norton Lane	
Woodburn Center	503.981.8820
120 E. Lincoln St.	
Northwest Viticulture Center.....	503.584.7272
215 Doaks Ferry Rd. NW	
Brooks Public Safety Center	503.485.2131
4910 Brooklake Rd. NE, Brooks	

It is the policy of Chemeketa Community College and its Board that there will be no discrimination or harassment on the basis of race, religion, color, sex, age, national origin, ethnic origin, sexual orientation, gender identity, marital status, citizenship status, pregnancy and related conditions, family relationship, veteran's status, disabilities and tobacco usage in any educational programs, activities or employment. Persons having questions about equal opportunity/affirmative action should contact the Affirmative Action Officer at 4000 Lancaster Dr. NE, Salem, Oregon 97309-7070, or call 503.399.4784. To request this publication in an alternative format, please call 503.399.5192.

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Chemeketa Community College District



LEGEND

■ Communities with Chemeketa locations

▲ Communities that host Chemeketa classes

Chemeketa Locations

Salem Campus

4000 Lancaster Dr. NE
Salem, OR 97305-1453

Dallas Center

1340 SE Holman Ave.
Dallas, OR 97338

Yamhill Valley Campus

288 NE Norton Lane
McMinnville, OR 97128-9508

Woodburn Center

120 E Lincoln St.
Woodburn, OR 97071-5024

Brooks Regional Training Center

4910 Brooklake Rd. NE
Brooks, Oregon 97305

Center for Business & Industry

626 High Street NE
Salem, OR 97301-2438

Chemeketa Eola

215 Doaks Ferry Rd. NW Salem, OR 97304-4138

About Chemeketa





Welcome to Chemeketa

www.chemeketa.edu

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 of college at Chemeketa, take the career and 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 Dallas, Eola, Yamhill Valley or Woodburn locations. We also offer classes in schools and other locations in communities throughout the college district. You can even stay home and take a class via television, online or distance learning that will fit your needs and schedule.

Whatever your goals and interests, we are committed to help you enhance the quality of your life through learning.

Programs

Chemeketa has four areas of study:

Career and technical education Prepares you to qualify for work in specific fields. You can enroll in more than 40 career and technical training programs. In some of these, you may earn a Certificate of

The meaning of Chemeketa

The name Chemeketa is a Kalapuya 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, shared old ideas, and cultivated new ones. It is hoped that those who come to Chemeketa today will do just the same.

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.



Completion in one year or less. Many programs have other certificates that credential you to work in jobs in your field while attending college. 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, Chemeketa's career and technical education 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 the humanities, communications, sciences, and social sciences. See page 52 for general education information.

College transfer courses If you wish to continue your education at a four-year college or university, you may complete the one-year Oregon Transfer Module (see page 52), or if you successfully complete Chemeketa's two-year college transfer program, you may also earn an Associate of Arts Oregon Transfer degree. See page 53 for requirements.

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

Lifelong learning Helps you continue to learn throughout your life. Chemeketa offers many credit and non-credit classes, workshops, and short courses to assist you. These classes can help you improve your technical, vocational, and academic knowledge and skills; retrain you for new positions; and continue your personal development.

Developmental skill building classes Offered for you to learn basic reading, writing, mathematics, and study skills; finish high school; or learn English.

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

Faculty

Chemeketa has over 200 full-time faculty members. In general, faculty who teach college transfer courses have at least a master's degree; some have doctoral degrees. Faculty in career and technical programs generally have a rich background that combines education with practical, on-the-job experience. In addition, hundreds of part-time faculty teach day and evening classes on subjects directly related to their full-time jobs in the community.

History

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

Chemeketa Community College Guiding Principles

Vision *We are committed to transforming lives and communities through exceptional learning experiences.*

Mission *Chemeketa Community College values access and diversity which is affirmed by how we care, collaborate, and innovate with each other and the community. We promise to actively support student learning from precollege to transfer or to the workplace and lifelong learning by focusing on student success, quality, and sustainability in all of our practices and by being responsible stewards of our resources.*

Values *Our actions affirm our values, the character of the college, and how we do our work—*

Diversity *We are a college community enriched by the diversity of our students, staff, and community members. Each individual and group has the potential to contribute in our learning environment. Each has dignity. To diminish the dignity of one is to diminish the dignity of us all.*

Care *We care for, trust, and respect each other and the world around us through our words and our actions.*

Innovate *We innovate through reflection, analysis, creativity, and bold ideas. We design quality instruction, programs, and services to prepare students to meet the changing needs of our communities in a global society.*

Collaborate *We collaborate with others to ensure purposeful and effective programs and services that support all students' access to opportunities for educational achievement. We welcome diverse perspectives and encourage the free exchange of ideas.*

*Approved by the Board of Education
December 16, 2009*

Promises

We promise to actively encourage and support college preparation, workforce readiness, and lifelong learning.

We promise to actively encourage and support successful transition from high school to college and university study.

We promise to actively encourage and support the economic vitality of our community through excellence in technical training, workforce development, and business support.

Academic Calendar

	Summer 2011		Fall 2011	Winter 2012	Spring 2012
	8 weeks Jun 20–Aug 13 (Regular Session)	10 weeks Jun 20–Aug. 27 (Selected Programs Only)	Sept. 26–Dec. 10	Jan 9–March 24	Apr 2–June 16
College-wide Inservice (College closed to public)			September 12		
Employee Inservice			September 13–16		
Student registration: Check registration status on My Chemeketa					
Beginning of Term	June 20	June 20	September 26	January 9	April 2
Last Day to Register Without Instructor Signature	June 27	June 27	September 30	January 13	April 6
Last Day to Withdraw and Receive Refund	July 1	July 1	October 7	January 20	April 13
Last Day to Register or Add Classes	July 1	July 1	October 7	January 20	April 13
Audit Requests Due and Pass/No Pass Requests Due	July 18	July 18	October 21	February 3	April 27
Graduation Applications for Next Term Due	July 18	July 18	October 21	February 3	April 27
Academic Year Holidays			November 11, 24–25	January 16	May 28
Other Holidays	July 4	July 4	September 5 December 23, 26, 30 January 2		
College Closure			December 20–22		
Summer Friday Closure	Fridays, July 15–Aug 26	Fridays, July 15–Aug 26			
Winter Break/Spring Break			Dec. 12–Jan. 7	March 26–31	
Last Day to Withdraw from Classes without Responsibility for Grades	July 25	July 25	November 18	March 2	May 25
Review & Final Exams	Final exams given during last class period	Final exams given during last class period	December 5–9	March 19–23	June 11–15
End of Term	August 13	August 27	December 10	March 24	June 16

Note: Please check the term's *Schedule of Classes* for registration information. Schedules are available in Counseling and Career Services in Bldg. 2.



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 Commission on Colleges and Universities granted accreditation to Chemeketa in December 1972. In addition, the Oregon State Board of Education approves all career and technical programs and college transfer courses. Professional associations have also ac-

credited those career and technical education programs that require such approval.

For more information on accreditation, contact the Accreditation Liaison Officer, Maureen McGlynn, in Building 9 on the Salem campus at 503.399.6145.

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.

The largest campus is located at 4000 Lancaster Drive N.E., Salem. There are other campuses and centers in Dallas, Yamhill Valley and Woodburn. Credit and non-credit classes, workshops, seminars, and special programs are scheduled in more than 25 locations throughout the college district. These classes meet during the day, evening, and on weekends in schools, businesses, churches, and homes.

The Chemeketa district also includes two centers that provide more specialized services to employers and the community. Chemeketa's Center for Business and Industry opens at a new location is at 626 High Street NE in downtown Salem. The Brooks Regional Training Center, 4910 Brooklake Rd. NE, Brooks, provides training for fire districts and law enforcement throughout the region and houses part of the Fire Science and EMT/Paramedic programs.

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, the Cashier's Office, Tutoring Services Center, Student Center, Public Safety, Food Service, and the Planetarium.

The Learning Resource Center is located in Building 9. It includes the library, which is equipped with computers for

Teaching and Learning Values

We are a college that...

- Creates a learning climate of mutual respect and fairness.
- *Encourages creative and critical thinking.*
- *Actively engages individuals in the learning process.*
- *Facilitates learning that applies to and enriches lives.*
- *Clarifies expectations and encourages student responsibility for learning.*
- *Promotes learning as a lifelong process.*

The Teaching and Learning Values are a shared responsibility at the college and are considered in decision- and policy-making arenas. We encourage and promote these values in college programs, courses, services, and activities.

How to enroll at Chemeketa

Student Classification	1. Applying for admission	2. Placement testing	3. Orientation/ Academic and Career Advising	4. Registration for classes
Enrolling for most Salem campus credit classes	Complete the online Admission Application at applyonline.chemeketa.edu	www.chemeketa.edu/services/counseling/testing/annex.html	View online orientation. Go to my.chemeketa.edu . Log in with your My Chemeketa username and password. Choose Student Tab. Click on New Student Orientation.	Check your registration status on My Chemeketa.
Enrolling for classes held outside of Salem	Complete the online Admission Application at applyonline.chemeketa.edu	Contact nearest Chemeketa campus.	View online orientation. Go to my.chemeketa.edu . Log in with your My Chemeketa username and password. Choose Student Tab. Click on New Student Orientation. Call the college's Dallas, Yamhill Valley or Woodburn campuses or contact Counseling and Career Services, Building 2, Salem campus for advising session dates.	Check your registration status on My Chemeketa.
Enrolling for Salem evening, or weekend	Complete the online Admission Application at applyonline.chemeketa.edu	If degree seeking www.chemeketa.edu/services/counseling/testing/annex.html	See above.	Check your registration status on My Chemeketa.
Earning a GED (Options) if you are age 16-21	Complete enrollment applications available in Salem Campus building 50/102 or Woodburn HSP office, attend an orientation and pretest. Students under the age of 18 must submit an Underage Approval Form.	Contact HSP Office Building 50/102 or Woodburn HSP Office for assistance	Contact High School programs office 50/102	Orientations, pretesting and enrollment occur every three weeks. Call 503.399.5293 for information and schedules.
Earning a GED Taking English for Speakers of other Languages	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college's Dallas, Yamhill Valley or Woodburn campuses.	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college's Dallas, Yamhill Valley or Woodburn campuses.	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college's Dallas, Yamhill Valley or Woodburn campuses.	Consult quarterly <i>Schedule of Classes</i> . Students must attend a program orientation before registering for classes.
Earning a high school diploma	Submit high school transcript to Building 50, Room 102, Salem campus. Students under the age of 18 must submit an Underage Approval Form. Dual enrollment programs are available as well as a charter school sponsorship option.	Contact High School Programs Office Building 50/102	College placement testing available at any Chemeketa location.	Students 16-21 should work with the Salem, Woodburn or Sheridan High School Program offices. Adult Diploma candidates call the AHSD advisor at 503.399.5115



research, a television studio, teleconferencing rooms, and facilities for audio, graphics, and multimedia production.

Building 6 has up-to-date computer labs, classrooms, and an auditorium, where lectures and performances are scheduled throughout the year.

Building 8, has been re-modelled and expanded with a 60,000 square-foot addition to include modern, well-equipped laboratories for science and health-related programs. The building features dental hygiene and massage therapy clinics for community use.

Workout and weight rooms, racquetball courts, and a gymnasium are located in the physical education facility, Building 7.

The Brooks Regional Training Center and the station facilities on the Salem campus also serve as working fire stations. Brooks is also home to our new classroom building housing our fire fighting, emergency response medicine and criminal justice programs.

Our new Yamhill Valley campus in Yamhill Valley offers comprehensive college services including transfer courses and programs in health, technical and hospitality careers.

For more information about facilities on the Salem campus, call 503.399.5008.

Chemeketa's outreach campuses and centers all include classrooms, meeting spaces, student resources and

Affirmative action/equal opportunity and non-harassment policies

It is the policy of Chemeketa Community College that discrimination on the grounds of race, religion, color, sex, marital status, national origin, ethnic origin, citizenship status, age, sexual orientation, gender identity, disability, pregnancy and related conditions, family relationship, veterans status, tobacco usage, whistle blowing, victim of domestic violence or genetic information 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 Discrimi-

nation Act; the Americans with Disabilities Act of 1990 and the Amendment of 2008; Oregon Civil Rights Law (ORS 659A); 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:

- *is reasonably perceived by the receiver as unwelcome or offensive.*

- *refers in a demeaning way to a person's race, religion, color, sex, marital status, national origin, ethnic origin, citizenship status, age, sexual orientation, gender identity, disability, pregnancy and related conditions, family relationship, veterans status, or tobacco usage; creates a hostile or adverse work or educational environment; and/or subjects employees or students to different terms or conditions based on the characteristics listed above.*

Questions or complaints may be directed to the Affirmative Action Officer, P.O. Box 14007, Salem, Oregon 97309, 503.399.4784.

administrative offices; most also have computer labs, resource centers and technical classrooms.

Admission and Registration

Enrolling at Chemeketa

503.399.5006; Fax 503.399.3918

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.

If you are an international student, see page 8.

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

Please contact Counseling and Career Services in Building 2 on the Salem campus at 503.399.5120 or at your local Chemeketa outreach location. Talk with a counselor during an advising session about your academic and occupational plans and the requirements for the program which interests you.

If you are younger than 18 and do not have a high school diploma or GED certificate, you should contact the Admissions Office in Building 2 on the Salem campus for information about underage admission.

Placement tests

503.399.6556

testing@chemeketa.edu

If you are a new student pursuing a degree or certificate, you will be required to take a free placement test. The purpose of the test is to determine your skill levels in reading, writing, and mathematics so you can select the entry-level classes that are right for you. Test results more than five years old are not valid. Under certain conditions, you may be granted a test waiver.

Information about tests and test waivers may be obtained from Testing Services in Building 2 on the Salem campus

or from Chemeketa’s Dallas, Yamhill Valley and Woodburn locations. To request disability-related accommodations, please call 503.399.5192.

Orientation and registration information

503.399.5120

advising@chemeketa.edu

Orientation is required for all new degree or certificate seeking students. View the online orientation through My Chemeketa on the student tab. For information about registration, call 503.399.5120, drop by Counseling and Career Services in Building 2 on the Salem campus, visit any of our community locations and check your registration status on My Chemeketa.

Registration

503.399.5001

registrar@chemeketa.edu

For information, see “Steps to register” in each terms *Schedule of Classes* for step-by-step procedures for registering for classes. For your specific beginning registration day and time see My Chemeketa, “check your registration status.”

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 money from previous terms, unless you make appropriate arrangements with Business Services on the Salem campus. Please call 503.399.5011 for more information.

Class loads

503.399.5001

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

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, embarazo o condición relacionada, durante horas de trabajo, informar contra la compañía, víctima de violencia doméstica, información genética 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:

- es razonablemente percibido por el afectado de modo no bienvenido u ofensivo.

- se refiere de forma ofensiva a la raza, religión, color, sexo, estado civil, origen, nacionalidad, estatus de ciudadanía, edad, orientación sexual, incapacidad, embarazo y todo lo relacionado, relación familiar, estado de veterano, o uso del tabaco de una persona; creando un ambiente educativo y de trabajo hostil o adverso; y/o somete a los empleados o estudiantes a términos diferentes o condiciones basadas en las características ya antes mencionadas.

Preguntas o quejas deben ser dirigidas a la oficial de acción afirmativa, P.O. Box 14007, Salem, Oregon 97309-7070, 503.399.8677.

Class changes

503.399.5001

registrar@chemeketa.edu

You may make changes in your class schedule before the deadline listed in the Academic Calendar on page 3. Registration and drop dates will vary for classes shorter than full-term. See My Chemeketa for specific dates. To make schedule changes, access Web registration at My Chemeketa or complete an Add/Drop Form. Forms are available in the Enrollment Center, staff offices, and Counseling and Career Services on the Salem campus, or from the office or counseling staff at any of the other college locations. It is recommended that the changes be approved by an academic advisor or counselor. You can turn in the form at the Enrollment Center in Salem Building 2 or any Chemeketa campus or center. A fee may be charged for adding or dropping classes.

Enrollment limitations

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

Please apply early for all programs, especially for the career and technical education programs which limit enrollment or have special admission requirements (listed on pages 67–145).

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-program in order to complete required program prerequisites.

Many of Chemeketa's career and technical education 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 staff at any Chemeketa location

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, human services, practicum experiences in education and child care programs, and intercollegiate sports. If you are enrolling in the nursing programs and in some health programs, you 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 associate dean who oversees the program in which you plan to participate.

Withdrawal from college

503.399.5001

registrar@chemeketa.edu

If you decide to withdraw from Chemeketa, you may do so using the Web registration system, My Chemeketa, or you may obtain an Add/Drop Form from the Enrollment Center, Counseling and Career Services, or Chemeketa's Dallas, Yamhill Valley or Woodburn locations. Submit the completed form to the Enrollment Center or one of our community locations as soon as possible. The last day to withdraw from classes without responsibility for grades is listed in the Academic Calendar on page 3. Drop dates will vary for classes shorter than full-term. See my Chemeketa for specific dates. If you leave Chemeketa without following the withdrawal procedures mentioned above, you are responsible for tuition and fees and the final grades you receive; they will appear on your transcript of Chemeketa credits.

If you withdraw using the Web registration system or an Add/Drop Form within the first two weeks of the term, you will receive a refund of the tuition and fees you paid. (Exceptions apply for shorter duration classes.) Amounts

The Chemeketa Creed

The Chemeketa Creed is part of the Student Rights and Responsibilities Document which can be found on pages 242 through 246 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.

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. Refunds are not issued for amounts less than \$5.

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.

International students

503.399.5141; Fax 503.365.4768

international@chemeketa.edu

Each year about 125 international students attend Chemeketa. Representing a variety of cultures and ethnicities, they come from more than 20 different countries. International students may enroll in any career and technical program or college transfer program we offer. Many students attend English language training through the Chemeketa Language and Culture Institute before they enter college level programs.

Through International Programs, Chemeketa offers an outstanding range of services and activities to help international students get started and succeed. Some of these services include: an orientation program, conversation tables, advising, career development and volunteer opportunities, housing assistance, writing center, academic tutoring, leadership training, educational excursions, and clubs.

If you are a citizen of another country, you may enter the college at the start of any term. Chemeketa has special application materials and deadlines for international students available by mail or on the college Web site.

Please apply as early as possible so you can get assistance in understanding the United States Citizenship and Immigration Service (USCIS) and college requirements for admissions.

Chemeketa provides a world of learning for all its students. You are invited to join others and experience



Chemeketa. For more information, please contact International Programs at the phone or email address listed above.

Money Matters

Tuition

503.399.5011

businessservices@chemeketa.edu

Tuition and fees are due after you register. Late payment fees will be charged. Please refer to the current term *Schedule of Classes* or to the college Web site at www.chemeketa.edu.

- 2.3 Discourage bigotry and respect the diversity and dignity of all persons.
- 2.4 Respect the rights and property of all persons.
- 2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.

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

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

chemeketa.edu/services/tuition.html for additional information.

By registering for a Chemeketa course, you agree that tuition, fees and other applicable charges incurred will be considered an educational loan between you and Chemeketa Community College that is nondischargeable under Section 523(a)(8) of the US Bankruptcy Code. You are further agreeing that if you fail to make any payments as prescribed above, your account may be submitted to a collection agency and applicable collections charges may be added to your account balance due. In case legal action is instituted to collect on your account, you are agreeing to pay (in addition to the costs and disbursements provided by law) such additional sums as a court of law may determine as reasonable for attorney's fees and court costs. Oregon state law applies to any dispute over payment.

Credit courses

Use the chart on page 11 to calculate the cost of your credit tuition. Some classes carry fees in addition to tuition.

Non-credit courses

Community Education classes are self-supporting. All of the fees collected from Community Education classes cover all instructional and administrative costs plus supplies, rent, and printing. This program is not funded by the college's general fund tax dollars, and so the college tuition rates may not apply. You will find the cost of these classes listed in the *Schedule of Classes* and the Community Education Schedule each term.

The term Schedule of Classes lists any charges for Adult Basic Education (ABE), General Educational Development (GED), Basic Skills Development (BSD), and non-credit English for Speakers of Other Languages (ESOL) classes. There is a \$115 fee to take the GED test. A one-time-only Testing/Application Fee of \$15 is charged to all new applicants seeking to join the ABE/GED, BSD, or ESOL programs. The fee covers the costs associated with the required applicant assessments used for initial placement into the levels and classes of each program. If you are seeking re-entry into an Academic Transitions program, you may not be charged.

Certain courses, such as some training classes, may require separate registration and tuition. For some classes, there are additional charges to cover the costs of required materials.

Universal Fee

A Universal Fee applies to both credit and non-credit classes. The fee is \$10 per credit for credit classes and 30 cents per hour for non-credit classes.

Online fees

A \$50 fee is charged for each online course in addition to tuition and any applicable course fees.

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 residency 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.

Foundation scholarships

503.399.6990

info@chemeketafoundation.org

If money is standing between you and your Chemeketa education, the college's foundation has scholarships available to help overcome that barrier. The Chemeketa Community College Foundation administers several scholarship programs for Chemeketa students. Working with the college Financial Aid Office, the foundation has prepared a universal scholarship application form which will simplify the process for you. If you are interested, complete an application form and you will be considered for every scholarship for which you are eligible.

Other costs and fees

503.399.5011

businessservices@chemeketa.edu

The cost of books and supplies for full-time students is about \$450 per term. In some of Chemeketa's programs, you will also have to provide your own tools, equipment, and uniforms. These costs are included in the descriptions of career and technical education programs on pages 67 to 145.

Fees also vary by the course; this information is included in the course descriptions in this catalog.

The physical education locker and towel fee in Building 7 of the Salem campus is \$15 per term if you are not enrolled in a PE class; otherwise, it is free for you to use during the term of that class.

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 Center in Building 2 of the Salem campus

Cost per credit academic year 2011–2012

The following chart will help you in determining the cost per credit including tuition and universal fee. Other course specific fees may apply. Be sure to check the tuition & fee column next to the specific course in the schedule or online

# of credits	Oregon Students			Out of State & International Students		
	Tuition	Universal Fee	Total Cost Per Credit	Tuition	Universal Fee	Total Cost Per Credit
1	\$77	\$10	\$87	\$242	\$10	\$252
2	\$154	\$20	\$174	\$484	\$20	\$504
3	\$231	\$30	\$261	\$726	\$30	\$756
4	\$308	\$40	\$348	\$968	\$40	\$1,008
5	\$385	\$50	\$435	\$1,210	\$50	\$1,260
6	\$462	\$60	\$522	\$1,452	\$60	\$1,512
7	\$539	\$70	\$609	\$1,694	\$70	\$1,764
8	\$616	\$80	\$696	\$1,936	\$80	\$2,016
9	\$693	\$90	\$783	\$2,178	\$90	\$2,268
10	\$770	\$100	\$870	\$2,420	\$100	\$2,520
11	\$847	\$110	\$957	\$2,662	\$110	\$2,772
12	\$924	\$120	\$1,044	\$2,904	\$120	\$3,024
13	\$1,001	\$130	\$1,131	\$3,146	\$130	\$3,276
14	\$1,078	\$140	\$1,218	\$3,388	\$140	\$3,528
15	\$1,155	\$150	\$1,305	\$3,630	\$150	\$3,780
16	\$1,232	\$160	\$1,392	\$3,872	\$160	\$4,032
17	\$1,309	\$170	\$1,479	\$4,114	\$170	\$4,284
18	\$1,386	\$180	\$1,566	\$4,356	\$180	\$4,536

* International students attending on an F1 visa will be charged a non-refundable service fee of \$265 per term. International students attending on other visa types will be charged a non-refundable service fee of \$75 per term.

or from staff at the other college locations. If you first enroll in Chemeketa during fall, winter, or spring terms, you may also purchase coverage to include summer term.

You are encouraged to buy insurance coverage if you are enrolled in classes involving risk and/or physical activity. In some classes and activities where good safety prac-

tices are required, you will be asked to sign a Risk Waiver Form.

Chemeketa policy requires that all F-1 international students must obtain health and accident insurance. You must purchase insurance prior to time of registration. International students should contact the International Admissions Office at 503.399.2527 for further information.

Veterans' Services

503.399.5004

veterans@chemeketa.edu

The veterans' Services Office in Building 2 on the Salem campus provides information and assistance to Veterans and eligible dependents on how to apply for, receive, and maintain eligibility for all VA educational programs.

Chemeketa staff in the Veterans' Services Office will assist students in requesting an initial determination of eligibility for VA educational benefits and electronically submit student's benefit requests each term. Courses students receive benefits for must be required for their stated Chemeketa degree or program and outlined in the college's academic catalog. The Veterans' Services Office monitors class registration, changes in enrollment status, applicability of classes taken toward degree completion and student grades and will notify VA of any changes that impact benefit payment status.

How to stay eligible

To continue to receive VA educational benefits, you are required to register for, complete, and maintain a 2.00 cumulative 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
- Less than half-time students: complete all credits
- Summer term requirements may be different. Contact Veterans' Services for more information.

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 those who may use our services.

The most current information on Chemeketa's programs and services can always be found on our web site: www.chemeketa.edu.

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, 1959, 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 an eligible degree or certificate program.
- You must enroll for at least six credit hours each term for most funds.
- 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 highest award at Chemeketa for 2011–2012 is \$5,550. 	<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 highest award at Chemeketa for 2011–2012 is \$600. 	<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 half-time (six 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 award at Chemeketa for 2011–2012 is \$1,800 (full-time students or \$900 for part-time students). 	<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.
Work			
Federal Work Study Program		<ul style="list-style-type: none"> • Amounts vary according to your financial need. • Funds usually are not more than \$1,000 a term or \$4,000 a year. • Jobs pay minimum wage or higher. 	<ul style="list-style-type: none"> • Jobs are available both on and off campus. • Job instructions are e-mailed to your My Chemeketa account.
Chemeketa part-time employment (Funded by Chemeketa Community College)	<ul style="list-style-type: none"> • You must enroll in six credit hours or more. 	<ul style="list-style-type: none"> • Pay varies according to the job. • Jobs pay minimum wage or higher. 	<ul style="list-style-type: none"> • No FAFSA is required. • Contact the Human Resources Dept.
Part-time jobs (Funded by private businesses)	<ul style="list-style-type: none"> • You must be willing to work. • You must meet the qualifications of the employer. 	<ul style="list-style-type: none"> • Pay varies according to the job. • The average wage for 2009–2010 was \$9.33 an hour. 	<ul style="list-style-type: none"> • No FAFSA is required. • Apply at the Job Placement Center in Building 2 on the Salem campus.

Programs and source of funding	Eligibility requirements	Available amounts	Special information
Loans			
Federal Perkins Student Loan Program (FPSL)		<ul style="list-style-type: none"> You may borrow up to \$3,000 in an academic year. The highest award at Chemeketa for 2011–2012 is \$3,000. 	<ul style="list-style-type: none"> You do not have to pay any interest or principal while in school. You must begin payment six to nine months after you drop your enrollment to less than six credit hours. The current interest rate is 5 percent. You must repay Chemeketa. You must complete entrance counseling online 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. First-time borrowers must attend class for 30 days before the first check is issued.
Federal Subsidized Direct Loan (Funded with interest subsidy from the federal government.)	<ul style="list-style-type: none"> School has the right to deny loan certification and/or limit amount borrowed. 	<ul style="list-style-type: none"> You may borrow up to \$2,625 to complete pre-requisites for a program you are trying to get admitted into. You may borrow up to \$3,500 to complete the first year of a program of undergraduate education. After completing your first year of undergraduate education, you may borrow up to \$4,500 to complete the remainder of a program of undergraduate study. 	<ul style="list-style-type: none"> After accepting Direct Loans online follow directions for signing MPN and complete entrance counseling. 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 U.S. Department of Education for other possible deferments. You must attend an entrance and an exit counseling session. The variable interest rate is capped at 8.25 percent. The federal government pays the interest while you are enrolled in an approved program. First-time borrowers must attend class for 30 days before the first check is issued.
Federal Unsubsidized Direct Loan (Provides for insured loans for borrowers who do not qualify for federally subsidized Direct Loans. Terms and conditions for subsidized Direct Loans apply to unsubsidized Direct Loans.)	<ul style="list-style-type: none"> School has the right to deny loan certification and/or limit amount borrowed. 	<ul style="list-style-type: none"> You may borrow the cost of attendance minus the amount of estimated financial assistance, up to annual loan limits. Students who show need for only part of the annual subsidized Direct 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.
Federal "PLUS" program (Funded by the federal government.)	<ul style="list-style-type: none"> Credit checks will be performed and loan certification may be denied 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. Pay the required fees. Variable interest rate may not exceed 9 percent. Payment begins 60 days after the date funds are disbursed.

These requirements apply to each term for which you receive VA educational benefits. Your benefits also stop if you completely withdraw—officially or unofficially—from Chemeketa. You may be required to repay any VA educational benefits received if you withdraw from a class more than 30 days after the term begins.

Financial aid

503.399.5018

finaid@chemeketa.edu

If you do not have enough money to attend Chemeketa, the Financial Aid Office in Building 2 on the Salem campus can 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, 1959.
- Show need for financial help.
- Enroll in an eligible 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, non-credit, or challenge courses in these totals.
 - 3) You may not count a repeated course in which you earned lower than a grade of "C" in that course.

- 4) You may count up to 45 credit hours of developmental courses that were recommended by your advisor.
- 5) Pell Grants are not restricted by any enrollment level.

What kinds of financial aid are available?

There are three kinds of financial aid available when you are enrolled at Chemeketa:

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

For detailed information, review the chart on pages 12 and 13.

When to apply

Apply for financial aid at least three months before you plan to enroll at Chemeketa. Applications are processed in the order the college receives them. Since many students start fall term, it may take longer to process your application during the summer. File a Financial Aid Form by early April if you plan to begin fall term.

It takes at least 12 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 posted on the college website. If you apply after these dates, you may be eligible only for a Pell Grant and a Direct Student Loan for the following term.

Financial aid applications are accepted throughout the academic year, which begins with summer 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.

Questions? Call for information.

Salem Campus Welcome Center

503.399.5120

advising@chemeketa.edu

Chemeketa's Welcome Center is located in Counseling and Career Services on the first floor of Building 2 on the Salem campus. Staff can answer your questions about room locations, activities, workshops, meetings, and instructional staff office locations. The Welcome Center also distributes class schedules and catalogs.

Other Locations:

- **Dallas Area** • 503.623.5567 or 503.399.5206
- **Yamhill Valley Area** • 503.472.9482 or 503.399.5219
- **Salem Keizer Area** • 503.399.6562
- **Woodburn Area** • 503.981.8820 or 503.399.5207
- **Brooks Regional Training Center** • 503.485.2131
- **Chemeketa Online** • 503.399.7873
- **Center for Business and Industry (CCBI)**
503.399.5181



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

The Oregon Opportunity Grant is awarded to qualifying 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, applications with 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 the Oregon Opportunity 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 2.00 cumulative 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
- Less than half-time students: complete all credits

These requirements apply to each term you are on financial aid, as well as all terms you're attending Chemeketa.

Academic progress

If you do not meet the minimum term and cumulative credit hours and 2.00 GPA requirements, the Financial Aid Office reviews your progress and may either stop your aid or place you on a warning and allow you one more term to meet requirements. Students who are on "warning", and do not meet the requirements the following term, will go into "Denied" status and their aid stops. If an Academic Progress Appeal is filed, reviewed and approved, the student will be placed on a "Probationary" status for the following term. Students on "Probation" must be following an academic plan. A student who is on "Probation" and does not meet the requirements will be placed in "Denied" status and will lose their aid eligibility.

Your aid stops if you completely withdraw, officially or unofficially from Chemeketa. You may be required to repay all or a portion of any 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 and all transfer credits are included in this limit.

Refunds and repayments

The college policy for tuition refunds applies to all students. See page 9 for details.

If you have received financial aid and completely withdraw officially or unofficially, the Financial Aid Office will determine whether you are entitled to all of the financial aid received. If not, the Financial Aid Office will determine what portion of the financial aid you owe, and will notify you. Repayments are based on the official withdrawal date. If you owe a repayment, you are not eligible for further financial aid funds and cannot receive any services from the college until the repayment is made. You will receive a copy of this repayment policy and 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.

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.

Tuition waiver for 65+ eligibility

- Students must be Oregon residents; and
- Students must be 65 years old or older at the beginning of the term in which the course is offered; and
- Space must be available in the course as determined by the instructor and the department; and
- The course must be a lower-division collegiate course 100 or 200 level (e.g. ART 101, SPN 111, WR227, etc.); and
- The course prerequisites must be satisfied prior to enrollment; and
- The maximum costs to be covered by an approved tuition waiver each term is the cost of 8 credits. All course fees are to be paid by the student.

Contacts

- Dallas: Linda Kaufmann, 503.316.3282 or Zelda Emmert, 503.316.3272
- Evening and Weekend Programs: Amanda Rowe, 503.399.5140
- Online: Bonnie Macey, or Kathy Roberts 503.399.7873
- Salem: Nette Abderhalden, 503.399.6559

- Yamhill Valley: Ted Gross, 503.316.3290
- Woodburn: Irma Guzman, 503.316.3255

Academic Information

Student records and transcripts

503.399.5001

registrar@chemeketa.edu

Student academic records are maintained in the Registrar's Office for ten years. These records may include transfer credit evaluations, correspondence, curriculum substitutions, and degree evaluation toward graduation.

Transcripts of Chemeketa credit courses are kept permanently. You may request your official transcript online through My Chemeketa at my.chemeketa.edu. You may obtain an official transcript in person from the Enrollment Center in Building 2, Room 200, on the Salem campus by submitting a written request with the appropriate fee. You can also access this service through My Chemeketa at my.chemeketa.edu for an unofficial transcript. If you owe a financial obligation to the college, your official transcript will be withheld until the debt is paid in full.

Please keep the Enrollment Center informed of any change of address while you are a student at Chemeketa.

OAR 589.004.0400 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 and the State Department of Community Colleges and Workforce Development. 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 educational pursuits.

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 Social Security number will be used only for the purposes listed above.

Student records policy

503.399.5001

registrar@chemeketa.edu

Chemeketa has established policies and practices to safeguard the privacy of both your paper-based and electronic student records. Under the Family Educational Rights and Privacy Act (FERPA), the college may release basic, limited information (called "directory information") to anyone who inquires; however, you may request that the college release no information about you by completing a special form, available through the Enrollment Center in Building 2 on the Salem campus.

Family Educational Rights and Privacy Act (FERPA)

This federal statute outlines the rights of students and the responsibilities of educational institutions in the maintenance and security of student records. In general, FERPA affords Chemeketa students the following rights:

- the right to obtain a copy of Chemeketa's current student records policy;
- the right to inspect and review your own educational records;
- the right to seek to amend your own educational records;
- the right to have some control over the disclosure of information from your own educational records (by authorizing or denying access in writing);
- the right to file complaints of alleged failures to comply with the requirements of FERPA (with the U.S. Department of Education).

Directory information at Chemeketa includes:

- Name
- Credit hour status (time status)
- Dates and terms of enrollment
- Degree or certificate earned and dates earned (including GED certificates)
- Athletic statistics, honors

Solomon Amendment Disclosure

The Solomon Amendment requires by law that the college release to U.S. military recruiters the following student information: name, address, telephone numbers, date of birth, educational level, academic major, and degrees awarded. Completing the special form mentioned under "Student records policy" (above) will cause Chemeketa to withhold your information from military recruiters.

Grading system

The responsibility for evaluating student performance and for assigning grades rests with the instructor.

The responsibility for demonstrating competency within the framework of a course's outcomes and criteria rests with the student.

Students have the right to know how and on what basis their performance is being evaluated.

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

Grade/Points

A/4 Excellent. An indication that the student has met the stated outcomes and course criteria at the highest level, demonstrating mastery of required knowledge and skills.

B/3 Very Capable. An indication that the student has met the stated outcomes and course criteria at a high level, demonstrating mastery of most required knowledge and skills.

C/2 Competent. An indication that the student has met the stated outcomes and course criteria with sufficient mastery of enough of the required knowledge and skills to be capable of success in other courses that require this course as a prerequisite.

D/1 Limited success. An indication that the student has only minimally met the stated outcomes and criteria of the course but may not have sufficient mastery of enough of the required knowledge and skills to be capable of success in other courses that require this course as a prerequisite.

F/0 Failure. An indication that the student has not adequately met the stated outcomes and criteria of the course.

IB/0, IC/0, ID/0, IF/0 Incomplete. An "I" must be requested by the student and is given at the instructor's discretion when some essential requirement of the course has not been completed, and additional time is granted for completion of coursework. A contract will specify the length of additional time to complete the course material (standard is one-term).

If the contract is not fulfilled then the "I" grade will revert to the specified letter grade. An "I" does not entitle a student to satisfy a prerequisite requirement for another course.

P/O Pass. Acceptable Performance. A grade of "P" represents satisfactory achievement which would have been graded "C" or better on the regular grading scale, but is given instead of a letter grade. A maximum of 8 "P" credits are allowed toward a one-year certificate. A maximum of 16 "P" credits are allowed toward an associate's degree.

NP/0No Pass. Unacceptable Performance. Does not satisfy requirements for entry into courses where prerequisites are specified.

PL/0 Pass. This grade is used to indicate satisfactory achievement of course outcomes and criteria for Credit for Prior Learning and Credit for Professional Certification.

The student's grade point average is computed by dividing the total credit hours (except I, P, NP, and PL) into the total points earned.

The following marks may appear on a student's transcript and are assigned by Enrollment Services:

Mark Meaning

X Audit. This mark is used when a student participates in the class but does not wish to receive a grade or credit for the course.

R Course Repeated. The "R" mark is used upon student request when a course taken at Chemeketa has been repeated and the student receives a higher grade in the repeated course. If a course is repeated more than once, only the original grade can be changed to an "R". This mark cannot be used to change "I" grades.

M Missing Grade. This mark appears when an instructor neglects to enter a grade for the course. Students receiving an "M" should contact the instructor as soon as possible so that a grade change can be submitted to correct the omitted grade.

Incomplete

You may remove an "Incomplete" from your record by completing course requirements. Your instructor will provide you with a Notice of Incomplete Status in a Course Form, the contract will specify the length of additional time to complete the course material (standard is one-term). When you have met the requirements, your instructor will change the "Incomplete" to a new grade. If the contract is not fulfilled then the "I" grade will revert to the specified letter grade. The Registrar's Office will officially notify you of the change.

Auditing courses

If you enroll in credit courses but do not wish to receive grades or credits, you may audit the courses. You must pay full tuition and fees when auditing a course. Pick up and turn in an Audit Request Form at the Enrollment Center on the Salem campus or from staff at any other college location 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.

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

If you decide to drop a class, you may do so on My Chemeketa or by submitting an Add/Drop Form to the Enrollment Center on the Salem campus or other college locations during regular business hours. If you drop a class that meets for the entire term (a 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 credit card will be credited back to the credit card. Refunds are not issued for amounts under \$5. Changes in the number of hours for which you are registered may affect your financial aid, agency, or veterans' benefits.

See information under "Withdrawal from College," page 8.

Grade Changes

Awarding grades to students is the responsibility of the instructor of the course in which the student is registered. Once awarded, grades are final. They may not be changed except where evidence is presented (within one calendar year after the grade is assigned) that an error has occurred.

Pass/No pass

A pass (P) grade indicates satisfactory completion of the course (equivalent to a C or better). A no pass (NP) grade means the course was not satisfactorily completed and no credit was granted. Some courses offer the option to choose between P/NP and a letter grade and some courses may be taken for a letter grade only. A pass grade satisfies the prerequisite of "C" or better required for entry into some courses. Each student is limited to receiving no more than 16 P/NP credits for an associate's degree, and 8 P/NP credits for the Oregon Transfer Module or a certificate. Transfer students should be aware that four-year institutions limit the number of P/NP credits that



may be applied to a degree. If you'd like to be graded P/ NP, and the course qualifies, you must complete the P/NP Request Form, obtain your instructor's approval by way of his/her signature and submit the request form to the Enrollment Center by the end of the fourth week of the term. P/NP grades cannot be changed back to a standard letter grade.

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 ten 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.

CEU	CEU's were earned	0.0
NOC	No CEU's were earned	0.0

Repeating a course

503.399.5001
registrar@chemeketa.edu

Please 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, pick up and turn in a Student Grade Repeat Request from the Enrollment Center on the Salem campus or at any college location 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. If the original grade is an "N" or "IB, IC, ID, IF," it may not be changed no matter how many times you repeat the 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, requesting an "R" grade could have an effect on the benefits you were paid in the term you originally took the course. In some instances an overpayment obligation



may be created by the VA. Please contact Chemeketa Veterans' Services before submitting the Student Grade Repeat Request.

Transfer credits

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

If you need a copy of your transcript for your records or for advising, please order additional copies to be sent to your home address. Your unofficial academic transcript is always available via the Web on My Chemeketa (my.chemeketa.edu).

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

If you have taken the College Level Examination Program (CLEP) or the Advanced Placement (AP) Test, request that your scores be forwarded to the Admissions Office. Then contact the Admissions Office and request, in writing, an evaluation of your transcripts and scores. For more CLEP and Advanced Placement (AP) information, see page 21.

Chemeketa also accepts some credits from the military and the Community College of the Air Force. Contact the Admissions Office on the Salem campus for details.

Your accepted transfer credits and scores will become part of your permanent academic record at Chemeketa. Only the course grades you earn at Chemeketa are used to compute your grade point average.

Auditing courses

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 9.

Transfer credit, prior learning, and credit by exam

Transfer credit and prior learning accepted by Chemeketa Community College is transcribed under the heading "Transfer Credit" and "Other Chemeketa Credit" on your official transcript. The number of hours accepted from other institutions is recorded; however, the grades are not included in the GPA.

T	Transfer "C" or better	0.0
TD	Transfer "D"	0.0
PL	Prior Learning	0.0
EC	Credit by Exam	0.0

Academic recognition

recognition@chemeketa.edu

Chemeketa recognizes outstanding academic performance by placing students on one of three lists. **Honor Roll** recognizes students who earn a term grade point average of at least 3.00 while completing six or more credit hours. **The Dean's List** recognizes students who earn a term grade point average between 3.50 and 3.99 while completing 12 or more credit hours. **The President's List** recognizes students who earn a perfect 4.00 grade point average while completing 12 or more credit hours. Students who qualify for academic recognition receive e-mail notification of their honor and may choose to download documents which commemorate their achievement.

Academic progress/review program

503.399.5076

Chemeketa wants to help you reach your academic goals. To accomplish this, the college has initiated an academic progress/review program which provides for intervention at certain points throughout your 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 2.00 GPA, or
- A continuing student who falls below a 2.00 cumulative GPA with more than 36 credit hours of coursework.

Academic probation status

- A student who is below a 2.00 GPA for a second consecutive term, or
- A student who falls below a 2.00 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 2.00 GPA. The student will be suspended from further enrollment at Chemeketa until reinstated. The student may appeal the suspension through the Dean of Students.

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.

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.

Credit by Advanced Placement Examination

503.399.6556

advising@chemeketa.edu

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

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.



for the course. Inquire at Counseling and Career Services on the Salem campus about what courses and scores are accepted at Chemeketa or visit our website chemeketa.edu and type counseling in the search box then click on the link to Advanced Placement & International Baccalaureate.

Credit by College Level Examination Program (CLEP)

503.399.6556

testing@chemeketa.edu

You may earn credit for some college courses through the College Level Examination Program (CLEP). Inquire at Testing Services on the Salem campus to determine which examinations and scores Chemeketa accepts. If you wish to take a CLEP examination, schedule a testing time through testing services in Counseling and Career Services on the Salem campus chemeketa.edu and type CLEP in the search box.

Credit by Challenge Examination

503.399.6556

testing@chemeketa.edu

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 \$30 for each exam. If you successfully complete the examination(s), you must pay tuition and fees for the

course(s) before the grade(s) are recorded on your transcript.

Contact Testing Services on the Salem campus for more information about earning college credits by challenge examinations or visit our Website Chemeketa.edu and type counseling in the search box then click on the link to testing and then the link to Challenge exams.

Credit by International Baccalaureate (IB) Certificate or Diploma

503.399.5120

Chemeketa Community College recognizes IB achievement by awarding credit to students who score 5 or above on Higher Level IB exams. The official International Baccalaureate Certificate is required in order to receive credit. If you are an enrolled student and want to receive this credit, you need to contact your former high school and indicate that you would like the official IB test scores to be sent to the Admissions Office on the Salem campus and request in writing an evaluation of your transcripts. You can find out what courses are accepted by Chemeketa through the Salem campus Counseling and Career Services center or visit our website chemeketa.edu and type counseling in the search box then click on the link to Advanced Placement & International Baccalaureate..

Credit for prior learning

503.399.7185 ext. 708

In certain career and technical education programs and transfer areas, 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 Résumé, a three-credit-hour course, or contact the Counseling and Career Services staff on the Salem campus.

Credit for professional certification

503.399.5120

In specific career and technical education programs, Chemeketa may award credit for certified professional career training. If you are enrolling in such programs as Criminal Justice, Emergency Medical Technology/ Paramedic, Early Childhood Education, Fire Science, or Apprenticeship, you may be eligible for a waiver of some basic preparation courses if defined criteria are met.

For more information, contact your program advisor or Counseling and Career Services.

Cooperative Work Experience

503.399.5028

cwe@chemeketa.edu

As a student, you may be qualified to participate in work-based learning in your career field through the Cooperative Work Experience (CWE) program. This program allows you to combine your classroom studies with work-related experiences.

In this program, a CWE Coordinator or program faculty member assists you in finding a qualified training site. Your current job may qualify if it relates to your studies and if you are developing new skills. You must enroll for the appropriate number of credits for the amount of hours you work per week. The CWE coordinator must approve your training site and the learning objectives that you and your supervisor develop prior to beginning your training. Your participation is required in weekly seminars or in regular meetings with a CWE faculty member to discuss your progress.

CWE training helps you expand your knowledge of, and experience in, your selected program while you earn college credit. You gain valuable references for future employment and you can make the transition from school to career a smooth process.

Most of Chemeketa's career and technical education programs include CWE for elective credit. The CWE office is located in Counseling and Career Services, Building 2, Room 115, on the Salem campus.

Job readiness classes—Classes are offered to all students. These classes include Résumé and Job Search Correspondence and Interviewing for Success.

These classes are listed under "Job Search" in the *Schedule of Classes*.

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.

Distance education

<http://online.chemeketa.edu/>

503.399.7873

Distance education courses are available to students as an alternative to attending one of the Chemeketa campuses. Chemeketa Online offers more than 300 credit and non-credit courses each term. Many students complete a degree with a mix of traditional and distance education courses.

You can complete the Oregon Transfer Module, earn eight degrees and 10 certificates through Chemeketa Online. The degrees available are Associate of Arts Oregon Transfer, Associate of General Studies, Associate of Applied Science in Accounting, Associate of Applied Science in Hospitality Management, Associate of Applied Science in Management, Associate of Science in Speech-Language Pathology Assistant, Associate of Applied Science in Tourism and Travel Management, and Associate of Science Transfer in Business. Significant coursework can be completed through distance education for an Associate of Applied Science in Computer – Assisted Drafting (CAD), Associate of Applied Science in Fire Protection Technology – Fire Prevention, and Associate of Applied Science in Fire Protection Technology – Fire Suppression. You can earn a certificate in Accounting, Business Software, Destination Marketing, Event Management, Hospitality Management, Juvenile Justice, Retail Management, Speech-Language Pathology Assisting, Tax Preparation, Tourism and Travel Management.

Offerings, information and registration procedures about distance education courses are available at <http://online.chemeketa.edu>

Online courses allow you to take classes at your convenience. You will need access to a computer with required hardware and software. We strongly recommend high-speed Internet access. If you are unable to access high-speed Internet, you may use a modem or other device capable of connecting to the Internet at a speed

of at least 56 kbps. Courses with audio, video or graphical components may not load properly if you are using dial-up Internet connection. Some online courses include streaming video or viewing of videotapes as a course requirement. You must have an e-mail address, access to Internet service, and be able to operate a browser such as Firefox or Internet Explorer to participate in online classes.

Interaction with the instructor and other students is provided through forums and e-mail. You don't have to be online at a certain time every day, but you will be expected to log in to the course website regularly, respond to online discussions, and use the Internet as a research tool. Some online courses may have required on-campus labs.

You will have a current e-mail address listed in your My Chemeketa account. This is the only e-mail address the instructor will use to contact you. A technical orientation and information regarding minimum requirements for your computer browser and software are available on the Chemeketa Online website at <http://online.chemeketa.edu/orientations.htm>.

A \$50 fee is charged for each online class in addition to tuition and applicable course fees. If you have any questions regarding distance education classes or the schedule, please contact Chemeketa Online at 503.399.7873 or e-mail <http://online.chemeketa.edu>

Evening and weekend programs

Chemeketa offers expanded evening and weekend formats that provide a full range of courses leading to degrees. You can earn required credits in mathematics, science, writing and more.

Weekend college

Students can complete the coursework for the Oregon Transfer Model First Year entirely on Saturdays through the Weekend College. A supportive weekend environment includes a community room and student services, and an innovative format of hybrid courses allows students to begin any term and finish first year requirements in one year.

For more information contact Amanda Rowe, 503.399.5140.

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 and are listed on each course syllabus.

Study abroad

503.399.5141

Chemeketa Community College provides opportunities to study abroad while earning Chemeketa Community College transfer credits. Courses are taught by Chemeketa and other Oregon faculty. For specific offerings, consult the Chemeketa *Schedule of Classes*.

Current programs include: fall quarter in Florence, Italy; spring quarter in London, England; and summer quarter in Mexico and Costa Rica

For questions about Study Abroad, contact Teter Kapan, 503.399.5141.

Student Development Services

Tours of campus

503.399.3995

ambassadors@chemeketa.edu

Tours of the Salem campus are conducted by Chemeketa's Student Ambassadors. You may call or e-mail to schedule a student-guided tour.

Student e-mail accounts

503.399.7899

tac@chemeketa.edu

Every Chemeketa student automatically gets a free student Gmail account and access to Google Apps. Your student e-mail account is used by the college to communicate important information, such as course changes, information about your program of study, and notifications about academic recognition. You can also use the account for personal correspondence. You can even take your e-mail account with you; it's there forever and you can continue to use it even after you complete your educational goals.

Student computer lab

503.399.5237

computerlab.chemeketa.edu

Enrolled students are welcome to use this open computer lab for Chemeketa-related coursework. Computers run the Windows operating system and many common software applications used in Chemeketa courses. Instructional technicians are available to help students with the software applications. Printing and photo copying is available for a small charge. The lab is located on the Salem campus in Building 6, Room 218. Student ID card required (available at the Bookstore).



Tutoring services

503.399.5190

tutor@chemeketa.edu

Tutoring is a free service, provided for all full-time and part-time students currently enrolled in core credit classes at Chemeketa. You can access services in the Tutoring Center, Building 2, Room 210, on the Salem campus or online at <http://tutoring.chemeketa.edu>. Current term hours are posted on the door and on the web site. You must have a Chemeketa K# to register for these services. Only limited tutoring is available the first week of the term and during finals week.

Disability Services

503.399.5192 voice/TTY

disability@chemeketa.edu

Chemeketa offers support services for students with documented disabilities. These services include but are not limited to: academic accommodations for courses and testing, access to facilities and activities, and academic advising.

Services for Deaf and hard of hearing students include sign language interpreting and adaptive equipment. Appointments are necessary for all services. Early contact is advised, as late requests may result in a delay of service.

If you have a documented disability, including learning, psychiatric, sensory, orthopedic, or otherwise, please know that support services are available for you. The Disability Services Office is available to help you assess your

needs, coordinate access to facilities and processes, and plan academic accommodations that will make classes accessible.

If you need disability-related accommodations for classes or college events, please contact the Disability Services Office at least two weeks in advance.

The TRiO Disabilities Student Support Services Program (DSSS) provides additional support in individual tutoring, scholarships, mentoring, books/equipment loans, etc. for students with disabilities who qualify. Contact 503.399.5192 for more information.

Chemeketa Language Center

503.399.5289

The Chemeketa Language Center welcomes students enrolled in language courses including English for Speakers of Other Languages (ESOL/ENL), American Sign Language and foreign languages. We provide a large variety of resources to support language learning for independent and classroom settings including a 34-computer iMac smart classroom (each computer features Web cameras and multimedia headsets), and an additional 14 Windows PCs for independent study. The helpful and knowledgeable lab staff are eager to help students and instructors make the best use of our resources. Please feel free to contact us anytime with questions. Drop by Bldg. 3, Rm. 257 or call 503.399.5289.

TRiO projects

503.315.4293

Chemeketa currently operates a variety TRiO programs, each 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. You 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.

If you are interested in participating in any of these programs, please contact the TRiO coordinator in Building 2, Room 230, on the Salem campus.

Migrant education programs

Chemeketa currently operates two programs to help migrant and seasonal farm workers and their children attend classes. These programs are funded by the U.S. Department of Education. You may be interested in participating in one of these:

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. If you would like more information about CAMP, call 503.589.7778.

High School Equivalency Program (HEP), located on the Salem campus, is designed to assist 140 migrant and seasonal farmworkers and their families in obtaining the equivalent of a high school diploma (GED) each year. Program elements include instruction in Spanish and English, personalized advising and counseling, tutoring, technology and computer training, cultural enrichment activities, and academic excursions. Benefits to students include an extended/flexible class schedule, classrooms and computer labs with adequate supplies, instructional and testing materials, subsidized medical care, transportation stipends, and childcare scholarships. If you are interested and want more information about HEP, call 503.589.7725.

Study Skills Center

503.399.5162

Bldg. 2, Room 212

<http://www.chemeketa.edu/earncertdegree/advising/studyskills/studying/index.html>

The Study Skills Center 1) serves students college-wide needing assistance with reading strategies and study skill techniques, 2) provides resources for students currently taking reading and study skills courses, and, 3) offers faculty and staff support for issues related to reading and study strategies. The Study Skills Consultant offers weekly free workshops in the Center available to all students with online versions of the workshops also available. In addition, effective learning and reading resources are available for checkout.

Writing Center

503.399.7179

cwc@chemeketa.edu

www.chemeketa.edu/services/writingcenter

If you need writing assistance, help is available in the Chemeketa Writing Center where you may consult with writing instructors or use the computers. You can receive

assistance in building writing skills, composing academic essays, and learning how to review and edit your work. In addition to stopping by the Writing Center for assistance, please watch the quarterly *Schedule of Classes* for a listing of classes. For more information or to make an appointment, call 503.399.7179 or stop by the Writing Center in Building 9, within the library, on the Salem campus or try them online, www.chemeketa.edu/services/writingcenter.

Student Services

Alcohol and drug support groups

503.399.6154

wanda.urban@chemeketa.edu

Support groups for substance dependency are coordinated through the Human Services Program and staffed by volunteers. Times and locations of meetings vary each term. Contact the Office of Student Retention and College Life in Building 2 on the Salem campus for more information.

The Student Book Exchange

503.399.5185

asc@chemeketa.edu

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

The Associated Students of Chemeketa receive books during finals week of fall term and winter term and sell books during the first week of winter term and spring term. The Book Exchange is housed in Building 2, Room 176H, on the Salem campus. For more information, contact the Associated Students of Chemeketa at 503.399.5185.

Bookstore

503.399.5131

bookstore.chemeketa.edu

You may purchase books and supplies at the college Bookstore in Building 1 on the Salem campus or on the Yamhill Valley campus. Textbooks, software, reference books, and Chemeketa Community College imprinted clothing and gifts are also available on the Bookstore web site at bookstore.chemeketa.edu.

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, personal identification and credit card, (if applicable) in order to receive a refund.

Book buy-back—Each term during finals week, the Salem and Yamhill Valley campus bookstores pay 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 books at prices established by used book wholesalers. Online students may call 503.399.5130 for buyback information.

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.

Regular bookstore hours—7:30 am–5 pm, Monday–Friday. The Salem campus location has extended hours the first two weeks of fall, winter and spring terms and the first week of summer term.

Child care

Chemeketa offers one child care program on the Salem campus. The program is accredited by the National Academy of Early Childhood Programs.

Child Development Center, Building 39, 503.399.5107. As a training center for students enrolled in the Early Childhood Education program, the center offers full- or part-time care for children ages two-and-a-half to six years. Applications are accepted at any time, but you should apply early. Contact the center for applications and fee information.

The Financial Aid Office 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 a bulletin board located in the Student Center in Building 2 on the Salem campus, and local information may also be available at other campus locations.

First aid

503.399.5023
publicsafety@chemeketa.edu

For first aid services on the Salem campus, call Public Safety at 503.399.5023. If you are at another college location and need assistance, please contact one of their staff. There are also emergency red phones located throughout the Salem 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 your medical needs.

Housing information

503.399.5116

Chemeketa does not provide housing; however, the Office of Student Retention and College Life 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. Other Chemeketa campuses and centers may have similar information available.

Library services

503.399.5043
library.chemeketa.edu

Chemeketa Community College libraries provide a full range of services to support teaching and learning. Both the Salem and Yamhill Valley campuses offer an extensive online collection of journals, books, and streaming media, making it easy to complete your studies whenever and wherever it is convenient for you. Chemeketa's library is a member of the Chemeketa Cooperative Regional Library Service (CCRLS) and the Orbis Cascade Alliance. Material from regional libraries can be requested online and delivered to either campus. Our diverse main collection on the Salem campus includes 65,000 books, thousands of magazines and journals, instructional media, Spanish and adult literacy materials, graphic novels, and children's books. These materials are also requestable.

Some of our most popular services include:

- FREE Checkout of material!!
- Wireless internet access
- Computers, laptops and calculators
- Printing and copying
- Quiet study and group work space
- Reserve items (material assigned by instructors)
- Daily delivery of material from regional libraries and beyond
- Local and national newspapers

Chemeketa's librarians are available to help students and instructors with finding information. The library provides reference service in person, over the phone, and 24/7 assistance from the library website via L/Net. Course-specific research guides are also available to help students navigate our resources.

A valid student ID/library card is required for use of the computers and to check out material. Our library website provides detailed information about library hours and offers resources for finding electronic books and articles, requesting and renewing items, and paying fines online. Check us out!

Lost and found

503.399.5023
publicsafety@chemeketa.edu

Lost and found items are housed in the Public Safety Office on the Salem campus and at the information desk



at most other college centers and campuses. If you have lost or found an item, please check at one of these locations.

Parking on the Salem campus

503.399.5023

publicsafety@chemeketa.edu

If you park a vehicle on the Salem campus from 8 am–10 pm, Monday through Friday, the college requires a parking permit on the vehicle. Parking permits for the Salem campus are available at the Public Safety Office. Students and employees may purchase an annual parking permit (fall term through summer term) for \$45. After initial purchase of an annual permit, additional annual permits may be purchased for a reduced fee of \$20 for any vehicle registered to the original annual permit purchaser. Individual term permits may be purchased for \$25. Permits are assigned to a specific vehicle and must be attached to the exterior of the vehicle, either on the rear bumper or rear window. Visitors may obtain free parking permits at the Information Booth or Public Safety Office. Employees of the college and students are not allowed to use visitor permits.

Along with the permit, you will receive a copy of Chemeketa's Traffic Code. The college expects employees and

students to know and follow the rules for operating and parking a vehicle on campus.

The college suggests you lock your car at all times when on campus and not leave personal effects of value in plain view inside your vehicle. More information about campus safety is contained in an annual report available from the Public Safety Office.

Public bus services

Local bus service to the Salem campus is available through Cherriots. Carts and Wheels provides transportation to the campus from Woodburn, Silverton, and Dallas. If you are attending classes at one of the other Chemeketa locations, please contact their staff to find out what local transportation options are available to you.

For more information on all routes and schedules in the Salem area, contact the Salem Area Transit Information Office (Cherriots) at 503.588.2877 or visit their Web site: www.cherriots.org.

Information about Carts and Wheels bus service is available by calling 503.585.5187.

Cherriots bus passes are available for purchase at the Bookstore in Building 1 on the Salem campus; bus schedules are available in the lobby of Building 2.

Student leadership opportunities

At Chemeketa Community College, programs outside the classroom can help you become more fully involved in your education. Chemeketa's Student Center, located in Building 2 on the Salem campus, is designed to provide space for your recreational, service, and social interests and needs.

There are numerous opportunities for you to get involved. The following is a list of programs in the Office of Student Retention and College Life and across the college that you can get involved in.

Associated Students of Chemeketa (ASC)

503.399.5185

asc@chemeketa.edu

The ASC Executive Board represents the Chemeketa student voice on the Chemeketa Board of Education, Oregon Community College Student Association (OCCSA), and various college standing committees. Their mission is to represent, advocate, and promote the well-being of students at Chemeketa Community College.

This team also works on a variety of projects including campus clubs, The Book Exchange and the Student Leadership Development program. As a member of this team, you can assist in organizing the Council of Clubs, Club Fairs, and the The Book Exchange, and assist with projects for the Student Leadership Development Program. Students are selected through an application and interview process to determine their interests, abilities and experience. You may be paid at an hourly rate, a tuition grant or a combination of both. Federal Work Study recipients are eligible to apply.

The Chemeketa Courier

503.399.5104

courier@chemeketa.edu

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 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. Students can also enroll in the class, JNL215, and work on a number of assignments, including page design, distribution, copy editing, headline writing, cartooning, column/editorial writing, etc.

Building 45

<http://building45.chemeketa.edu>

Building 45 is the college's online literary/arts publication. It is published twice a year, at the end of the winter and spring terms. Current and former Chemeketa students may submit work in a variety of genres (fiction, non-fiction, poetry, art, photography, music, video, multimedia) via an online submission form. An editorial committee comprised of humanities faculty make the selections for publication.

For more information, and to view past issues, please visit building45.chemeketa.edu.

College committees

503.399.5185

asc@chemeketa.edu

Student representatives along with Chemeketa employees serve on campus-wide committees including Academic Standards, Curriculum Committee, Legislative Committee, Presidential Advisory Council, Sustainability Advisory Council, the Diversity Advisory Council and more.

Chemeketa also has a representative on the board of the Oregon Community College Student Association (OCCSA), a state-wide, student-run organization representing more than 300,000 community college students in Oregon.

Multicultural Student Services Team

503.399.5143

multiculturalcenter@chemeketa.edu

Multicultural Student Services work team serves as the main reception and information agents for the Student Retention and College Life front office and the Multicultural Center. This dynamic student work team maintains display cases, bulletin boards and public areas of the Student Center and Multicultural Center and much more. This diverse student work team researches and plans intercultural events that increase the college community's cultural awareness.

Along the way, team members develop pride in their cultural heritage within the global community; learn leadership and professional skills and effect change on issues currently impacting the campus community.

Multicultural Center—"Through educational programming, the Multicultural Center broadens student appreciation and respect for all cultures, individuals and groups."

The Multicultural Center is the living embodiment of Chemeketa's commitment to:

- Honoring inclusion
- Facilitating communications

- Promoting safe environments
- Addressing conflict and difference
- Encouraging renewal and change

Intercollegiate athletics

503.399.5082

Chemeketa is a member of the Northwest Athletic Association of Community Colleges (NWAACC), which includes community colleges in Oregon and Washington. This highly-organized athletic program provides 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 and soccer, and women's volleyball and softball.

If you participate in intercollegiate athletics, a physical examination and documentation of immunization for measles are required. Team travel, equipment, and secondary health insurance are provided.

Mentor program

503.315.4293

The TRiO Talent Search Mentor Program gives you 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

503.399.8748

peers@chemeketa.edu

Peer Assistants are experienced Chemeketa students who are trained to help others. As a Peer Assistant, you will provide information and referrals, locate resources, and assist students to use the services within the Counseling and Career Services department.

Student Ambassadors

503.589.7644

ambassadors@chemeketa.edu

This program gives you the opportunity to work as a student leader in a variety of college settings. Student Ambassadors conduct campus tours and provide assistance to prospective students through personal contact and correspondence. You can also be involved in recruitment, promotional and special events, high school visita-

tions, and working with international and multi-cultural students. Ambassadors are selected through a competitive application and interview process. As an Ambassador, you may be paid at an hourly rate, a tuition grant, or a combination of both.

Student clubs and organizations

503.399.5185

asc@chemeketa.edu

Chemeketa Community College recognizes a number of organizations that provide a variety of activities for students. For the list of current clubs at Chemeketa, visit the web site at www.chemeketa.edu/collegelife/life/clubs, or contact the Office of Student Retention and College Life in Building 2 on the Salem campus.

Student Retention Assistants

503.399.5147

retention@chemeketa.edu

Student Retention Assistants learn clerical skills on the job and work on retention related activities that will improve student success outcomes. They assist in maintaining department records, filing, inputting data, scheduling, answering phones, ordering office supplies, and other various duties. As a member of this team, you will also help host a one hour talk radio show on a local radio station once a week. Students are selected through an application and interview process to determine their interests, abilities and experience.

Retention Project Peer Mentor Program

503.399.5118

americorps@chemeketa.edu

The Retention Project Peer Mentor Program aims to improve retention and academic advancement rates of high school students who may be at risk of dropping out of school by providing them with a college student mentor and engaging them in service-learning opportunities. Through participation in a two-credit academic course, Peer Mentors will be trained and assisted by an AmeriCorps Retention Project Member to develop meaningful relationships with community high school students, both in the high school classroom and in after-school settings.

Where to eat on the Salem campus

Food Central, Building 2—Commons Area. Open Monday–Friday, 7:30 am–2 pm, our six-station food court offers something tasty for everyone, from hot entrees, burgers and sandwiches off the grill, to healthy wraps, soups and salads and a variety of convenient grab-n-go items.

Espresso & Smoothies, Building 2—Commons Area. Open early mornings and late evenings to help you get

going or to pick you up with your favorite espresso drink. Gourmet coffees, teas, pastries and smoothies, made with 100% natural berry syrups, are also available.

Sandwiches & Pizza, Building 2—Commons Area.

Offering made to order hot or cold sub sandwiches and pizza by the slice or by the pie. Open extended hours.

Convenience Store, Building 2—The C-Store carries a wide variety of snacks, candy, hot box foods, fresh fruit, grab-n-go items, pastries, and beverages. Open Saturdays.

Crossroads Café, Building 4—Offering espresso drinks, gourmet coffees & teas as well as, soups and salads and a variety of convenient grab-n-go items.

Café Eight, Building 8—Offering espresso drinks, gourmet coffees & teas, juices and a good variety of convenient and healthy grab-n-go items such as salads, sandwiches, fruits and veggies, wraps and specialty desserts.

Blue Moon Café, Building 48—Providing gourmet sandwiches, salad bar, soups, pastries, assorted beverages and a full espresso bar, along with convenient snacks and sundry items.

Catering—Contact Chemeketa Event Services, 503.399.6444 for all campus and outreach location catering needs including lunches, dinners, snacks, coffee services, etc.

There are also a number of snack and beverage vending machines conveniently located throughout all Chemeketa campuses and centers.

Counseling and Career Services

Counseling services

503.399.5120
advising@chemeketa.edu

If you are interested in educational, career, or personal counseling, contact our Counseling and Career Services Center in Building 2 on the Salem campus. Chemeketa's Dallas, Yamhill Valley and Woodburn locations also provide counseling by appointment. 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, call Counseling and Career Services for current hours of operation.

Career planning classes

Career planning classes are conducted by counseling staff to assist you in choosing or changing careers. In these classes 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 labor market trends;
- develop a personal plan of action.

Contact or stop by the Counseling and Career Services for a current schedule of career planning classes.

New student orientation

New student orientation is required of all new degree or certificate seeking students. View online orientation at my.chemeketa.edu. Using your user name and password, click on the Student tab to find the orientation. Learn about campus resources and services to help you be successful student. For more information, contact Counseling and Career Services.

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.

SKILLS is a computer program that allows you to compare skills you prefer to use with those required in certain occupations.

For more information on these Career Exploration tools, contact or stop by the Counseling and Career Services on the Salem campus. Access is also available at most other campus locations and can be accessed online through MyGame Plan on My Chemeketa (my.chemeketa.edu).

Academic advising

Chemeketa offers academic advising to all students. If you are enrolling in a career and technical education program of study, you may be assisted by 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, please see

a counselor in Counseling and Career Services on the Salem campus. Advising sessions are offered each term. You may also consult with a counselor at the Dallas, Yamhill Valley and Woodburn locations.

If you attend only evening classes or are a part-time student, please visit Counseling and Career Services location periodically for academic advising.

Services to the Community

Campus Art Gallery

503.399.2533

The Chemeketa Community College Art Gallery is located in Building 3, Room 122 on the Salem campus. The Gallery presents exhibits of professional artists from the region and around the country. Several shows a year, feature featuring a wide variety of media and are open for viewing by students, staff and the public. A special exhibit of student work is on display at the end of every academic year. To learn about the current exhibit, check gallery hours or see the upcoming season, go to art.chemeketa.edu.

Chemeketa Center for Business & Industry

503.399.5181 / 503.399.5088

ccbi.chemeketa.edu

The Chemeketa Center for Business & Industry (CCBI) is located at 626 High St. NE, Salem. The facility provides an auditorium that seats 84, nine conference/meeting rooms that can seat from 4 to 130 and desktop and portable computers with wireless Internet capability. These rooms are available to rent for workshops, meetings, or special events.

CCBI trains and counsels over 9,000 employees and business owners each year. Ongoing professional development pays dividends through improved employee job performance. Individuals can choose from regularly scheduled workshops or employers can arrange for a training to be delivered at the workplace. Some of the specific services available to the community include:

Small Business Assistance—Providing the tools and the environment for business owners to make great decisions, the Chemeketa Small Business Development Center (SBDC) engages business owners in learning through workshops (on-line and traditional classroom), information (Resource Center and BizCenter.org) and business advisors. Special programs are also included in the mix of services to business owners:

- The MERIT (MicroEnterprise Resources, Initiatives & Training) program provides training and assistance to people considering self-employment. The 21-hour feasibility course helps potential entrepreneurs

develop their business skills and learn the skills and tools needed to run a business. The MERIT class covers a variety of essential business topics, including marketing, bookkeeping, pricing a product or service, writing a business plan, and applying for financing. MERIT clients who have completed the class also have access to additional resources, such as one-on-one advising and technical assistance, scholarships for advanced training, and assistance with market research and finding funding sources. Classes are offered several times a year in Salem, Yamhill Valley, and Independence. For more information visit merit.chemeketa.edu or call the Chemeketa Center for Business & Industry at 503.399.5088.

- The SBM (Small Business Management) program assists established businesses through monthly classes and individual business advising to improve profitability, gain greater control over business operations, and build a strong business foundation.
- The OK (Opportunity Knocks) program is peer advising teams of established business owners acting as external board of directors for each other.
- The newly launched E'Ship (Entrepreneurship) online courses offer an opportunity for business owners in all stages of business to earn credit taking courses using their own business as their case study.
- The Entrepreneur's EDGE (Education, Development, Growth, Empowerment) incubator program assists new business to grow and prosper within a supportive environment. 10 office spaces house start-ups, and services include monthly advising and regular educational offerings.

Customized Training—Specific trainings are tailored for employees and delivered at a convenient location, date, and time. Clients include industry sectors, businesses, organizations, and government agencies. Through state-wide and regional networks, the Chemeketa Center for Business & Industry has access to hundreds of trainers. See page 51 Business and Industry Certification.

Services include:

- **Online Workshops**—a full range of Internet-based workshops offered each term. Take classes from home or work on your computer; instructors interact via e-mail. Over 200 topics including: small business management, accounting software, Social Media, A+ Certification, Microsoft Office, web design, project management, and languages.



- **Employee Skill Development**—A wide variety of employee and organizational development trainings are available, including math, writing, inter-personal communications, problem solving, English as a Second Language, leadership, supervision, and manufacturing. Courses are tailored to meet employer needs.
- **Command Spanish**—Participants learn one-way communication in Spanish. Short, outcome-based workshops and classes for dentists, nurses, law enforcement officers, bank tellers, teachers, firefighters and many other professionals yield immediate benefits for patients, employees, and customers. No prior knowledge of Spanish is required.
- **Computer Training**—A state-of-the-art computer lab for technical skills and A+ certification preparation training for individuals and organizations. Internet capability available. Classes are designed to increase work-related skills and productivity and can be customized to meet your needs.
- **Energy Efficiency**—Professional development workshops are available for contractors, building owners, architects.

Chemeketa Cooperative Regional Library Service

503.399.5043 • www.ccrs.org

The college library is part of the Chemeketa Cooperative Regional Library Service (CCRLS), along with 17 public libraries in the college district. This cooperative, tax-supported effort provides library service to district residents who have no access to a local library. Member libraries

share their resources and honor most library cards issued by other member libraries. CCRLS also provides book delivery between libraries.

An automated, online catalog listing over 580,000 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. The catalog can be accessed from the Internet at catalog.ccrs.org.

Community agriculture classes

503.399.5139

Chemeketa offers non-credit classes to meet the continuing educational needs of persons involved in agriculture with an emphasis on pesticide license examination preparation and recertification.

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

Agribusiness Management—Chemeketa's Agribusiness Management program prepares farm businesses who are program participants to understand sound business management principles and practices through a focus on effective farm record keeping, analysis, and interpretation. For more information, see page 34.

Community education classes

503.399.6562

Chemeketa offers a variety of community education classes throughout the district. These non-credit, personal enrichment classes vary in length from two hours to ten weeks. Classes start throughout the term and are offered during daytime, evening, and weekend hours. Topics include art, computer skills, cooking, dance, driver's education, fitness, foreign language, health, home projects, music, continuing technical education, travel, welding, and more.

For a listing of current Community Education classes, look in Chemeketa's quarterly *Schedule of Classes*, Community Education Class publication, and on the college web site at www.chemeketa.edu. To have a Community Education Class publication mailed to you, call 503.399.6562.

The Community Education Program is always interested in ideas for new classes and potential instructors who have teaching experience, enthusiasm, and a desire to share knowledge. Please call 503.399.6562, or e-mail CEInfo@chemeketa.edu.

Outreach programs

Committed to lifelong learning, the college schedules a wide variety of credit, non-credit, and community education classes, which meet during the day, evening and on weekends throughout the college district. These include college transfer courses; career and technical education and job skill-upgrading classes; and personal enrichment classes in arts and crafts, fitness, language, computer skills, and other topics. In response to community requests, college staff are willing to develop and schedule other classes.

Chemeketa's locations in Yamhill Valley, Dallas, and Woodburn also provide Adult Basic Education, General Educational Development (GED) test preparation, English for Speakers of Other Languages (ESOL), and High School Completion programs.

In addition to classes, all community locations provide these services:

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

Planetarium

503.399.5200 or 503.399.5246

Chemeketa's Planetarium is in Building 2 on the Salem campus. It features a Spitz model 512 sky instrument that 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 one to two different sky shows each fall, winter, and spring term. Showings are scheduled Friday nights when classes are in session. There is an admission fee with a special rate for students. Call to arrange group showings for schools, clubs, and organizations.

Degrees, Diplomas, Certificates, and Transfer Information



Degrees, diplomas, certificates, and transfer information

Associate Transfer Degrees and Oregon Transfer Module

Graduates of Chemeketa's two-year programs are awarded an Associate of Arts Oregon Transfer degree, an Associate of Applied Science degree, an Associate of Science degree or an Associate of General Studies degree. All are nationally recognized degrees.

Oregon Transfer Module

The Oregon Transfer Module comprises one year of coursework exclusively in general education, which can lead either to an AAOT or AS/OT-BUS transfer degree from Chemeketa or to a baccalaureate degree from any public Oregon college or university in the Oregon University System and will result in sophomore standing.

To earn the module, which is equivalent to three academic quarters or 45 credits, you must select from a list of approved courses listed on page 52. You must earn a grade of "C" or better in all courses and have a minimum cumulative GPA of 2.00 to complete the module. Upon transfer, the receiving institution may specify additional general education coursework that will be required for your major or ask you to make up the difference between the transfer module and the institution's total general education requirements.

If you intend to transfer to a specific Oregon university, contact an advisor who will work with you to ensure that you meet the specific requirements at the receiving school.

Associate of Arts Oregon Transfer degree

The Associate of Arts Oregon Transfer (AAOT) degree is the core curriculum of a liberal arts education. This core includes coursework in foundational and discipline studies areas. You will be taking courses in writing, communication mathematics, social sciences, and art and letters, among others. In addition, you are encouraged to explore a broad range of subjects through elective coursework. You must earn a grade of "C" or better in all courses and have a minimum cumulative GPA of 2.0 to complete the degree.

Students who earn an AAOT degree from Chemeketa have fulfilled the lower division general education requirements at any of the four-year colleges in the Oregon University System. If you enroll full time, it usually takes two years to meet the AAOT requirements.

Beginning summer term 2010, there were changes to the AAOT degree (see p. 53) that are consistent across all of Oregon's 17 community colleges. Two content areas are now embedded in required courses. Revisions to the degree include the addition of:

- **Information Literacy**—this content is embedded in the Writing requirements of the degree.
- **Cultural Literacy**—this requirement is met by taking one course in the area of discipline studies that is designated as meeting the statewide requirement. At Chemeketa, you will find cultural literacy is called Difference, Power, and Responsibility and courses are available in all areas of the arts and letters and social science areas (see the program of study guide on page 46 for Cultural Literacy courses).
- Also note that, in most areas, courses not credits are required to meet the degree (90 credit hours total). Many courses that were formerly 3-credit are now 4-credit courses to better meet transfer needs. Contact a college advisor for more information.

See the program guide on pages 46 to 50 for a complete list of our transfer programs. Information and curriculum guidelines begin on page 67.

Associate of Science/Oregon Transfer Business degree

The Associate of Science/Oregon Transfer Business Degree is a focused academic program that provides you with a marketable degree and keeps open your options for transfer to a baccalaureate program. By earning this degree from Chemeketa, you will have fulfilled the lower division general requirements at any of the schools in the Oregon University System to which you choose to transfer, as well as the ability to register as a junior. Recipients of this degree, however, are not guaranteed admission to the business school/program of choice; that is ultimately up to the institution to which you apply.

This statewide degree must be taken as designed; that is, courses or sequence requirements may not be added or removed. To qualify for this degree, you must meet the requirements listed on page 54.

Associate Degrees and Certificates

Associate of Science degree

The Associate of Science (AS) degree is designed for students who plan to transfer and complete a Bachelor of Science degree at a four-year college or university. The degree includes a core of general education courses and electives that allow you to tailor your course of studies to meet particular college transfer requirements. It does not guarantee that you will have completed all lower division general education requirements for the baccalaureate

degree, nor does it ensure junior-level status at a four-year state university.

If you select this degree, you are encouraged to consult with an advisor to determine which courses will best align with the general education requirements at the four-year institution to which you intend to transfer.

To qualify for the degree, you must meet the requirements listed on page 56.

Associate of Applied Science degree

Chemeketa, with its emphasis on career and technical education, offers preparation 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 about two years to meet the Associate of Applied Science degree requirements. In some programs of study, there are prerequisites to enter the program. See the program guide on pages 46 to 50 for a complete list of Associate of Applied Science degree programs. Information and curriculum outlines of these programs begin on page 67.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on page 55.

Associate of General Studies degree

The Associate of General Studies (AGS) 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 or to fulfill the requirements of a specific four-year college program or special program of study.

To qualify for the Associate of General Studies degree, you must meet the requirements listed on page 57.

Certificate of Completion

You will receive a Certificate of Completion if you meet the requirements of certain one-year or less-than-one-year career and technical education programs.

See the program guide on pages 46 to 50 for a complete list of Certificate of Completion programs. Information and curriculum outlines of these programs begin on page 67.

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 2.00 or above for all coursework which applies to the certificate;
- Complete a minimum of 15 credit hours at Chemeketa, and–
- Apply courses numbered 050 or higher toward a certificate–

Many programs have other certificates that credential you to work in jobs in your field while attending college. Some of these certificates are included in part of a larger two-year degree, creating a pathway for you to work, go to school, and advance in your career field. Ask your program advisor or college counselor for more information on which courses can apply to other certificates or degrees in your chosen field of study.

Second degree

To earn a second associate's degree, you must complete at least 12 credits at Chemeketa in addition to those you have completed for the first degree. You must also meet all the requirements for the second degree.

Graduation

503.399.6588

graduation@chemeketa.edu

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

As a candidate for graduation, fill out an Application for a Certificate or Degree form. Return the form to the Enrollment Center in Building 2, Room 200, on the Salem campus by the fourth week of the academic term before the term in which you will complete the program requirements. Dates for when applications for graduation are due are listed on page 3 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 summer term, you are eligible to participate in the graduation ceremony held the preceding June.

If your course of study extends beyond five years or is interrupted by two years or more, graduation requirements may have changed. In order to meet the new graduation requirements, you must contact your program advisor for current or equivalent course substitutions.

Chemeketa awards adult high school diplomas through its High School Completion program. The Oregon Department of Education issues General Educational Development (GED) certificates. For details on the High School Completion and GED programs, see page 39.

Classes required to complete the programs outlined in this catalog are offered on the Salem campus and through distance learning options. Some of the classes are also offered at Chemeketa's Dallas, Yamhill Valley and Woodburn locations.

Occupational Skills Training

503.365.4713

You 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 for you by the Skills Training coordinator, site supervisor, and/or sponsoring vocational consultant if a sponsoring agency is involved. Relevant classes may also be part of the training if those classes are essential to developing the skills being sought. Workers' compensation coverage is included. For further information about the program, see page 46 in the Programs of Study.

On-the-Job Evaluation—The OJE is designed to provide a way to clarify vocational goals and assess capabilities and potential for a designated job or training area. This is a non-credit, non-graded process that is monitored according to a personalized outcome assessment and provides workers' compensation at the training site.

Office of High School Programs

Chemeketa has several programs to help you earn the high school credits needed for a high school diploma or its equivalent. Students must be 16 year old to participate. Information is available for all programs at the Salem High School Programs Office 50/102 or at outreach locations.

Students below the age of 15 will not be allowed to enroll in credit or developmental ed classes. Certain 15 year olds may be accepted after completing specific requirements. (See enrollment policy for under 16).

Alternative High School Programs

GED Options—Chemeketa Campuses

GED Options programs for high school aged students are available at many of Chemeketa's campuses. Day, afternoon and evening sessions are available on the Salem Campus. If you are interested in getting a GED through Chemeketa and need classes preparing for testing, please contact 503.399.5293 for orientation and enrollment information

Winema High School

Winema High School programs are specially designed for students who have not been successful in a traditional high school setting, but who have the desire and ability to earn a high school diploma. Winema operates day and evening programs on the Salem campus; satellite programs are available in Sheridan and Woodburn. Winema offers a

great opportunity to earn a high school diploma in a college environment. Students must be 16-21 years old, complete an enrollment information packet and skills testing. You must be enrolled in the program full time and must be 16-18 years old. Many school districts sponsor students for enrollment and a charter school option is also available.

For more information or enrollment/orientation dates, contact the program at 503.399.5293 or 503.399.5115 (Salem), 503.589.7650 (Woodburn), or 503.843.3770 (Sheridan).

AVE and Winema Options

Chemeketa's Salem campus offers a program designed to help high school students, aged 16–21, who need additional skill development in reading, writing, math and English Language skills (listening, speaking, writing and reading). These two programs are designed to assist students to develop prerequisite academic skills before entering a diploma or GED Options programs.

For more information contact the program at 503.365.4705.

College transitions programs for high school students

In partnership with various school districts, Chemeketa has developed early college opportunities for high school students. In these programs, you work with your school district counselor to get approval to take college courses at one of Chemeketa's many campuses. College credit applies for both college and high school requirements. A charter school entry option is also available at all Chemeketa locations. For information or enrollment, contact 503.399.5293 or 503.399.5115.

Expanded Options

In partnership with various school districts, full time high school students are able to take college courses to complete high school diploma requirement. Referral from your local high school is necessary. Please contact your high school counselor for information.

Adult high school diploma program

In Chemeketa's adult high school diploma program, you may earn the credits you need to receive a high school diploma while taking college courses. 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 50/102 on the Salem campus or to Chemeketa's Yamhill Valley or Woodburn locations. To participate, you must take the college placement tests and meet the minimum entry scores. You must have a release from your high school to participate in this option if you are under 18 years old. Please contact 503.399.5293 or 503.399.5115 for more information.

Academic Transition Programs

The college offers several programs to help adults improve reading, writing and math skills to prepare adults for work or to study in college.

General Educational Development (GED)

503.399.6556

You may earn a high school equivalency certificate by passing General Educational Development (GED) tests in English or Spanish. There are five tests covering language arts (writing and reading), social studies, science, and mathematics.

Chemeketa offers classes throughout the college district to help you prepare for these tests. Classes are held at the Dallas, McMinnville, Woodburn, and Salem locations. Generally, you must be 18 years or older, but if you are 16 or 17, see Alternative High School Programs, GED Options.

GED Tests are given in Salem, McMinnville, and Woodburn. The fee is \$115. To request disability related accommodations, please call 503.399.5192

Adult Basic Education (ABE) and General Educational Development (GED) Classes

503.399.5224

Adult Basic Education (ABE) and General Educational Development (GED) programs offer day and evening non-credit classes to review basic skills in reading, writing, and math, and to prepare you to pass the five GED tests in language arts (writing and reading), social studies, science, and math in order to earn your high school equivalency certificate. Classes are offered in :

- Pre-GED and GED level reading
- Social studies and Science
- Pre-GED and GED level writing
- Pre-GED and GED level math
- Computer Basics
- GED Health Care Classes
- Spanish GED

Classes are held at the Salem, Woodburn, McMinnville and Dallas locations.

Basic Skills Development

503.399.5224

The Basic Skills Development program offers non-credit classes to those college students who would like a one-term review of reading, writing, or math skills by taking non-credit Adult Basic Education classes.

English for Speakers of other Languages (ESOL)—non-credit program.

503.399.6298

The ESOL Program provides instruction designed to improve non-native English-speaking students' ability to

read, write, listen, and speak in English as a second language with additional classes in pronunciation, grammar, and basic computer skills for students from the beginning level to advanced (college-transition) level. Classes are offered in the day and evening in Salem, Yamhill Valley, and Woodburn. If you want to learn more about ESOL classes, contact the ESOL program to find out about language assessment and enrolling in classes. The program also offers language assessment and description of language abilities to employers and individuals for a small fee.

English as a Non-Native Language (ENL)—credit program

503.399.6298

The Chemeketa ESOL program also offers intermediate to advanced level credit courses for non-native speakers of English at the Salem campus to help students prepare for college or work. Courses include academic reading, writing, listening, and speaking, computer/technology skills, pronunciation and English grammar. For more information, refer to course listings under ENL in the quarterly *Schedule of Classes*.

Classes are available in both the day and the evening in Salem, Woodburn and Yamhill Valley. New students can also make an appointment to have their English language skills evaluated. Contact the ESOL office in your city for more information.

Chemeketa Language and Culture Institute

503.399.5141

The Language and Culture Institute collaborates with the ESOL program to provide 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 college offers instruction at several English levels from beginning to advanced. The intermediate and advanced English levels may be taken for college credit. The institute also customizes short programs for small groups.

English Now

503.399.6298

English Now (EN) program offers limited English-speaking students the opportunity to learn English in non-credit community education classes. EN classes are for adults wanting to learn some practical English communication skills focused on speaking and listening and supplemented with reading and writing instruction. EN courses were designed to help students become more confident with the language, more comfortable in social situations, and more connected to their community. Students can continue to enroll in classes as long as they wish to transfer to ESOL or ENL classes as appropriate.

Reading and Study Skills Program

503.399.5162

The Reading and Study Skills Program offers college credit individualized, lecture, hybrid, and online classes for developmental and transfer students who need to improve their academic skills in reading, vocabulary building, and study skills. A reading and study skills faculty member is available to consult with you and your instructors on course-specific learning strategies including taking tests, controlling test anxiety, and managing time. For more information on these credit classes and services, contact the Study Skills Center in Building 2, Room 212, on the Salem campus. Classes in reading, spelling, and vocabulary building are also offered at the Dallas, Yamhill Valley and Woodburn locations.

College-level Reading and Effective Learning courses (Study Skills)

These courses serve as a foundation for success in other college courses by developing essential critical thinking, reading, writing, and learning strategies. For more information, refer to 100-level and above course listings under Reading and Study Skills in the quarterly *Schedule of Classes*.

College Transfer

General information

Chemeketa offers the Oregon Transfer Module and the Associate of Arts Oregon Transfer degree, as well as individual transfer courses for students who wish to begin their bachelor's degree at the community college. You can complete most of the degree's general education requirements and begin work on the requirements for a specific major while studying at Chemeketa.

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

- Contact the four-year university 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 college or university a term or two before completing your work at Chemeketa to make sure you are meeting all requirements.
- Apply for admission as a college transfer student and transfer your credits to the four-year institution.

Chemeketa offers the Associate of Science/Oregon Transfer degree in Business for students who wish to transfer to a business program at any of the schools in the Oregon University System.

Collaborative bachelor's degrees

Chemeketa has partnerships with a majority of the colleges and universities in the area to offer bachelor's and master's degrees in Salem. Most classes are held during the evening, on weekends, or via distance education. For more information on these programs, contact advisors at the numbers listed below:

Portland State University

Amy Nelson Green, Academic Advisor
503.315.4281, psusalem@pdx.edu

Bachelor degree programs in Liberal Studies and Social Sciences. Minors in Business, Sociology, Women's Studies and Civic Leadership. Certificates in Early Childhood Education, Youth Worker Issues, Rural Social Services and Volunteer Engagement and Leadership. Also weekend Business Degree Program held near Clackamas Town Center one Wednesday evening and two Saturdays per term. Contact Brian Jimenez 503.725.3089 or wbdp@pdx.edu

Linfield College

Ann Sukalac, Academic Advisor
503.399.5121, asukalac@linfield.edu

Bachelor degree programs in Arts and Humanities, Accounting, Business Information Systems, International Business, Marketing, Management, Nursing (RN to BSN only), and Social and Behavioral sciences. Certificate programs in Accounting (post-baccalaureate only), Computer Information Systems, Human Resource Management, and Marketing.

Oregon State University

Rick DeBellis, coordinator
541.737.2790 ecampus@oregonstate.edu

Online bachelor's degree programs in Environmental Science, General Agriculture, Fisheries & Wildlife. Liberal Studies, Political Science and Natural Resources. General Anthropology, Economics, Environmental Economics and Policy. General Horticulture, Human Development and Family Science, Sociology, Women's Studies. 19 online minors.

George Fox University

888.888.0178, adultdegree@georgefox.edu,

Bachelor degree programs in: Elementary Education, Management and Organizational Leadership, Project Management Health Administration, Management and Business Information Systems, Social and Behavioral Studies and Technology Management.

Corban University

503.589.8195; 1.800.764.1383, adp@corban.edu

Bachelor's degrees in Business (Business and Organizational Leadership and Healthcare Administration) and Psychology (Family Studies) through Online Cohorts or one night a week Cohorts on the Salem campus.

Western Oregon University

877.877.1593

wolfgram@wou.edu

Dual Enrollment, bachelor and graduate degree programs.

Eastern Oregon University

Terry Walters, Regional Director/Advisor

503.589.7917

twalters@eou.edu

Bachelor's degree programs through Online Distance Education in Anthropology/Sociology, Business Administration, Business Economics, English (Literature/Film), Fire Service Administration, Liberal Studies, Philosophy/ Politics/Economics, Physical Education/Health, and Psychology. 19 Minors also available online.

University of Phoenix Salem Learning Center

503.364.5695

Bachelor's degrees in: Arts & Sciences, Business, Criminal Justice, Human Services, Psychology and Technology. Master's degree programs in Business and Education. Convenient and flexible online and classroom format via evening and weekend classes in Salem and Portland or distance education.

Capella University 888.227.2736

Online bachelor degree programs in Business, Information Technology, Psychology, Public Safety, Public Administration and RN to BSN; online master's and doctoral degrees in Business, Computer Science, Education, Human Services and Psychology.

Curriculum requirements

Chemeketa's college advising sheets are adapted from requirements listed in the most recent catalogs of Oregon's public four-year universities. Counseling and Career Services (Building 2 on the Salem campus) and academic advisors have the actual catalogs. You may also review these requirements with a counselor at Chemeketa's Dallas, Yamhill Valley or Woodburn locations.

General education requirements for Oregon's four-year colleges and universities are listed on pages 58–64. 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 University, George Fox

University, Lewis and Clark College, Linfield College, Marylhurst University, Oregon Health Sciences University, Pacific Northwest College of Art, Pacific University, University of Portland, Corban College, Western States Chiropractic College, Willamette University, and the University of Phoenix.

Military Science (Army ROTC)

Military Science (MS) courses are offered through a dual enrollment agreement with either Oregon State University or Western Oregon University. You may enroll at OSU or WOU in:

MS111, 112, 113 Adventure Training (one credit each)

MS211, 212, 213 Military Science II (three credits each)

All courses may be applied to the Military Science program or used as electives. Courses are taught off campus. For further information on Army ROTC courses or any other aspect of the program, contact the Department of Military Science, 541.737.3511.

General Education

Philosophy

Courses in general education offer students unique opportunities to investigate the major areas of study. These courses are designed to foster intellectual growth and to build an understanding of the interdisciplinary nature of knowledge.

General education courses offer students a coherent core of studies that develop the habits of mind that lead to thoughtful and productive global citizenship. Overall, general education provides opportunities for lifelong learning and the ability to integrate concepts and ideas across disciplines.

Outcomes

Outcomes in general education communicate the knowledge, skills, and abilities required to equip students to make responsible contributions to society. In 2009, outcomes and criteria were adopted throughout Oregon that guide the purpose and types of courses that comprise general education. Chemeketa endorses these outcomes and seeks to ensure that through regular and systematic assessment, students who complete their program of study are academically prepared for their next educational experience.

As a result of taking General Education courses, a student should be able to:

In Arts and Letters

- Interpret and engage in the Arts and Letters, making use of the creative process to enrich the quality of life and

- Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

In Mathematics

- Use appropriate mathematics to solve problems; and
- Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

In Science or Computer Science

- Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models, and solutions and generate further questions;
- Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and
- Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

In Social Science

- Apply analytical skills to social phenomena in order to understand human behavior; and
- Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

In Speech/Oral Communication

- Engage in ethical communication processes that accomplish goals;
- Respond to the needs of diverse audiences and contexts;
- Build and manage relationships.

In Writing

- Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
- Locate, evaluate, and ethically utilize information to communicate effectively; and
- Demonstrate appropriate reasoning in response to complex issues.

In Cultural Literacy (included in courses that meet the outcomes of Discipline Studies)

- Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

In Information Literacy (included in Writing Foundational requirements)

- Formulate a problem statement;

- Determine the nature and extent of the information needed to address the problem;
- Access relevant information effectively and efficiently;
- Evaluate information and its source critically; and
- Understand many of the economic, legal, and social issues surrounding the use of information

Cultural Literacy

At Chemeketa, the goal of Difference, Power, and Responsibility (also called cultural literacy) courses is to provide a framework within which you can develop an awareness of issues of difference and power in order to participate responsibly within a democratic society. You will find that course content related to cultural literacy is a part of many courses, but is primarily embedded in the arts and letters and social sciences. You will need to take one DPR-designated/cultural literacy course to fulfill the requirements of the AAOT degree. See page 53 for identified cultural literacy requirements in the AAOT degree.

Information Literacy

Information literacy content is embedded in the college writing courses required for the AAOT degree. As a result of taking Writing 121, 122 and/or 227 courses, you will gain the ability to determine the type of information needed to address a problem, access relevant information efficiently, evaluate its source critically, and use the needed information effectively. See page 229 for descriptions of the writing courses.

Related instruction

Courses in related instruction connect and strengthen the knowledge and skills acquired in certificates of completion and two-year Associate of Applied Science degrees. All students enrolled in career and technical education areas are required to complete courses in college-level related instruction, specifically:

- Communication/writing
- Computation/mathematics
- Human relations/psychology or sociology

Refer to your program area to learn of the specific requirements for individual certificates and degrees. In some programs, approved course substitutions are specifically noted.

Certificates of Completion and Short-term Training Awards

You don't need to complete a two-year degree to prepare for some of the jobs that may be of interest to you. Many programs offer Certificates of Completion that you can usually finish in one year. Many of the courses in these certificates will apply to an Associate of Applied Science (AAS) degree in the same field. These certificates can help you get started on a career path or advance in

your chosen field while continuing your education toward higher degrees.

Another alternative is getting training for a specific workplace skill and receiving a short-term training award. The amount of time required for short-term training ranges from a few hours to one or two terms. Contact the departments or individuals below for more details or check the page listed below.

Certificates of Completion

Certificate	Contact	Duration	Page
Activity Director Training	Donna Hirt, 503.399.6157	1 term	119
Addiction Counselor Certification Preparation	Donna Hirt, 503.399.6157	4 terms	119
Architectural Drafting	Mike Kelly, 503.399.5069	3 terms	94
Automotive Body Repair	Steve Agee, 503.399.6521	4 terms	76
Automotive Entry-Level Technician	Steve Agee, 503.399.6521	4 terms	76
Automotive Machining	Steve Agee, 503.399.6521	4 terms	77
Basic Corrections	Elaine Premo, 503.589.7768	2 terms	90
Basic Law Enforcement	Elaine Premo, 503.589.7768	2-3 terms	90
Basic Manufacturing Technician	Sheldon Schnider, 503.589.7875	4 terms	124
Basic Nursing Assistant	Pat Mandeville, 503.399.5058	11 weeks	129
Business Software	Patti Sessions, 503.399.6094	2-3 terms	81
Business Technology	Patti Sessions, 503.399.6094	4-5 terms	81
CNC Operator	Sheldon Schnider, 503.589.7875	3 terms	125
Computer Programming	Mandy Reiningger, 503.365.4822	2-3 terms	87
Computer Systems Administrator	Mandy Reiningger, 503.365.4822	2-3 terms	87
Computer Systems Support	Mandy Reiningger, 503.365.48223	2-3 terms	87
Computer-Aided Manufacturing (CAM) Fundamentals	Sheldon Schnider, 503.589.7875	2-3 terms	125
Computer-Assisted Drafting (CAD)	Mike Kelly, 503.399.5069	3 terms	94
Database Developer	Mandy Reiningger, 503.365.4822	2-3 terms	88
Dental Assisting	Lynn George, 503.399.5265	3 terms	92
Destination Marketing	Kris Powers, 503.584.7598	3-4 terms	137
Early Childhood Education	Linda Craven, 503.399.6076	3 terms	96
Employment Skills Training	Chuck Skirvin, 503.399.6549	varies	131

Event Management	Kris Powers, 503.584.7598	3-4 terms	118
Fire Service Supervision & Management	Bill Klein, 503.399.6240	3 terms	109
Health Information Technology	Cheryl Davis, 503.399.2669	3 terms	112
Hospitality Management	Kris Powers, 503.584.7598	4 terms	117
Juvenile Corrections	Elaine Premo, 503.589.7768	3 terms	122
Manual Machine Operator	Sheldon Schnider, 503.589.7875	3 terms	124
Medical Coding and Insurance Billing	Cheryl Davis, 503.399.2669	3 terms	112
Network Management and Systems Security	Mandy Reiningger, 503.365.4822	2-3 terms	88
Occupational Skills Training	Mark Noah, 503.399.5217	3-12 months	131
Office Fundamentals	Barbara Holler, 503.399.3524	3-4 terms	84
Pharmacy Technician	Cheryl Buckholz, 503.365.4696	3 terms	132
Retail Management	Laney Furr, 503.399.6163	2-3 terms	134
Survey Technology	Mike Kelly, 503.399.5069	3 terms	110
Tax Preparation	Lana Tuss, 503.399.6152	1 term	69
Tourism and Travel Management	Kris Powers, 503.584.7598	2-3 terms	137
Vineyard Operations	Al MacDonald, 503.584.7254	4 terms	139
Web Developer	Mandy Reiningger, 503.365.4822	2-3 terms	88
Welding Technology	Mike Pintler, 503.399.6059	3 terms	142

Short-Term Training Awards

Training	Contact	Duration
DEQ Maintenance Provider	CCBI, 503.399.5181	16 hours
DEQ Onsite Wastewater Installer	CCBI, 503.399.5181	8 hours
ODOT Flagger Training	CCBI, 503.399.5181	4 hours
Small Business Management Programs (see page XXX)	CCBI, 503.399.5088	9 months

Certificates, two-year degrees and transfer guide

Below is 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, check the page referenced in the program section of the catalog, or call Counseling and Career Services at 503.399.5120.

Certificate—Certificate of Completion

AAS—Associate of Applied Science degree

Transfer—Concentration of courses that transfer to four-year institutions

Other—Special programs

Limited—Enrollment is limited by program size and/or requirements

Addl Qual—Additional qualifications are required for admission to the program (for example, criminal background check, immunizations, employment)

Note: Students applying to any certificate or degree program must take the college placement tests and meet with Counseling and Career Services or a program advisor to complete the admissions process.

General Degrees							
	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Oregon Transfer Module (OTM)			✓				52
Associate of Arts Oregon Transfer (AAOT)			✓				53
Associate of Science / Oregon Transfer (ASOT) in Business			✓				54
Associate of Applied Science (AAS)		✓					55
Associate of Science (AS)			✓				56
Associate of General Studies (AGS) Arts and Communication							
	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Art			✓				75
Design			✓				93
Drafting Technology–CAD Programs							93
• Architectural Drafting	✓						94
• Computer-Assisted Drafting (CAD)	✓	✓					94
English			✓				106
Film Arts			✓				192
Foreign Languages			✓				109
General Studies			✓				110
Humanities			✓				209
Journalism			✓				121
Music			✓				213
Philosophy			✓				133
Pre-Law			✓				133
Religion			✓				220
Speech			✓				135
Speech-Language Pathology Assistant Programs							135
• Speech-Language Pathology Assistant	✓	✓					136
Visual Communications Programs							140
• Graphic Design		✓			✓		141
• Interactive Media		✓			✓		141
Writing			✓				229

Business and Management

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Accounting Programs							68
• Accounting	✓	✓					68
• Tax Preparation	✓						69
Agribusiness Management Program				✓			69
Business Administration			✓				79
Business Technology Programs							79
• Accounting Administrative Assistant		✓					82
• Administrative Office Professional		✓					82
• Business Software	✓						81
• Business Technology	✓						81
• Medical Administrative Assistant		✓					83
• Office Fundamentals	✓						80
Health Services Management Program		✓					111
Hospitality Management Programs							117
• Event Management	✓						118
• Hospitality Management	✓	✓					117
Management Program		✓					127
• Procurement Management	✓						127
Retail Management Program	✓						134
Small Business Management Programs				✓			135
Tourism and Travel Management Programs							136
• Destination Marketing	✓						137
• Tourism and Travel Management	✓	✓					137
Vineyard Management Program		✓					138
Wine Marketing Program		✓					143

Health Sciences

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Medical Administrative Assistant Program		✓					83
Chiropractic			✓				84
Computer Information Systems–Health Informatics Program		✓					84
Dental Assisting Program	✓				✓	✓	92
Dental Hygiene			✓				93
Emergency Medical Technology—Paramedic Program		✓			✓	✓	104
Health, Health Education			✓				111
Health Services Management Programs							111
• Health Information Technology	✓					✓	112
• Health Services Management		✓				✓	113
• Medical Coding and Insurance Billing	✓						112
Hemodialysis Technician	✓						114
Nursing Programs	✓	✓	✓		✓	✓	128
Nutrition and Food Management: Dietetics			✓				131
Pharmacy Programs							131
• Pharmacy Technician	✓				✓	✓	132
• Pharmacy Management		✓			✓	✓	132
Physical Education and Human Performance			✓				133
Pre-Professional Study (Medicine, Dentistry, Pharmacy, Veterinary Medicine)			✓				133
Speech-Language Pathology Assistant Programs							135
• Speech-Language Pathology Assistant	✓	✓			✓	✓	136

Human Resources and Social Sciences

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Anthropology			✓				70
Chicano/Latino Studies			✓				177
Criminal Justice Programs							89
• Basic Corrections	✓					✓	90
• Basic Law Enforcement	✓					✓	90
• Criminal Justice		✓	✓			✓	91
Early Childhood Education Programs							95
• Infant/Toddler	✓						96
• Preschool	✓						96
• Early Childhood Education	✓	✓				✓	97
Economics			✓				98
Education—Elementary			✓				98
Education—Secondary			✓				98
Fire Protection Technology Programs							106
• Fire Prevention		✓					108
• Fire Suppression		✓	✓		✓	✓	107
• Fire Service Supervision and Management	✓				✓	✓	109
General Studies			✓				110
Geography			✓				110
History			✓				114
Hospitality Management Programs							117
• Event Management	✓						118
• Hospitality Management	✓	✓					117
Human Development and Family Studies			✓				198
Human Services Programs							119
• Addiction Counselor Certification Preparation	✓				✓	✓	120
• Addiction Studies		✓			✓	✓	119
• Social Services		✓			✓	✓	121
Juvenile Corrections Program	✓					✓	122
Juvenile Justice Program		✓				✓	122
Management Program		✓					127
• Procurement Management	✓						127
Retail Management Program	✓						134
Small Business Management Program				✓			135
Political Science			✓				133
Psychology			✓				133
Social Science			✓				224
Sociology			✓				135
Tourism and Travel Management Programs							136
• Destination Marketing	✓						137
• Tourism and Travel Management	✓	✓					137
Women's Studies			✓				230

Industrial and Engineering Technology

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Apprenticeship Programs							70
• Construction Trades, General: HVAC/R	✓	✓	✓			✓	72
• Construction Trades, General: Plumber	✓	✓	✓			✓	73
• Construction Trades, General: Sheet Metal	✓	✓	✓			✓	74
• Electrician Apprenticeship Technologies: Inside Electrician	✓	✓	✓			✓	71
Automotive Technology Programs							75
• Automotive Machining	✓				✓		77
• Automotive Technology		✓			✓		77
• Body Repair	✓				✓		76
• Entry Level Technician	✓						76
Building Inspection Technology Program		✓			✓		78
Computer Information Systems–Health Informatics Program		✓					84
Computer Information Systems Programs							85
• Computer Systems and Information Technology		✓					86
• Computer Programming	✓						87
• Computer Support Specialist	✓						87
• Computer Systems Administration	✓						87
• Database Developer	✓						88
• Network Management and Systems Security	✓						88
• Web Developer	✓						88
Computer Science			✓				89
Drafting Technology–CAD Programs							93
• Architectural Drafting	✓						94
• Computer-Assisted Drafting (CAD)	✓	✓					94
Electronics Technologies Programs							98
• Computer Electronics		✓					100
• Electronic Engineering Technician		✓					99
• Industrial Electronics		✓					102
• Process Control Technology		✓					103
• Renewable Energy Management		✓					104
• Electronics	✓						99
• Process Control	✓						100
Engineering			✓				105
Geomatics and Engineering Technology Program							110
• Survey Technology	✓						110
Machining Technology Programs							123
• Basic Manufacturing Technician	✓						124
• Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)		✓					125
• Computer-Aided Manufacturing (CAM) Fundamentals	✓						125
• Computer Numerically Controlled (CNC) Operator	✓						125
• Manual Machine Operator	✓						125
Welding Programs							142
• Welding	✓						142
• Welding Fabrication		✓					142

Mathematics, Science, Computer Science and Natural Resources

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Agribusiness Management Program				✓			69
Agriculture			✓				70
Biology			✓				78
Botany			✓				78
Chemistry			✓				84
Computer Information Systems Programs							85
• Computer Systems and Information Technology		✓					86
• Computer Programming	✓						87
• Computer Support Specialist	✓						87
• Computer Systems Administration	✓						87
• Database Developer	✓						88
• Network Management and Systems Security	✓						88
• Web Developer	✓						88
Computer Science			✓				89
Drafting Technology–CAD Programs							93
• Architectural Drafting	✓						94
• Computer-Assisted Drafting (CAD)	✓	✓					94
Forestry			✓				109
General Science			✓				110
Geology			✓				110
Geomatics and Engineering Technology Program							110
• Survey Technology	✓						110
Horticulture Programs		✓					115
• Horticulture		✓					
• Phytotechnology		✓					116
Mathematics			✓				128
Physics			✓				133
Vineyard Management Programs		✓					138
• Vineyard Management		✓					
• Vineyard Operations	✓						139
Wine Marketing Program		✓					143
Winemaking Program		✓					144

Skills Development

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Adult Basic Education				✓			40
Adult High School Diploma				✓			39
College Assistance Migrant Program (CAMP)				✓	✓		25
Early College High School				✓			39
Employment Skills Training	✓						39
English as a Non-Native Language				✓			40
English for Speakers of Other Languages				✓			40
General Educational Development (GED)				✓			40
GED Options	✓						39
High School Equivalency Program (HEP)				✓	✓		25
Occupational Skills Training	✓						39
Winema				✓			39

Business and Industry Certification

Certification is a recognized approach to demonstrate your proficiencies in any one of a wide range of technical and administrative areas. Whether you are seeking a position with a new organization or looking to advance in your present organization, certification demonstrates that you have the skills you need to take the next step. At Chemeketa Community College, our mission is to provide high-quality, affordable career education that meets the needs of professionals and employers. You will be working with

experienced faculty, using today's technology, paying a fraction of the cost of private training companies. The course material is developed to help you prepare for the certification test and succeed on the job.

Certificates are available for a broad range of career areas designed for professionals working in a wide range of fields. Training and certification gives employees the skills they need for today's high-tech workplace.

Preparation for Industry Certification

Certification	Contact	Telephone
Operating System Core Hardware* (A+)**, ***	Mandy Reininger	503.365.4822
Microsoft Certified Technical Specialist (MCP) *	Mandy Reininger	503.365.4822
Oracle Database Administrator	Mandy Reininger	503.365.4822
Flagger Training, State of Oregon Certificate **	Center for Business & Industry (CCBI)	503.399.5181
Structural Welding Certification *	Mike Pintler	503.399.6059
Pipe Welding Certification *	Mike Pintler	503.399.6059

*credit

**non-credit

***available online, non-credit

Oregon Transfer Module

General Education Requirements

Requirements	Min. Cr. Hours	Courses that satisfy requirements
Complete a minimum of 45 credits. All courses must be passed with a grade of C- or better.		
Writing Two courses of college transfer composition.	8	WR121* and WR122* , or WR227*
Oral Communication One course of a fundamentals of speech or communication course	3–4	SP100 , SP111 , SP112 , SP115** , SP130 , SP218 , SP219 , or SP237**
Mathematics One course of college-level mathematics, for which at least Intermediate Algebra (MTH095) is a prerequisite.	4	MTH105 or above
Arts and Letters Three courses chosen from two disciplines. Note: In Arts and Letters, the second year of a foreign language may be included, but not the first year. American Sign Language (ASL) is considered a foreign language. The course taken to meet the Oral Communication requirement above may not be used to meet the Arts and Letters requirement.	9–12	ART101** , 115, 116, 117, 131, 154, 155, 204, 205, 206, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 244, 247, 248, 261, 261D, 262, 263, 265, 266, 270, 271, 272, 273, 281**, 284, 291; ASL211 , 212, 213; ENG104 , 105, 106, 107, 108, 109, 201, 202, 204, 205, 221, 222, 232, 250, 253, 254, 256**, 257**, 258**, 260, 261, 269**, 275; FA255 , 256, 257; FR201 , 202, 203; HUM106 , 120**, 220**, JNL216 , 217, 224, 225, 226, 227, 228; JPN201 , 202, 203; MUS161 , 201, 202, 203, 211, 212, 213; PHL201 , 203, 206**, REL201 , 202, 203; RUS201 , 202, 203; SP100 , 111, 112, 115**, 130, 218, 219, 237**, SPN201 , 202, 203; WR240 , 241, 242, 243, 244, 245, 250, 262, 263
Social Sciences Three courses.	9–12	ATH101** , 102**, 103**, 153, 212, 214, 215, 231; CLA201 , 202, 203; EC200 , 201, 202; GEG105 , 106**, 107, 201, 202, 206, 207, 220; HST104 , 105, 106, 157, 158, 201**, 202**, 203**, 237, 257**, 258, 262**, 269**, 279; PS201 , 202, 203, 205; PSY100 , 201, 202**, 206, 237, 239; SOC204** , 205**, 206**, 210**, 213**, 221, 232**, WS101** , 102**
Science/Math/Computer Science Three courses, including at least one biological or physical science with a lab. Note: When choosing courses in science and mathematics, students and advisors should check the specific requirements at receiving schools. Courses that include a laboratory component, or that deal with specific subjects, may be required for majors or degrees.	9–12	BI101 , 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH104 , 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; GEO142 , 143, 144, 201, 202, 203; GS104 , 105, 106, 107, 141, 142, 143; PH201 , 202, 203, 207, 208, 209, 211, 212, 213. CIS233J , 234J; CS160 , 161, 162, 260, 271 MTH105 or above
Electives As required to bring the total credits to 45. Course must be from the Arts and Letters, Social Science, or Science/Math/Computer Science subject areas.		

Notes:

Each course must be completed with a grade of "C" or better and must be worth at least 3 credits (quarter system). Students must have a minimum cumulative GPA of 2.00 at the time the module is posted.

1. Courses that are designed to prepare students for college-level work are not applicable to the transfer module.
2. All Oregon community colleges and Oregon University System institutions will offer students the opportunity to complete an Oregon Transfer Module and the OTM designation will be posted on the transcript by the issuing institution upon request. Regionally accredited private colleges and universities within the state are also welcome to offer and issue Transfer Modules, which will be accepted at any Oregon public college or university.
3. Oregon Transfer Module credits may not match program requirements in the receiving school. The OTM supplements, but does not supplant existing articulation agreements and does not replace effective advising.

* These courses fulfill the Information Literacy requirement of the AAOT.

** These courses fulfill the Cultural Literacy requirement of the AAOT. A minimum of one course fulfills this requirement. Complete at least one course Summer Term 2010 or later.

Associate of Arts Oregon Transfer Degree Requirements

Requirements	Amount	Courses that satisfy requirements
Complete a minimum of 90 credit hours. All courses must be completed with a grade of "C" or better. These must include the following:		
Fundamental Requirements		
Writing (Minimum of 8 credits)	8 credits	WR121* , WR122,* or WR227*
Math (One course, for which MTH095 is a prerequisite)	1 course	MTH105 or above
Oral Communication/Rhetoric (One course)	1 course	SP100 , SP111 , SP112 , SP115** , SP130 , SP218 , SP219 , or SP237**
Health/Wellness/Fitness (One or more courses totaling at least three credits)	3 credits	Any PE185 course (1 credit each); any HE or HPE course (3 credits each).
Discipline Studies		
Arts and Letters Complete a minimum of three courses chosen from two or more disciplines. (All foreign languages are considered one discipline.***) The course used to meet the Oral Communication/Rhetoric requirement above may not be used to meet this requirement.	3 courses	ART101** , 115, 116, 117, 131, 154, 155, 204, 205, 206, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 244, 247, 248, 261, 261D, 262, 263, 265, 266, 270, 271, 272, 273, 281**, 284, 291; ASL211 , 212, 213; ENG104 , 105, 106, 107, 108, 109, 201, 202, 204, 205, 221, 222, 232, 250, 253, 254, 256**, 257**, 258**, 260, 261, 269**, 275; FA255 , 256, 257; FR201 , 202, 203; HUM106 , 120**, 220**, JNL216 , 217, 224, 225, 226, 227, 228; JPN201 , 202, 203; MUS161 , 201, 202, 203, 211, 212, 213; PHL201 , 203, 206**, REL201 , 202, 203; RUS201 , 202, 203; SP100 , 111, 112, 115**, 130, 218, 219, 237**, SPN201 , 202, 203; WR240 , 241, 242, 243, 244, 245, 250, 262, 263
Social Sciences Complete a minimum of four courses chosen from two or more disciplines.	4 courses	ATH101** , 102**, 103**, 153, 212, 214, 215, 231; CLA201 , 202, 203; EC200 , 201, 202; GEG105 , 106**, 107, 201, 202, 206, 207, 220; HST104 , 105, 106, 157, 158, 201**, 202**, 203**, 237, 257**, 258, 262**, 269**, 279; PS201 , 202, 203, 205; PSY100 , 201, 202**, 206, 237, 239; SOC204** , 205**, 206**, 210**, 213**, 221, 232**, WS101** , 102**
Sciences/Math/Computer Science Complete a minimum of four courses from at least two disciplines, including at least three laboratory courses in biological and/or physical science.	4 courses	Choose three courses from: BI101 , 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH104 , 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; GEO142 , 143, 144, 201, 202, 203; GS104 , 105, 106, 107, 141, 142, 143; PH201 , 202, 203, 207, 208, 209, 211, 212, 213. Choose a fourth course from the list above or below: CIS233J , 234J; CS160 , 161, 162, 233U, 260, 271; MTH105 or above
Electives Complete any college-level courses that would bring the total number of credits to 90, including up to 12 credits of career and technical education courses.		A total of 12 credit hours in career and technical education may be applied toward an Associate of Arts Oregon Transfer Degree. The following courses will not apply: BT0104 , 105; COM051 , 052, 053; MTH052-095 ; RD080 , 090; SSP050A , B, C, 051; WR080 , 090, 091.
Earn a cumulative grade point average (GPA) of 2.00 or above in all work to be applied toward the degree.		
Complete a minimum of 30 credit hours at Chemeketa.		

* These courses fulfill the Information Literacy requirement of the AAOT.

** These courses fulfill the Cultural Literacy requirement of the AAOT. A minimum of one course fulfills this requirement. Complete at least one course Summer Term 2010 or later.

*** American Sign Language (ASL) is considered a foreign language.

Notes: Two terms of the same college-level foreign language, with a grade of "C" or better, 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 the same foreign language at the high school level. This is not a requirement for earning the Associate of Arts degree.

GPA admission requirements for the four-year OUS schools are not necessarily satisfied with an AAOT degree. Please contact your school of choice for specific requirements.

Associate of Science/Oregon Transfer Degree in Business

Requirements	Credits Hours	Courses that satisfy requirements
General Requirements		
Note: Each course in this section must be completed with a grade of "C" or better.		
Writing: A minimum of 8 credits of college-transfer writing courses.	8	Designated courses are: WR121 and WR122 , or WR227
Oral Communications/Rhetoric: A minimum of 3 credits of a fundamentals of speech or communication course	3–4	SP111 , SP112 , SP115 , SP130 , SP218 , SP219 , or SP237
Mathematics: A minimum of 12 credits, MTH111 or above, four credits of which must be statistics	12	MTH111 or above and * MTH243 and MTH244 for PSU * MTH243 and MTH244 or MTH241 for EOU, SOU * MTH243 and MTH241 for OSU, WOU, UO
Computer Applications: A minimum of 3 credits. Proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of applicable courses	3–6	Computer Science: CIS101 , CIS125A , CIS125E Computer Applications: CA208
Distribution Requirements		
Note: Courses used to meet these requirements must be at least 3 credits each. In "Arts and Letters" the second year of a foreign language may be included, but not the first year. ASL is considered a foreign language.		
Arts and Letters: A minimum of 12 credits, chosen from at least two disciplines. Each course must be a minimum of 3 credits.	12	ART 101, 115, 116, 117, 131, 154, 155, 204, 205, 206, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 244, 247, 248, 261, 261D, 262, 263, 265, 266, 270, 271, 272, 273, 281, 284, 291; ASL 211, 212, 213; ENG 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 221, 222, 232, 250, 253, 254, 256, 257, 258, 260, 261, 269, 275; FA 255, 256, 257; FR 201, 202, 203; HUM 106, 120, 220; JNL 216, 217, 224, 225, 226, 227, 228; JPN 201, 202, 203; MUS 161, 201, 202, 203, 211, 212, 213; PHL 201, 203, 206; REL 201, 202, 203; RUS 201, 202, 203; SP 100, 111, 112, 115, 130, 218, 219, 237; SPN 201, 202, 203; WR 240, 241, 242, 243, 244, 245, 250, 262, 263
Social Sciences: A minimum of 12 credits, with a minimum of 8 credits of "principles of economics" (EC 201, EC 202 to include microeconomics and macroeconomics) at the 200 level. The courses in economics must be completed with a grade of "C" or better. Each course must be a minimum of 3 credits.	12	ATH 101, 102, 103, 153, 212, 214, 215, 231; CLA 201, 202, 203; EC 200, 201, 202; GEG 105, 106, 107, 201, 202, 206, 207, 220; HST 104, 105, 106, 157, 158, 201, 202, 203, 237, 257, 258, 262, 269, 279; PS 201, 202, 203, 205; PSY 100, 201, 202, 206, 237, 239; SOC 204, 205, 206, 210, 213, 221, 232; WS 101, 102
Science: A minimum of 12 credits of laboratory courses in the biological or physical sciences. Each course must be a minimum of 4 credits.	12	BI 101, 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH 104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; GEO 142, 143, 144, 201, 202, 203; GS 104, 105, 106, 107, 141, 142, 143; PH 201, 202, 203, 207, 208, 209, 211, 212, 213
Subtotal of General and Distribution Requirements	62–66	
Business-Specific Requirements		
Note: Each course in this section must be completed with a grade of "C" or better.		
BA 101 Introduction to Business <i>A minimum of 3 credits.</i>	4	BA 101
BA 211 Fundamentals of Financial Accounting and BA 213 Decision Making with Accounting Information (or BA 211, BA 212 Financial Accounting 1, 2, and BA 213 Managerial Accounting) <i>A minimum of 8 credits.</i>	8–12	BA 211, BA 212, and BA 213
BA 226 Business Law 1 (or other advisor-approved Business elective) <i>A minimum of 3 credits</i>	4	BA 226
Electives and/or University-Specific Prerequisites	8–14	Depends on choice of transfer institution. See an advisor. A maximum of 12 credit hours in career and technical education courses may be included, with the exception of the following: BT 084, 085; COM 051, 052, 053; MTH 052 through 095; RD 080, 090; SSP 050A,B, C; SSP 051; WR 080, 090, 091. OIT-BA 206; PSY 201 PSU-BA 214; CIS 121 OSU-BA 275 or MTH 244 UO-MTH 244
Grand Total Credits	90+	
Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance.		
Notes: For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of "C-" or above, OR two years of the same high school-level second language with an average grade of "C-" or above, OR satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.		

Associate of Applied Science Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Satisfactorily complete the required courses and credit hours listed for each career and technical education program. See pages 67 to 145 in this catalog for career and technical education programs. You will meet the degree requirements if you follow the career and technical courses listed for your program.		

In addition, the courses listed below meet the college's degree requirements:

Related Instruction Requirements

Communication/Writing	3	One course of WR115, WR121, COM051 or higher writing course, or approved program substitute.
Computation/Math	3	One course of MTH052 or any higher numbered math course.
Human Relation/Psychology/Sociology	3	PSY101, PSY104, PSY201, PSY202, PSY206, PSY237, PSY239, SOC204, SOC205, SOC206, SOC210, SOC213 , or approved program substitute.
Digital Literacy	3	The following program-approved list of courses allows a student to meet the college's digital literacy competency requirement. Check with your program advisor if you have any questions related to this requirement. CIS101* Intro to Microcomputer Applications 3 cr CIS120* Computer Information Science I 4 cr DRF165* CAD System Administration 3 cr CAM160* Programming CNC Mills 4 cr *Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or college advisor.
Three credits from one of the three following areas:	3	
Social Science		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, Journalism, Music, Music Performance, Philosophy, Religion, Speech, Theater Arts
Sciences/Applied Science		Approved program-related instruction may satisfy this requirement, or courses in Biology, Botany, Chemistry, Computer Science, General Engineering, General Science, Geology, Horticulture, Nutrition and Food Management, Oceanography, Physics
Three additional credits from any of these areas:	3	Health/Physical Education, Humanities/Fine Arts, Math, Science/Applied Science, Social Science, Writing**, English as a Non-Native Language**, Reading**, Study Skill** **Course must be 100 level or higher.

Career and Technical Courses See specific career and technical program.

Complete a minimum of 30 credit hours at Chemeketa.

Earn a cumulative grade point average (GPA) of 2.00 or above for all course credits that 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 related instruction requirements in communications, computation, and human relations. See page 43.
3. Some of Oregon's four-year institutions accept certain courses in career and technical education 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 Apprenticeship degrees, see page 70.

Associate of Science Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		
General Education Requirements		
Writing (A minimum of 6 credits with a grade of "C" or better)	6	WR121 and one additional writing course for which WR121 is a prerequisite.
Math (A minimum of 4 credits with a grade of "C" or better)	4	MTH111* or higher
Speech (A minimum of 3 credits with a grade of "C" or better)	3	SP100, SP111, SP112, SP115, SP130, SP218, SP219, or SP237
Physical Education or Health (A minimum of 3 credits with a grade of "C" or better)	3	Any PE185 course (1 credit each); any HE and HPE course (3 credits each). A maximum of 3 credits of PE185 may be applied toward the degree.
Computer Literacy (A minimum of 3 credits with a grade of "C" or better)	3	Choose 3 credits from: CIS101, 102A, 120, 120A, 121, 122, 125A, 125E, 125G, 133J, 133JS, 133SC, 133VB, 140B, 140U, 145, 178I, 178W, 179, 186, 195, 233J, 234J, 244, 244A, 276A, 276B, 276C, 277A, 277B, 278, 279, 288, 289, 295; CS133U, 160, 161, 162, 260, 271, 275.
Arts and Letters/Humanities (A minimum of 9 credits with a grade of "C" or better, chosen from at least two disciplines).	9–12	ART101, 115, 116, 117, 131, 154, 155, 204, 205, 206, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 244, 247, 248, 261, 261D, 262, 263, 265, 266, 270, 271, 272, 273, 281, 284, 291; ASL211, 212, 213; ENG104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 221, 222, 232, 250, 253, 254, 256, 257, 258, 260, 261, 269, 275; FA255, 256, 257; FR201, 202, 203; HUM106, 120, 220; JNL216, 217, 224, 225, 226, 227, 228; JPN201, 202, 203; MUS161, 201, 202, 203, 211, 212, 213; PHL201, 203, 206; REL201, 202, 203; RUS201, 202, 203; SP100, 111, 112, 115, 130, 218, 219, 237; SPN201, 202, 203; WR240, 241, 242, 243, 244, 245, 250, 262, 263
Social Science (A minimum of 9 credits with a grade of "C" or better, chosen from at least two disciplines).	9–12	ATH101, 102, 103, 153, 212, 214, 215, 231; CLA201, 202, 203; EC200, 201, 202; GEG105, 106, 107, 201, 202, 206, 207, 220; HST104, 105, 106, 157, 158, 201, 202, 203, 237, 257, 258, 262, 269, 279; PS201, 202, 203, 205; PSY100, 201, 202, 206, 237, 239; SOC204, 205, 206, 210, 213, 221, 232; WS101, 102
Science (A minimum of 12 credits with a grade of "C" or better. Courses must include a laboratory.	12	BI101, 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; GEO142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH201, 202, 203, 207, 208, 209, 211, 212, 213
Subtotal	49	
Electives		Complete additional courses to bring the total number of credits to 90 . All elective credits must be numbered 100 or above and be lower division collegiate courses.

Complete a minimum of 30 credit hours at Chemeketa.

Earn a cumulative grade point average (GPA) of 2.00 or above for all course credits which apply toward the degree.

Notes: Two terms of the same 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 the same foreign language at the high school level. This is not a requirement for earning the Associate of Science degree.

* GPA admission, major, and general education requirements for the four-year OUS schools are not necessarily satisfied with an AS degree. Please contact your school of choice for their specific requirements.

Associate of General Studies Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		
Writing (Minimum of 6 credits with a grade "C" or better)	6	WR121 and one additional course from WR122, 227, 240, 241, 242, 243, 244, 245, 262 or BA214
Math (Minimum of 4 credits with a grade "C" or better)	4	MTH095 or above
Speech (Minimum of 3 credits with a grade "C" or better)	3	SP100 or above
Digital Literacy	3	The following program-approved list of courses allows a student to meet the college's digital literacy competency requirement. Check with your program advisor if you have any questions related to this requirement. CIS101* Introduction to Microcomputer Applications 3 cr CIS120* Computer Information Science I 4 cr DRF165* CAD System Administration 3 cr CAM160* Programming CNC Mills 4 cr *Indicates a course prerequisite or requirement related to the course.
Physical Education or Health** **A maximum of 12 credit hours of physical education (PE185) may be applied toward the degree.	3	Any PE185 course (1 credit each); any HE and HPE course (3 credits each); or three terms of PE180, PE185 , or higher course (1 credit each).
Arts and Letters/Humanities Each course must be a minimum of 3 credits.	9	Choose courses from Art, American Sign Language, English, Film Arts, French, Humanities, Journalism, Japanese, Music, Philosophy, Religion, Russian, Speech, Spanish, Writing.
Social Science Each course must be a minimum of 3 credits. (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.
Science Each course must be a minimum of 4 credits. (Courses must include a laboratory.)	8	Choose courses from Biology, Chemistry, Geology, General Science, Physics.
Electives: Additional courses to bring the total number of credits to 90.		A maximum of 36 credit hours in career and technical education or developmental courses numbered 050-099 may be applied toward the 90 credit hours required for the degree. See page 148 for how courses are numbered. All collegiate courses must be numbered 100 or above.
Earn a cumulative grade point average (GPA) of 2.00 or above in all work to be applied toward the degree.		
Complete a minimum of 30 credit hours at Chemeketa.		
Note: A maximum of 12 credit hours of cooperative work experience may be applied toward the degree.		

Eastern Oregon University General Education Requirements (Core Curriculum)

Requirements	EOU Credit hours	Chemeketa courses that satisfy requirements
General Education Core	Minimum 45 hours	The General Education Core (GEC) contains four categories: Aesthetics and Humanities; Social Science; Natural, Mathematical, and Information Sciences; and Artistic Process and Creation. Students must complete 60 credits; a minimum of six credits from at least two different disciplines in each category. No more than 20 credits in each category may count toward the GEC requirement. The Gateway is an optional category in the GEC and 15 credits from this group may be applied toward the 60 GEC credits required.
Aesthetics and Humanities: Courses must be in at least two different disciplines.	6–20 credits	ART 101*, 204*, 205*, 206*; ASL 111, 112, 113, 211, 212, 213; ENG 104*, 105*, 106*, 107, 108, 109*, 201, 202, 204, 205, 222, 253*, 254*, 256, 257, 258*, 260, 261, 269, 275; FA 255, 256, 257; FR 101, 102, 103, 201, 202, 203; HUM 106, 220; JNL 224; JPN 101, 102, 103, 201, 202, 203; MUS 105*, 161, 201, 202, 203; PHL 201*, 203*, 205, 206; REL 201, 202*, 203*; RUS 101, 102, 103, 201, 202, 203; SP 115, 130; SPN 101, 102, 103, 150, 151, 201, 202, 203
Social Science: Courses must be in at least two different disciplines.	6–20 credits	ATH 101*, 102*, 103*; 180, 212, 214, 215, 231; CLA 201, 202, 203; CIS 140B, 140U; EC 200, 201*, 202*, 203*; FRP 166, 277; GEG 106, 107, 190, 201*, 202*, 206, 207*; HE 209; HST 104*, 105*, 106*, 157, 158, 201*, 202*, 203*, 228, 257, 258, 262, 279; JNL 224; PS 201*, 202*, 203*, 205; PSY 100*, 101, 202*, 206, 237*; SOC 204*, 205*, 206*; WS 101*, 102
Natural, Mathematical, and Information Sciences: Courses must be in at least two different disciplines.	6–20 credit	BI 101*, 102*, 103*, 131, 132, 133, 143, 200; CH 104, 105, 106, 110*, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; FRP 171, 174, 266; GEG 105; GEO 142, 143, 144, 201, 202, 203; GS 104*, 105*, 106*, 107*, 120, 141*, 142*, 143*; MTH 211, 212, 213, 241, 243, 244, 251, 252, 253, 254, 255; OC 133; PH 111, 121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY 201
Artistic Process and Creation: Courses must be in at least two different disciplines.	6–20 credit	ART 115, 116, 117, 131, 132, 154, 155, 156, 221, 222, 223, 234, 235, 238, 239, 244, 245, 246, 254, 261, 262, 263, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 284, 285, 286, 291, 292, 293; MUS 174, 197; WR 227, 240, 241, 242, 243, 244, 245, 262
Gateway	Up to 15 credits	SP 100, 111, 112, 218, 219; WR 121, 122

*Indicates courses offered through distance education.

Students entering EOU who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will be considered as having met the lower division general education distribution requirements at Eastern.

Notes:

1. A maximum of 120 credit hours of lower division course work may be applied toward a baccalaureate degree.
2. Students with an AAOT from an accredited Oregon community college will be considered as having met the general education distribution requirements at Eastern.
3. For the Bachelor of Science degree (B.S.) and the Bachelor of Arts (B.A.): 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 will be limited to any mathematics or statistics course that has a prerequisite of intermediate algebra or higher and is a minimum of three credits. This course must be successfully completed with a C- or better. Individual majors may require specific courses to satisfy this requirement. As a program requirement, the course must be graded A-F, otherwise students may take the course S/U.
4. For the Bachelor of Arts Degree (B.A.): 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).
5. A grade of C- or higher is required in all courses that count toward the general education core. Courses in which "D" grades have been earned will transfer to Eastern, but will not count towards the general education requirements.
6. A maximum of 12 career/technical credits, completed with a grade of "C-" or better, will be accepted. These credits will be transcribed in a lump sum as lower division electives with a grade of "S". They may not be used to meet general education or program requirements. A Transfer Evaluation Report acknowledging the courses accepted by the university will be sent to the student after the admission status has been confirmed. Career/technical coursework in a clearly articulated program agreement between EOU and another institution is exempt from this policy.
7. Up to 12 credit hours in Physical Education Activity and Music Activity courses may be applied toward degree requirements. Music majors may apply a maximum of 120 MUS/MUP credits toward graduation.
8. This guide is subject to change without notice and should not be regarded as a contract between Eastern and students attending Chemeketa.
9. Two years of high school or two terms of college-level foreign language (same language) completed with a C- or better are required for students graduating from high school in spring 1997 or later.

Application for financial aid should be mailed between January 1 and February 1 for fall term. Applications will be available in December in the Chemeketa Financial Aid office.

Admission applications for EOU are available in the Chemeketa Counseling office. Students are encouraged to apply for admission as soon as winter term grades are posted and send a second transcript after spring term grades are available. Students applying for financial aid should make application for admission in January.

www.eou.edu • 541.962.3393

Requirements	OIT Credit hours	Chemeketa courses that satisfy requirements
Communication		
Fundamentals of Speech	3	SP111
English Composition	6	WR121 and 122
Nine additional credits from speech/writing courses having WR122 or SP111 as a prerequisite; specified by the major department from the following:	9	BA214 ; SP115 , 218, 219; WR227
Humanities	9	Choose from: ART 101, 115*, 116*, 117*, 118*, 131*, 132*, 154*, 155*, 156*, 204*, 205*, 206*, 210*, 221*, 222*, 223*, 224*, 234*, 235, 238*, 239*, 244*, 245*, 246*, 254*, 261*, 261D*, 262*, 263*, 266*, 270*, 271*, 272*, 273*, 274*, 275*, 281*, 281B*, 281C*, 284*, 285*, 286*, 291*, 292*, 293; ENG 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 222, 250, 253, 254, 260, 261; FA 255, 256, 257; FR 100, 201, 202, 203; HUM 120; JPN 201, 202, 203; MUS 105, 197, 201, 202, 203; PHL 201, 203, 205; REL 201, 202, 203; RUS 201, 202, 203; SPN 201, 202, 203
Social Sciences	12	Twelve credits selected by student or specified by major department from the following: ATH 101, 102, 103, 231; CLA 203; CJ 101; EC 200, 201, 202, 203; GEG 105, 106, 107, 201, 202, 206; HST 104, 105, 106, 157, 158, 201, 202, 203, 228, 237, 257, 258; PS 201, 202, 203, 205; PSY 100, 101, 104, 201, 202, 206, 217, 237, 239, 282; SOC 204, 205, 206, 210, 221; WS 101, 102
Science/Mathematics		
College Algebra	4	MTH 105, 111, 211, 212, 213
One four-credit college-level mathematics course for which at least intermediate algebra (MTH095) is a prerequisite.	12	Plus 12 hours selected from: BI 101, 102, 103, 131, 132, 133, 153, 200, 231, 232, 233, 234; CH 104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; GEO 142, 143, 144, 201, 202, 203; GS 104, 105, 106, 107; MTH 112, 231, 243, 251, 252, 253, 254, 255, 256; OC 133; PH 121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213

Students entering OIT who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will be considered as having met the lower division general education distribution requirements at OIT.

Notes:

1. 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.
2. This guide is subject to change without notice and should not be regarded as a contract between OIT and students attending Chemeketa.
3. 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.
4. *These courses transfer as "Human Performance" and OIT will only accept 3 credits.

Applications for financial aid should be mailed between January 1 and February 1 for fall term to receive priority consideration. Applications will be available December in the Chemeketa Financial Aid office. Students applying for financial aid should apply for admission at the same time.

Admission applications for OIT are available in the Chemeketa Counseling office. Students are encouraged to apply for admission as soon as winter term grades are posted, and send a second Chemeketa grade transcript after spring term grades are available.

www.oit.edu 541.885.1000 or 800.422.2017

Oregon State University General Education Requirements (Core Curriculum)

Requirements	OSU Credit hours	Chemeketa courses that satisfy requirements
Writing I	4	WR121 (must be completed with a "C" grade or better before transferring)
Writing II	3	BA214; JNL216; WR122, 227, 240, 241, 242, 243, 244, 245, 262
Writing III/Speech	3	Any courses listed to meet Writing II requirements not taken to meet the Writing II requirements or SP111, 112, 218, 219
Mathematics	3	MTH105, 111 or higher math (must be completed before transferring)
Fitness	3	HPE295 Health and Fitness for Life
Writing Intensive Course		(Must be taken at OSU as upper division in the major)
Physical Science* (Including Lab)	4-5	CH104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; GEG105; GEO142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH201, 202, 203, 207, 208, 209, 211, 212, 213
Biological Science* (Including Lab)	4	BI101, 102, 103, 131, 132, 133, 143, 153, 200, 230, 234
One additional Physical Science or Biological Science course*	4-5	Any courses listed for Physical or Biological Science above.
Western Culture*	3	ART204, 205, 206; ENG107, 108, 109, 201, 202, 204, 205, 253, 254; FA255; GEG106, 207; HST201, 202, 203, 228; PHL201, 203; REL202, 203
Cultural Diversity*	3	ATH212, 214, 231; CLA201, 202, 203; ENG257; GEG201, 202, 206; HST104, 105, 106, 157, 158, 257, 258, 293; HUM220; REL201, 202
Literature and the Arts*	3	ART101, 204, 205, 206; ENG104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 250, 253, 254, 256, 257, 258, 260, 269, 275; FA255; MUS105, 161, 201, 202, 203
Social Processes and Institutions*	3	ATH103; EC201, 202; HE209; PS201, 202; PSY100, 201, 202; SOC204, 205, 213
Difference, Power and Discrimination*	3	HST201, 202, 203; SOC206
Global Issues	3	(Upper division course; must be taken at OSU.)
Science, Technology and Society	3	(Upper division course; must be taken at OSU.)

*No more than two courses from the same department may be used to fulfill this group of requirements.

Students entering OSU who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will be considered as having met the OSU's lower division baccalaureate core curriculum requirements.

Notes:

1. A maximum of 124 credit hours earned at a community college may be applied toward a baccalaureate degree.
2. Only courses with letter prefixes and numbers above 100 are accepted at OSU. Some professional/technical courses numbered 100 or higher are not accepted as transferable courses. Please contact the office of admissions and orientation at OSU regarding specific courses. Professional/Technical courses include those with prefixes of: **AH, AUM, BLD, BT, CA, CAM, CJ, COM, CPL, CVL, DEN, DRF, ECE, ED, ELT, EMT, ENL, ES, FE, FRP, FT, HD, HDF, HM, HOR, HS, HTM, MED, MFG, MT, NET, NUR, PHM, QS, RD, SLP, SSP, ST, VC, VMW, WFB, WLD.**
3. Students with professional/technical credits (including courses numbered 50-99) should contact the assistant registrar at OSU for assistance in determining transferability of these courses to an OSU major.
4. Departments, schools, or colleges at OSU may restrict the courses used by their major students to satisfy each general educational component.
5. OSU will accept "D" grades. Some departments, schools, or colleges may not accept "D" grades in required courses.
6. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.
7. Students graduating from high school in 1997 or after must have completed two years of the same high school-level second language or two terms of the same college-level second language, or demonstrated proficiency in a second language, to be admitted to OSU.

Application for financial aid should be mailed between January 1 and February 1 for fall term to receive priority consideration. Applications will be available December in the Chemeketa Financial Aid and Counseling offices.

Admission applications for OSU are available in the Chemeketa Counseling office. Students are encouraged to apply for admission as soon as winter term grades are posted, and send a second Chemeketa grade transcript after spring term grades are available. OSU Admissions application deadline for transfer students is May 1. Students applying for financial aid should apply for admission by March 1 so their financial aid application will be processed.

www.oregonstate.edu 541.737.4411 or 800.291.4192

Portland State University General Education Requirements

Requirements	PSU Credit hours	Chemeketa courses that 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, including WR121 (C- or higher), listed for Associate of Arts (AA) Oregon Transfer degree to waive the freshman general education requirement and enter PSU with Sophomore standing. Courses should include writing, speech and computer science. It is also important to learn appropriate uses of 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 AA Oregon Transfer degree and courses required for major. Students planning on attending Chemeketa for two years should complete AA Oregon Transfer degree.
Electives or major requirements	33	

Students entering PSU who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will be considered as having met the lower division core curriculum requirements.

Notes:

1. Students must have achieved a 2.25 cumulative GPA (starting Fall 2007) with 30 transferable credit hours to be considered as a transfer student for admissions purposes. Non-residents must have a 2.25 GPA. International students must have a 2.50 GPA.
2. Courses with letter prefixes and numbers below 100 are generally not accepted by PSU.
3. PSU will accept up to 12 credit hours of career and technical education courses as electives.
4. A maximum of 124 credit hours earned at community colleges may be applied toward a baccalaureate degree.
5. This guide is subject to change without notice and should not be regarded as a contract between PSU and students attending 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. Students may complete this requirement at PSU prior to graduation.
7. Students planning to earn a BA must complete two years of college-level foreign language and 4 credits in the Fine and Performing Arts.
8. Beginning Fall 2010, students transferring to PSU with 30 or more transfer credits will be required to have completed WR121 with a C- or higher. Students who have not completed WR121 prior to beginning at PSU will work with the Admissions office to determine options for meeting this requirement.

Applications for financial aid should be mailed between January 1 and February 1 to receive priority consideration for any term in the academic year. Financial aid will not be awarded unless an application for admission is on file.

Admission applications for PSU are available in the Chemeketa Counseling office. Students are encouraged to apply for admission as soon as winter term grades are posted and send a second Chemeketa grade transcript after spring term grades are available. Financial aid applicants should apply in January and send a second grade transcript after spring grades are posted.

www.pdx.edu 503.725.3511 or 800.547.8887

Southern Oregon University General Education Requirements (Core Curriculum)

SOU requirements	SOU Credit hours	Chemeketa courses that satisfy requirements
Writing Complete all 3 classes	9	WR 121, 122 and SP 111, 218, or 219 ("C-" or better in each class at SOU.)
Mathematics	4-5	MTH 105, 111, 112, 211+ 212, 241, 243, 244, 245, 251
Arts and Letters	9-12	Complete at least 3 courses from the following: ART 101, 204, 205, 206; ASL 211, 212, 213; ENG 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 221, 222, 232, 250, 253, 254, 256, 257, 258, 260, 261, 269; FA 255, 256, 257; FR 201,202,203; HUM 106; JNL 224; JPN 201, 202, 203; MUS 105,161, 201, 202, 203; PHL 201, 203, 205, 206; REL 201, 202, 203; RUS 201, 202, 203; SP 100, 115, 237; SPN 122, 123, 201, 202, 203; WR 241
Social Science	9-12	Complete at least 3 courses from the following: ATH 101, 102, 103, 180, 212, 214, 215, 231; BA 101; CJ 100, 101; CLA 201, 202, 203; EC 200, 201, 202, 203; GEG 106, 107, 201, 202, 206, 207, 220; HE 250; HPE 295; HST 104, 105, 106, 157, 158, 201, 202, 203, 228, 237, 257, 258, 262, 269, 279; PS 201, 202, 203, 205; PSY 100, 101, 104, 201, 202, 206, 237, 239; 282; SOC 204, 205, 206, 210, 213, 221; WS 101, 102
Science	9-12	Complete at least 3 courses from the following. At least 2 courses must have labs: BI 101, 102, 103, 131, 132, 133, 143, 153, 171, 172, 200, 230, 231, 234, 251; CH 104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243, CIS 120, 121, 244; GEG 105, 190; GEO 142, 143, 144, 201, 202, 203; GS 104, 105, 106, 107, 120,141, 142, 143; PH 111, 121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213

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

General education notes:

Must complete 36 transferable credits before transferring. Those who transfer with fewer than 36 credits must meet SOU's freshman admission requirements. Contact the Student ACCESS center for information: 541.552.6213.

Other notes:

1. A maximum of 124 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 electives towards the 124 credit transfer limit. SOU will accept AAS degrees (except in Business) for the Bachelor's in Business Management program.
4. Courses in which "D-" grades have been earned (except WR and SP) 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 second language (same language) required for all students graduating from high school Spring 1997 or later.

Admission applications for SOU are available online at www.sou.edu. For fall term admission, students are encouraged to apply for admission **as soon as winter term grades are posted**, and send a second Chemeketa grade transcript after spring term grades are available. Students applying for financial aid should apply for admission after fall term grades are posted. Students are welcome to apply for admission to SOU for any term.

www.sou.edu 541.552.6411 or 800.482.7672

Requirements	UO Credit hours	Chemeketa courses which satisfy requirements
Written English	6	WR121 and WR122 (with a "C-" grade or better); WR121 must be completed before transferring.
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.	15	Choose from the following: ART204, 205, 206; ASL211, 212, 213; ENG104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 222, 250, 253, 254, 256, 257, 258, 260; FA255, 256, 257; FR201, 202, 203; JPN201, 202, 203; MUS201, 202, 203; PHL201, 203, 206; REL202; RUS201, 202, 203; SP111, 115, 218; SPN201, 202, 203
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.	15	Choose from the following: ATH102, 103, 180, 212, 214, 215, 231; BA101; CLA201, 202, 203; EC200, 201, 202, 203; GEG106, 107, 201, 202, 206, 207, 220; HST104, 105, 106, 157, 158, 201, 202, 203, 228, 257, 258, 262, 269, 279; JNL224; PS201, 202, 203, 205; PSY202, 206, 237, 239; REL201, 203; SOC204, 205, 206, 210, 213, 221; WS101, 102
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 111 must be completed before transferring or be granted a waiver.	15	Choose from the following: ATH101; BI101, 102, 103, 131, 132, 133, 143, 171, 172, 200, 230, 231, 232, 233, 234; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; CIS244; CS161, 162, 260, 261; EGR214; GEO142, 143, 144, 201, 202, 203; GEG105, 190; GS104, 105, 106, 107, 120, 141, 142, 143; MTH105, 111, 112, 211, 212, 213, 231, 232, 241, 243, 244, 251, 252, 253, 254; OC133; PH121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY201
Multicultural Studies You must complete two courses chosen from two of the following three areas:		
Area 1—American Culture (AC)	2 courses, at least 3 credits each.	Area 1 ATH231; CLA201, 202, 203; ENG257; GEG207; HST257, 258, 259; MUS105; SSC100, 150, 151; SOC205, 206
Area 2—Identity, Pluralism and Tolerance (IP)		Area 2 ENG222, 256, 260; HE213; HS213; HST262; REL202; SOC213; WS101, 102
Area 3—International Cultures (IC) (Same courses may be chosen to meet this requirement and one of the requirements listed above.)		Area 3 ATH103, 212, 214, 215; ENG107, 108, 109, 258; GEG106, 201, 202, 220; HST104, 105, 106, 157, 158, 159, 277, 279; HUM220; REL201

*No more than 3 courses from any one department may be used to satisfy the total 45 credit group requirements. Only one course in the major may be used to satisfy group requirements.

Students entering U of O who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will have satisfied the university's writing and group requirements. The multicultural requirement is not satisfied by completion of the AAOT unless acceptable courses are taken as part of the AAOT degree.

Notes:

1. Students who have completed 36 quarter hours of transferable work with a 2.25 GPA may be considered for admission based solely on college work.
2. Only courses with letter prefixes and numbers above 100 are accepted at U of O (see exceptions below).
3. A maximum of 12 credit hours of vocational/technical courses are accepted as electives.
4. The following courses will not be granted credit at U of O: RD115.
5. A maximum of 124 credit hours earned at a community college may be applied toward a baccalaureate degree.
6. BA degree requires equivalent of two years of college foreign language. Students who have not earned an Associate of Arts-Oregon Transfer (AAOT) degree cannot use the same foreign language courses to meet both the Arts and Letters and BA requirement.
7. BS degree requires MTH111, 211, 212, 213; or one of the following options: MTH105, 111, 243; or MTH111 and two of MTH112, 241, or 243; or one course from: MTH251, 252, 253, 254, 255, or 256. All courses must be completed with a grade of C- or higher. Students who have not earned an Associate of Arts-Oregon Transfer (AAOT) cannot use the same courses to meet the BS degree Math/Computer course proficiency requirement and the Science requirement.
8. Courses in which "D" grades have been earned will transfer to U of O, but will not satisfy degree requirements in writing, mathematics, or foreign language, and may not be acceptable for major requirements.
9. Students must complete WR121 and MTH105 or 111 with a "C-" or better before transferring may request waiver of math requirement for admissions.
10. This guide is subject to change without notice and should not be regarded as a contract between U of O and students attending Chemeketa Community College.

Basic Courses Required for Bachelor of Architecture, Landscape Architecture, Interior Architecture, Music or Education

Students in Architecture, Landscape Architecture and Interior Architecture, as well as students seeking Bachelor of Education or Bachelor of Music, must meet the following requirements:

Institutional Requirement Required Hours/Courses Chemeketa Courses That Satisfy Requirements

1. Written English 6 credit hours WR121 & WR122 or WR123 (with a grade of "C-" or better)
2. Twelve credits in approved group satisfying courses in each of three areas: Arts and Letters, Social Sciences, and Sciences. In two of the groups there must be at least two courses from one subject, and in all three groups there must be courses from two different subjects.
3. Approved courses are listed above.
4. No more than three courses from any one subject may be counted toward the total 36 credit requirement.

Application for financial aid should be mailed between January 1 and February 1 for fall term to receive priority consideration. Applications will be available in December in Chemeketa Financial Aid office.

Admission applications for U of O are available in the Chemeketa Counseling office. Fall term admission application deadline for transfer students is May 15; priority deadline is March 15. Students applying for Financial Aid should make application for admission in January. Financial Aid applications are not processed at the U of O unless an application for admission is on file.

www.uoregon.edu 541.346.3243 or 800.232.3825

Western Oregon University General Education Requirements (Core Curriculum)

Requirements	WOU Credit hours	Chemeketa courses that satisfy requirements
English Composition (WR135)	4	WR122 (Must be passed with a C- or better.)
Communication Studies	3	SP111
Health and Physical Education	4	Activity courses selected from PE185 , 190 and HPE295 , 296. Classes should include different activities. (Prefer HPE295 and 1 hr activity class.)
Creative Arts (Art, Dance, Music, Theater Arts)	9	Choose from ART101 , 115, 116, 117, 131, 204, 205, 206; MUS105 , 161, 197, 201, 202, 203; **In addition, dance courses at WOU meet requirement. Prefer 9 hours in a combination of 3 different areas.
Humanities (Literature, Modern Language*, Philosophy or Religion)	12	A sequence of at least 6 hours in literature* is required and one philosophy or religion course. Choose literature courses from ENG104 , 105, 106, 107, 108, 109, 201, 202, 204, 205, 222, 250, 253, 254, 256, 260, 261, and one philosophy or religion course: PHL201 , 203, 206 or REL201 , 202, 203.
Laboratory Science	12	At least 8 hours in the same discipline is required. Choose lab science courses from BI101 , 102, 103, 131, 230, 231, 232, 233, 234; CH104 , 105, 106, 110, 121, 122, 123, 221, 222, 223; GEO142 , 143, 144, 201, 202, 203; GS104 , 105, 106, 107, 143; PH201 , 202, 203, 207, 208, 209, 211, 212, 213. Early Childhood/Elementary/Middle level education majors should take BI101 and GS104 and 106.
Social Science	11–12	A sequence of at least 8 hours in the same discipline is required. Choose ATH101 , 102, 103, 212, 214, 215, 231; GEG105 , 106, 107, 190, 206, 207; HST104 , 105, 106, 157, 201, 202, 203, 262; PS201 , 202, 203, 205; SOC204 , 205, 206, 210, 213; EC201 , 202, 203. The remaining three hours may be in any social science area, including psychology and criminal justice. Note: U.S History and Geography are recommended for Early Childhood/Elementary/Middle level education majors; PSY201 and 202 is recommended for Early Childhood/Elementary/Middle level education majors.
Degree Requirements		
Bachelor of Arts (B.A.)	4	(1) MTH105 or higher math. (Early Childhood/Elementary/Middle level education majors should take MTH211 , 212, 213 Foundation of Elementary Mathematics) and
	3	(2) CIS101 ; 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 does not meet this requirement). Early Childhood/Elementary/Middle level Ed majors should take MTH211 , 212, 213.

Students entering WOU who have earned an Oregon Associate of Arts Transfer degree from Chemeketa will be considered as having met Western's core curriculum requirements but not the degree requirements.

Students transferring without the AA degree must have completed 24 transferable credits. Students who graduated 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 language to be admitted to WOU. Contact the Admissions Office for further information.

*Note: Students may substitute one term of a foreign language for one literature course in the core curriculum.

****PE185J**,A,B,C—Dance, Jazz

Notes:

1. A maximum of 124 hours taken at a community college can be transferred to WOU.
2. In general, only courses at the baccalaureate level with a letter prefix and a number of 100 or higher are considered transferable. WOU does not award credit for **CPL120**.
3. Up to 24 hours of career/technical credits can be transferred as free electives.
4. Courses in which "D" grades have been earned are accepted by WOU but may not be allowed in the major or minor. Writing courses used to satisfy WR135 must be passed with a C- or better.
5. Students who have not completed all of the core curriculum requirements (or AAOT) at the time they transfer will be expected to complete them with courses among those specifically required of freshmen beginning their work at WOU.
6. Courses numbered 199, 299, and 280 (CWE) transfer to Western Oregon as unrestricted elective credit, and are not applied to the major/minor or Core Curriculum requirements. Up to 12 hours of CWE (College Work Experience) can be accepted.
7. Criminal Justice, Business, Health, Psychology, Education, ASL, and Fire Services Administration programs require completion of prerequisite curriculums and an additional application to the specific program.
8. This guide is subject to change without notice and should not be regarded as a contract between Western Oregon University and students attending

Chemeketa Community College.

Application for financial aid should be mailed between January 1 and February 1 for fall term to receive priority consideration. Applications will be available December in the Chemeketa Financial Aid office.

Admission applications for WOU are available in the Chemeketa Counseling office. Students are encouraged to apply for admission during winter term, and send a second Chemeketa grade transcript after spring term grades are available. Early applications are encouraged. Students applying for financial aid should apply for admission in January.

www.wou.edu 877.877.1593

Career Choices and Programs of Study

As you begin at Chemeketa, you may have already decided on a career you want to pursue or a program area you want to enter. Many students, however, are still figuring that out when they start at the college. If you are still exploring career options, the information here may be helpful. Below is a list of the fastest-growing occupations in the United States. Chemeketa has programs of study

for most of these careers. In some cases there is more than one choice of a program to get you started in the field. For some of the professions you may need to get training at another community college. In all cases, you will see where you can find more information about the program or whom you need to contact.

Fastest Growing Occupations in the United States

Occupation	Program or Information	Page or Telephone
Computer Software Engineer, Applications	See Computer Science (Transfer)	page 89
Computer Support Specialist	See Computer Systems and Information Technology	page 85
Computer Software Engineer, Systems software	See Computer Science (Transfer)	page 89
Desktop Publisher	See Visual Communications	page 140
Database Administrator	See Computer Systems and Information Technology	page 85
Computer Systems Analyst	See Computer Systems and Information Technology	page 85
Social and Human Service Assistant	See Human Services Program	page 119
Physician Assistant	See Associate of Arts Oregon Transfer/Biology Major	page 53
Medical Records and Health Information Technician	See Health Services Management Program	page 111
Computer and Information Systems Manager	See Computer Systems and Information Technology	page 85
Physical Therapist	See Associate of Arts Oregon Transfer	page 53
Occupational Therapist	See Associate of Arts Oregon Transfer	page 53
Physical Therapist Assistant	Contact Mt. Hood Community College	503.491.4765
Audiologist	See Associate of Arts Oregon Transfer/Speech Major	page 53
Fitness Trainers and Aerobics Instructor	See Physical Education	page 133

Source: U.S. Department of Labor Statistics

Here is a list of the fastest-growing jobs in Marion, Polk, and Yamhill counties. As you look at these jobs, keep in mind that some of these jobs require a degree or certificate, but others may just require a few courses. In each

of these areas, Chemeketa has the training available to prepare you for work. The contact and program information will help you find the classes or program you need.

Occupation	Contact	Telephone	Programs and Courses
General Office Clerk	Patricia Sessions	503.399.6094	See Business Technology Certificate, page 81
Clerical Supervisor	Patricia Sessions	503.399.6094	See Administrative Assistant Options, page 80
Hospitality Management	Eric Aebe	503.589.7994	See Hospitality Management, page 117
Gardeners/Groundskeeper	David Hallett	503.399.6566	Landscaper/Groundskeeper Training
Registered Nurse	Kay Carnegie	503.399.5058	See Nursing, page 128
Receptionists/Information Clerk	Patricia Sessions	503.399.6094	See Office Fundamentals, page 80
Computer Support Specialist	James Finholt	503.589.7813	See Computer Systems and Information Technology, see page 85

Career Choices and Programs of Study



Accounting Programs

accounting.chemeketa.edu

See also **Business Administration and Management**.

Are you interested in becoming a bookkeeper, accountant, or tax preparer? 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. The Accounting AAS degree and certificates may be earned completely online.

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.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificates will:

- Identify, analyze, record, and summarize routine economic events, and present the results of that work, both manually and using a current accounting software package.
- Prepare commonly-used federal and state payroll and tax documents and reports. Demonstrate knowledge of relevant timelines for completion and submission of these documents and reports.

Students completing the AAS will:

- Identify, analyze, record, and summarize routine economic events, and present the results of that work, both manually and using a current accounting software package.
- Prepare commonly-used federal and state payroll and tax documents and reports. Demonstrate knowledge of relevant timelines for completion and submission of these documents and reports.
- Demonstrate knowledge of computerized accounting systems.
- In a team environment, prepare and analyze financial reports, make recommendations, and communicate results.
- Choose a course of action based on the conceptual framework, assumptions, principles, constraints, and ethics in accounting.

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 Chemeketa's Counseling and Career Services 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:

BA115	Introduction to Accounting (if less than RD090 and MTH060).....	4
BT131A	Electronic Calculators A (if less than 80 strikes/minute).....	1
CIS101	Introduction to Microcomputer Applications.....	3
MTH060	Introductory Algebra.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition.....	4

If you have questions about the requirements, call Chemeketa's Counseling and Career Services at 503.399.5120. 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 BA280B-L Cooperative Work Experience and earn up to three 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.

Accounting

Accounting Certificate of Completion

The Accounting Certificate is designed for current accounting students who wish to enter the field as a bookkeeper on their path to an associate or bachelor's degree in Accounting. This program prepares students to accomplish a wide variety of tasks within the broad area of accounting, including administrative accounting, small business accounting, and entry-level governmental accounting. In addition, this certificate provides students with the necessary foundation for preparing for the American Institute of Professional Bookkeepers (AIPB) certification exam.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,063; class fees, \$82; and universal fee, \$352. 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 41 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business.....	4
BA211	Financial Accounting I.....	4
CIS125E	Excel-Workbooks.....	4
	or	
BA225	Excel for Accounting.....	4
SSP125	Learning Strategies for Online Students.....	1
WR121	English Composition—Exposition.....	4
	or	
BT210	Professional Communication Skills.....	4

Term 2		
BA104	Business Applications Using Mathematics	4
BA177	Payroll.....	4
BA212	Financial Accounting 2	4
BA226	Business Law 1	4
Term 3		
BA213	Managerial Accounting	4
BA228	Computer Accounting Applications.....	4

Accounting

Tax Preparation Certificate of Completion

The Tax Preparation Certificate is designed for students interested in the field of tax preparation or as an additional credential for accountants. The program provides the foundation necessary to prepare individual income taxes, aid in preparation of partnership and corporation returns, and effectively design accounting systems to integrate smoothly with tax schedule preparation. In addition, this certificate provides the necessary 80 hours of course work required in order to take the State of Oregon Licensed Tax Preparer test.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$422; class fees, \$25; and universal fee, \$128. 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 16 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA211	Financial Accounting 1	4
Term 2		
BA177	Payroll	4
Term 3		
BA256	Income Tax 1	4
Term 4		
BA257	Income Tax 2	4

Accounting Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,200; class fees, \$464; universal fee, \$808; equipment and supplies, \$390. 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 102 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business.....	4
BA211	Financial Accounting 1	4
CIS125E	Excel-Workbooks.....	4
	or	
BA225	Excel for Accounting	4
SSP125	Learning Strategies for Online Students	1
WR121	English Composition–Exposition.....	4
	or	
BT210	Professional Communication Skills.....	4

Term 2		
BA104	Business Applications Using Mathematics+	4
BA177	Payroll.....	4
BA212	Financial Accounting 2	4
BA214	Business Communications+	3
BA226	Business Law 1	4

Term 3		
BA213	Managerial Accounting	4
BA228	Computer Accounting Applications.....	4
BA240	Governmental/Non-profit Accounting 1*	4
	or	
BA215	Cost Accounting.....	4
MTH070	Elementary Algebra+ (or higher).....	4

Term 4		
BA206	Business Management Principles.....	4
BA266	Intermediate Financial Accounting 1	4
EC200	Introduction to Economics (or higher).....	4
	Psychology/Sociology elective+***	4

Term 5		
BA256	Income Tax 1	4
BA259	Internal Auditing	4
BA267	Intermediate Financial Accounting 2	4
SP111	Fundamentals of Public Speaking (or higher, SP130 recommended).....	4

Term 6		
BA222	Financial Management.....	4
BA257	Income Tax 2	4
BA268	Intermediate Financial Accounting 3	4
BA280C	Cooperative Work Experience	3
	or	
	Business elective **	3
	Humanities/Fine Arts elective	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

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

**Business elective: Choose BA or EC courses at the 200 level or above.

***Psychology/Sociology elective, choose one: PSY101, PSY104, SOC204, SOC205, SOC206.

Agribusiness Management Programs

The Agribusiness Management programs 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. Various 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 503.589.7759.

XAGR9800C,D,E Agribusiness 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 Agribusiness 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 Agribusiness Management 3

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

XAGR9800M,N,P Agribusiness Management 4

Applies recordkeeping skills and three years of 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 Agribusiness 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 Agribusiness Management Workshop

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

Agriculture

(transfer course guideline)

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, Food Science and Technology, and Horticulture.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at OSU to learn of any possible changes in an academic area.

Anthropology

(transfer course guideline)

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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer.

Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Apprenticeship Programs

apprenticeship.chemeketa.edu

Apprenticeship training as a method of vocational education is recognized by the Apprenticeship and Training Division (ATD) of the Oregon Bureau of Labor and Industries (BOLI). It combines full-time, on-the-job learning (OJL) with committee approved contractors and trade related instruction taken in conjunction with each other.

The instruction at Chemeketa is for those already working in selected trades as apprentices, or for journey-level men and women who wish to upgrade their skills or knowledge. Each program requires four years of OJL and related instruction. Electricians and plumbers require state licensure at the conclusion of their training.

Chemeketa's Apprenticeship programs offer a Certificate of Completion and an Associate of Applied Science degree in Electrician Technologies Apprenticeship for Inside Wire Electricians, and a Certificate of Completion and an Associate of Applied Science degree in Construction Trades, General Apprenticeship with specializations in Heating, Ventilation, Air-Conditioning, and Refrigeration (HVAC/R); Plumbing; and Sheet Metal. These programs provide statewide transfer opportunities and an optional transfer path into a Bachelor of Science degree in Operations Management at the Oregon Institute of Technology (OIT). The related training courses are based on ATD and local Joint Apprenticeship Training Committee-approved related training developed to meet industry standards. They are approved for BOLI-registered apprentices and are not available to the general student population.

If you are interested in becoming registered in an Oregon State Apprenticeship program, please contact the Apprenticeship and Training Division at 971.673.0761 or www.or.gov/boli for program and entrance requirements. For more information on Chemeketa's apprenticeship certificates and degrees, please call Marilyn Hart Reed at 503.399.5255 or go to www.oregonapprenticeship.org.

All students in the Inside Wire Electrician, HVAC/R or Sheet Metal apprenticeship program must complete 8000 hours of State of Oregon-approved OJL; the plumber program requires 7700 hours of OJL. In addition, students must successfully complete skill sets in their field of specialization, as well as required general education classes.

Students completing the Electrician Apprenticeship Technologies Certificate, Inside Wire Electrician specialization will:

- Apply theory to electrical wiring.
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OESC standards for Inside Electrician.
- Complete three general education courses in communications, computation and human relations.

Students completing the Electrician Apprenticeship Technologies AAS, Inside Wire Electrician specialization will:

- Apply theory to electrical wiring.
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OESC standards for Inside Electrician.
- Complete general education courses.

Students completing the Construction Trades General Apprenticeship Certificate, HVAC/R Specialization will:

- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete three general education courses in communications, computation and human relations.

Students completing the Construction Trades General Apprenticeship AAS, HVAC/R Specialization will:

- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete general education courses.

Students completing the Construction Trades General Apprenticeship Certificate, Plumbers Specialization will:

- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete three general education courses in communications, computation and human relations.

Students completing the Construction Trades General Apprenticeship AAS, Plumbers Specialization will:

- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete general education courses

Students completing the Construction Trades General Apprenticeship Certificate, Sheet Metal Specialization will:

- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete three general education courses in communications, computation and human relations.

Students completing the Construction Trades General Apprenticeship AAS, Sheet Metal Specialization will:

- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.
- Complete general education courses

Getting started

The requirements for each apprenticeship certificate and degree program are listed below.

Electrician Apprenticeship entry requirements:

- Minimum of 18 years old.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or higher or
- Completion of MTH060 and MTH070 at Chemeketa or

- Pass Chemeketa's Math Placement Test and be placed into MTH070 or higher.

Electrician Apprenticeship Technologies AAS, Inside Wire Electrician Specialization requirements:

- Journey-level status in the electrical industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the general education requirements for an AAS degree.
- Compile a minimum of 90 approved credits; 22 credits may be awarded for proof of journey-level status.

HVAC/R Apprenticeship entry requirements:

- Minimum of 18 years old.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or higher or
- Completion of MTH060 or MTH070 at Chemeketa.

Construction Trades General Apprenticeship AAS, HVAC/R Specialization requirements:

- Journey-level status in the HVAC/R industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the general education requirements for an AAS degree.
- Compile a minimum of 90 approved credits; 22 credits may be awarded for proof of journey-level status.

Plumber Apprenticeship entry requirements:

- Minimum of 18 years old.
- High School Diploma or GED.

Construction Trades General Apprenticeship AAS, Plumber Specialization requirements:

- Journey-level status in the plumbing industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the general education requirements for an AAS degree.
- Compile a minimum of 90 approved credits; 22 credits may be awarded for proof of journey-level status.

Sheet Metal Apprenticeship entry requirements:

- Minimum of 18 years old.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or higher or
- Completion of MTH060 and MTH070 at Chemeketa.

Construction Trades General Apprenticeship AAS, Sheet Metal Specialization requirements:

- Journey-level status in the sheet metal industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the general education requirements for an AAS degree.
- Compile a minimum of 90 approved credits; 22 credits may be awarded for proof of journey-level status.

Electrician Apprenticeship Technologies

Electrician Apprenticeship Technologies Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$280; apprenticeship fees, \$80; universal fee, \$496. 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 64 credit hours.

Course	Title	Credit Hours
Term 1		
APR153A	Electrician Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR153B	Electrician Apprenticeship AC/DC Circuits	5
WR115	Introduction to Composition+ (or higher)	4
Term 3		
APR153C	Electrician Apprenticeship Measurements	3
PSY101	Psychology of Human Relations+ (or higher)	4
Term 4		
APR153D	Electricians Apprenticeship Theory	5
Term 5		
APR153E	Electrician Apprenticeship Wiring/Print Reading ..	5
Term 6		
APR153F	Electrician Apprenticeship Residential Installation	3
Term 7		
APR253G	Electrician Apprenticeship Safety and Code.....	5
Term 8		
APR253H	Electrician Apprenticeship Motors and Controls...	5
Term 9		
APR253I	Electrician Apprenticeship Fiber Optics.....	3
Term 10		
APR253J	Electrician Apprenticeship Math/Test Equipment. 5	
Term 11		
APR253K	Electrician Apprenticeship Voltage	5
Term 12		
APR253L	Electrician Apprenticeship Code and Exam Prep . 3	

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Electrician Apprenticeship Technologies Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$280; apprenticeship fees, \$80; universal fee, \$752. 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 (75 hours of coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
Term 1		
APR153A	Electrician Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR153B	Electrician Apprenticeship AC/DC Circuits	5
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
APR153C	Electrician Apprenticeship Measurements	3
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR153D	Electricians Apprenticeship Theory	5
PSY101	Psychology of Human Relations+ (or higher)	4

Term 5		
APR153E	Electrician Apprenticeship Wiring/Print Reading ..	5
SP111	Fundamentals of Public Speaking	4
Term 6		
APR153F	Electrician Apprenticeship Residential Installation	3
EC202	Introduction to Macroeconomics	4
Term 7		
APR253G	Electrician Apprenticeship Safety and Code.....	5
Term 8		
APR253H	Electrician Apprenticeship Motors and Controls...	5
Term 9		
APR253I	Electrician Apprenticeship Fiber Optics.....	3
Term 10		
APR253J	Electrician Apprenticeship Math/Test Equipment.....	5
Term 11		
APR253K	Electrician Apprenticeship Voltage	5
Term 12		
APR253L	Electrician Apprenticeship Code and Exam Prep	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship

Construction Trades, General Apprenticeship, Certificate of Completion: HVAC/R Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$420; universal fee, \$560. 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 72 credit hours.

Course	Title	Credit Hours
Term 1		
APR155A	HVAC/R Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR155B	HVAC/R Apprenticeship Soldering and Brazing ...	5
WR115	Introduction to Composition+ (or higher)	4
Term 3		
APR155C	HVAC/R Apprenticeship Introduction to Code	5
PSY101	Psychology of Human Relations+ (or higher)	4
Term 4		
APR155D	HVAC/R Apprenticeship Trade Math.....	5
Term 5		
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration.....	5
Term 6		
APR155F	HVAC/R Apprenticeship Electricity and Magnetism	5
Term 7		
APR255G	HVAC/R Apprenticeship Fuels.....	5
Term 8		
APR255H	HVAC/R Apprenticeship Residential Air Distribution.....	5

Term 9		
APR255I	HVAC/R Apprenticeship Welding	5
Term 10		
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals	5
Term 11		
APR255K	HVAC/R Apprenticeship Troubleshooting.....	5
Term 12		
APR255L	HVAC/R Apprenticeship Equipment and Room Layout.....	5

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship Associate of Applied Science: HVAC/R Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$350; program fees, \$420; apprenticeship fees, \$80; universal fee, \$816. 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 105 credit hours (83 hours of coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
Term 1		
APR155A	HVAC/R Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR155B	HVAC/R Apprenticeship Soldering and Brazing ...	5
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
APR155C	HVAC/R Apprenticeship Introduction to Code	5
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR155D	HVAC/R Apprenticeship Trade Math.....	5
PSY101	Psychology of Human Relations+ (or higher)	4
Term 5		
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration.....	5
SP111	Fundamentals of Public Speaking	4
Term 6		
APR155F	HVAC/R Apprenticeship Electricity and Magnetism	5
EC202	Introduction to Macroeconomics	4
Term 7		
APR255G	HVAC/R Apprenticeship Fuels.....	5
Term 8		
APR255H	HVAC/R Apprenticeship Residential Air Distribution.....	5
Term 9		
APR255I	HVAC/R Apprenticeship Welding	5
Term 10		
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals	5
Term 11		
APR255K	HVAC/R Apprenticeship Troubleshooting.....	5

Term 12		
APR255L	HVAC/R Apprenticeship Equipment and Room Layout.....	5

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship Certificate of Completion: Plumber Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$280; apprenticeship fees, \$80; universal fee, \$496. 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 64 credit hours.

Course	Title	Credit Hours
Term 1		
APR158A	Plumber Apprenticeship Fundamentals.....	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR158B	Plumber Apprenticeship Math and Print Reading.	5
WR115	Introduction to Composition+ (or higher)	4
Term 3		
APR158C	Plumber Apprenticeship Pipe Sizing	3
PSY101	Psychology of Human Relations+ (or higher)	4
Term 4		
APR158D	Plumber Apprenticeship Basic Installation	5
Term 5		
APR158E	Plumber Apprenticeship Occupancy.....	5
Term 6		
APR158F	Plumber Apprenticeship Advanced Waste Water Systems	3
Term 7		
APR258G	Plumber Apprenticeship Residential Installation...	5
Term 8		
APR258H	Plumber Apprenticeship Commercial Installation .	5
Term 9		
APR258I	Plumber Apprenticeship Code.....	3
Term 10		
APR258J	Plumber Apprenticeship Industrial Installation	5
Term 11		
APR258K	Plumber Apprenticeship Basic Waste Water System.....	5
Term 12		
APR258L	Plumber Apprenticeship Code and Test Prep.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship Associate of Applied Science: Plumber Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$280; apprenticeship fees, \$80; universal fee, \$752. 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 (75 hours

of coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
Term 1		
APR158A	Plumber Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR158B	Plumber Apprenticeship Math and Print Reading.	5
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
APR158C	Plumber Apprenticeship Pipe Sizing	3
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR158D	Plumber Apprenticeship Basic Installation	5
PSY101	Psychology of Human Relations+ (or higher)	4
Term 5		
APR158E	Plumber Apprenticeship Occupancy.....	5
SP111	Fundamentals of Public Speaking	4
Term 6		
APR158F	Plumber Apprenticeship Advanced Waste Water Systems	3
EC202	Introduction to Macroeconomics	4
Term 7		
APR258G	Plumber Apprenticeship Residential Installation...	5
Term 8		
APR258H	Plumber Apprenticeship Commercial Installation .	5
Term 9		
APR258I	Plumber Apprenticeship Code.....	3
Term 10		
APR258J	Plumber Apprenticeship Industrial Installation	5
Term 11		
APR258K	Plumber Apprenticeship Basic Waste Water System.....	5
Term 12		
APR258L	Plumber Apprenticeship Code and Test Prep.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship

Construction Trades, General Apprenticeship, Certificate of Completion: Sheet Metal Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$420; universal fee, \$552. 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 71 credit hours.

Course	Title	Credit Hours
Term 1		
APR166A	Sheet Metal Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawing	5
WR115	Introduction to Composition+ (or higher)	4

Term 3		
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout	5
PSY101	Psychology of Human Relations+ (or higher)	4
Term 4		
APR166D	Sheet Metal Apprenticeship Basic Installation	5
Term 5		
WLD077	Welding Processes	4
Term 6		
APR166E	Sheet Metal Apprenticeship Architectural Systems	5
Term 7		
APR266F	Sheet Metal Applied Math	5
Term 8		
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass	5
Term 9		
APR266H	Sheet Metal Apprenticeship Calculator Layout.....	5
Term 10		
APR266I	Sheet Metal Apprenticeship Radial Line Development	5
Term 11		
APR266J	Sheet Metal Apprenticeship Duct Sizing.....	5
Term 12		
APR266K	Sheet Metal Apprenticeship Job Site Management	5

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Construction Trades, General Apprenticeship

Associate of Applied Science: Sheet Metal Specialization

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, \$420; universal fee, \$632. 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 104 credit hours (82 hours of coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
Term 1		
APR166A	Sheet Metal Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawing	5
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout	5
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR166D	Sheet Metal Apprenticeship Basic Installation	5
PSY101	Psychology of Human Relations+ (or higher)	4
Term 5		
WLD077	Welding Processes	4
SP111	Fundamentals of Public Speaking	4

Term 6	
APR166E	Sheet Metal Apprenticeship Architectural Systems 5
EC202	Introduction to Macroeconomics 4
Term 7	
APR266F	Sheet Metal Apprenticeship Applied Math..... 5
Term 8	
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass 5
Term 9	
APR266H	Sheet Metal Apprenticeship Calculator Layout..... 5
Term 10	
APR266I	Sheet Metal Apprenticeship Radial Line Development 5
Term 11	
APR266J	Sheet Metal Apprenticeship Duct Sizing..... 5
Term 12	
APR266K	Sheet Metal Apprenticeship Job Site Management 5

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Art

(transfer course guideline)

See also **Visual Communications Programs**.

art.chemeketa.edu

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 U of O has majors in Art History, and Fine and Applied Arts.

A five-year educational guide in art leading to the Bachelor of Fine Arts (BFA) degree is also offered at OSU, SOU and U of O.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Automotive Technology Programs

automotive.chemeketa.edu

Do you want to become an automotive service and repair technician? The Automotive Technology program emphasizes technical training and development of skills through the study of the various systems of the automobile. The certificate programs have been designed to be completed in one year and the degree program in two years, and they offer training for auto body repair and auto machine shop, including courses in auto heating and air conditioning, welding, general education courses, and Cooperative Work Experience. Students in the degree program must attend full time.

The instruction, course of study, facilities, and equipment of the Automotive Technology program have been evaluated by the National Automotive Technicians Education Foundation (NATEF), and meet the National Institute for Automotive Service Excellence (ASE) Standards of Quality for the training of automobile technicians in all eight automotive specialty areas (Master Certification).

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.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Automotive Body Repair certificate will:

- Perform tasks related to collision repair, painting, brakes, electrical/electronic systems, suspension and steering, and heating and air conditioning systems.
- Analyze, diagnose and perform repairs related to auto body systems in I-CAR specialty areas.
- Identify and use tools, testing and measuring equipment required to perform automotive body repair.
- Perform personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment and handling, storage and disposal of chemicals in accordance with local, state, and federal safety and environmental regulations.
- Practice professional and ethical behaviors as applied to the workplace environment.
- Use industry standard automotive terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Students completing the Automotive Entry Level Technician certificate will:

- Perform tasks related to electrical/electronic systems, suspension and steering and heating and air conditioning.
- Analyze, diagnose and perform repairs related to electrical/electronic systems, suspension and steering and heating and air conditioning.
- Identify and use tools, testing and measuring equipment required to perform diagnosis and repairs to electrical/electronic systems, suspension and steering and heating and air conditioning.
- Perform personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; and handling, storage and disposal of chemicals in accordance with local, state, and federal safety and environmental regulations.
- Practice professional and ethical behaviors as applied to the workplace environment.
- Use industry standard automotive terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Students completing the Automotive Machining certificate will:

- Perform tasks related to engine repair and engine machining.

- Analyze, diagnose and perform repairs related to engine repair and engine machining in the Automotive Service Excellence areas.
- Identify and use tools, testing and measuring equipment required to perform automotive machining operations.
- Perform personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment and handling, storage and disposal of chemicals in accordance with local, state, and federal safety and environmental regulations.
- Practice professional and ethical behaviors as applied to the workplace environment.
- Use industry standard automotive terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Students completing the AAS will:

- Perform tasks related to brakes, electrical/electronic systems, engine performance and repair, suspension and steering, automatic transmissions and transaxles, heating and air conditioning systems, and manual drive train and axles.
- Analyze, diagnose, and repair automotive components and systems in the Automotive Service Excellence areas.
- Identify and use appropriate tools and testing and measuring equipment required to perform automotive service.
- Comply with personal and environmental safety practices associated with clothing; eye protection; hand tools; power equipment; and handling, storage, and disposal of chemicals in accordance with local, state, and federal safety and environmental regulations.
- Practice professional and ethical behaviors as applied to the workplace environment.
- Use industry standard automotive terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Getting started

The Automotive AAS degree, and the Auto Body Repair and Automotive Machining certificate programs have special admission requirements and enrollment limits. The first step to entering this program is to take the college's free placement test and meet with Counseling and Career Services staff, 503.399.5120. There are entry-level expectations for skill levels in reading, writing, and mathematics. Your advisor will help you develop an individualized program of study, which may include one or more of the following:

MTH020	Basic Mathematics.....	4
RD090	College Textbook Reading.....	3
WR080	Basic Writing	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.5210. 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 the Automotive program staff office in Building 4, Room 292. Enrollment in these programs is limited, and there is an early deadline for applications. All applicants must attend the Automotive Technology Orientation as a prerequisite for acceptance into the program. We recommend that you contact Counseling and Career Services at 503.399.5120, or

the Automotive Technology program chair at 503.399.6521 for details if you are considering the Automotive Technology degree, or Auto Body Repair, Automotive Machining, or Automotive Entry Level Certificate programs. To enroll, you must have a high school diploma or GED certificate.

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. To be eligible for on-site Cooperative Work Experience, students must maintain a 2.50 or higher GPA in Automotive Technology courses. With the approval of the program chair, you may enroll in AUM280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

**Automotive Technology
Automotive Body Repair Certificate
of Completion**

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$305; class fees, \$162; universal fee, \$376; equipment and supplies, \$1,800. 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 48 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (13 credit hours):

Course	Title	Credit Hours
COM051	Communications Skills 1+	3
	or	
WR121	English Composition–Exposition+ (or higher).....	4
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
PSY104	Psychology in the Workplace+	4
	or	
PSY101	Psychology of Human Relations+ (or higher).....	4

Automotive Body core requirements (20 credit hours):

AUM168	Automotive Electrical Systems 1	5
AUM184	Automotive Materials and Resources.....	1
AUM280L	Cooperative Work Experience	12
WLD097	Welding	2
	or	
WLD061	Basic Gas Metal Arc Welding (MIG)	3

Automotive Body Repair electives

(select a minimum of 15 credit hours):

AUM151	Basic Automotive Engines.....	5
AUM157	Automotive Brake Systems	6
AUM158	Automotive Steering and Suspension.....	5
AUM286	Automotive Heating and Air Conditioning	5

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

**Automotive Technology
Automotive Entry Level Technician
Certificate of Completion**

This certificate provides students with basic skills in key high-demand automotive repair and maintenance systems,

including brakes, electrical, suspension, steering, and climate control. The program is designed to allow students with full-time employment or other daytime commitments the ability to attend classes and obtain a certificate in a one-year period. (There are no prerequisites or special application requirements for admission to this program.)

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$352; class fees, \$98; universal fee, \$216. 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 28 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (10 credit hours):

Course	Title	Credit Hours
COM051	Communication Skills 1+.....	3
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
PSY104	Psychology in the Workplace+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4

Automotive Entry Level Technician core requirements (18 credit hours):

AUM159	Automotive Chassis Systems.....	5
AUM168	Automotive Electrical Systems 1	5
AUM286	Automotive Heating and Air Conditioning	5
AUM280C	Cooperative Work Experience	3

Automotive Technology

Automotive Machining Certificate of Completion

This certificate emphasizes machining and rebuilding automotive engines. A significant portion of the training is done on the job as well as through specific training on campus.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$290; class fees, \$240; universal fee, \$448; equipment and supplies, \$1,800. 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 57 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (13 credit hours):

Course	Title	Credit Hours
COM051	Communication Skills 1+.....	3
WR121	English Composition-Exposition+ (or higher)	4
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
PSY104	Psychology in the Workplace+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4

Automotive Machining core requirements

(44 credit hours):

Course	Title	Credit Hours
AUM151	Basic Automotive Engines.....	5
AUM184	Automotive Materials and Resources.....	1
AUM185A	Automotive Machining Fundamentals	3
AUM186A	Automotive Lathe Fundamentals	3
AUM187A	Automotive Milling Machine Processes	3
AUM188	Auto Machine Shop–Upper Engine.....	3
AUM189	Auto Machine Shop–Lower Engine	3
AUM190	Auto Machine Shop–Engine Assembly	3
AUM253	Automotive Engines 2.....	4
AUM280L	Cooperative Work Experience	12
WLD077	Welding Processes	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Automotive Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$900; class fees, \$618; universal fee, \$856; equipment and supplies, \$1,800. 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 with a grade of "C" or better in AUM courses.

Course	Title	Credit Hours
Term 1		
AUM151	Basic Automotive Engines.....	5
AUM158	Automotive Steering and Suspension.....	5
AUM184	Automotive Materials and Resources.....	1
COM051	Communication Skills 1+.....	3
WR121	English Composition-Exposition+ (or higher)	4
PH060	Applied Physical Science (or higher)	3
Term 2		
AUM152	Automotive Machine Shop.....	4
AUM157	Automotive Brake Systems	6
AUM159	Automotive Chassis Systems.....	5
AUM168	Automotive Electrical Systems 1	5
Term 3		
AUM161	Manual Drive Trains and Axles 1	5
AUM176	Automotive Electrical Systems 2	5
CIS101	Introduction to Microcomputer Applications (or higher).....	3
PSY104	Psychology in the Workplace+	4
PSY101	Psychology of Human Relations+ (or higher)	4
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
Term 4		
AUM262	Manual Drive Trains and Axles 2	4
AUM263	Automatic Transmissions and Transaxles 1.....	5
AUM266	Basic Fuel Systems	5
AUM277	Automotive Electrical Systems 3	5

Term 5

AUM267	Advanced Fuel Systems	5
AUM282	Electronic Vehicle Controls.....	5
AUM286	Automotive Heating and Air Conditioning	5
COM053	Technical Report Writing	3
	or	
WR122	English Composition–Argumentation and Research (or higher)	4

Term 6

AUM253	Automotive Engines 2.....	4
	or	
AUM280D	Cooperative Work Experience	4
AUM273	Automatic Transmissions and Transaxles 2.....	4
	or	
AUM280D	Cooperative Work Experience	4
AUM281	Advanced Drivability and Emissions	5
WLD097	Welding.....	2
	or	
WLD077	Welding Processes	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Biology, Botany, General Science

(transfer course guideline)

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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Building Inspection Technology Program

buildinginspection.chemeketa.edu

The Building Inspection Technology Associate of Applied Science (AAS) program has a two-year (seven-term) program for those new to and experienced in the field. As a graduate, you may qualify for State of Oregon and international certification as a building inspector or plans examiner at the residential and/or commercial level, depending upon your experience and tests taken. The certification tests are all an additional cost.

There is a need for certified building inspectors and plans examiners working for public and private agencies. If you have some experience in the field, you may qualify after you graduate 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. At the end of winter term each year, students are encouraged to attend an educational conference at an additional cost. 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 BLD280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index. Cooperative work experience is a requirement of this degree.

The degree program can be completed in 21 months if you attend full time. However, there are entry-level expectations for skill levels in reading, writing, and mathematics. The length of time you take to complete the program will depend on your skills in these areas. To assess the time you will need to complete the program, please meet with the program chair.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 503.399.5006.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Identify various jobs and associated work performed in a building department to gain employment.
- Use appropriate interpersonal communication skills to achieve code compliance.
- Perform inspections of buildings at various stages of construction and write correction notices and reports referencing current building codes.
- Be prepared to take State of Oregon OIC, MHI, PCI and International Code Council (ICC) Codes Certification tests.
- Identify different building materials and methods of construction currently used in the building industry.
- Read and interpret blueprints and assess their compliance to the various codes.

Building Inspection Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,345; class fees, \$258; universal fee, \$840; 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 106 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1.....	3
BLD159A	Materials of Construction.....	3
BLD160	Construction Print Reading.....	2
BLD193A	Building Inspection Lab.....	2
COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition–Exposition+ (or higher).....	4
CIS101	Introduction to Microcomputer Applications.....	3
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
Term 2		
BLD152	Building Codes 2.....	3
BLD161	Structural Inspection–Wood.....	3
BLD181A	Mechanical Codes 1.....	3
BLD193B	Building Inspection Lab.....	2
FE205B	Resumes and Job Search Correspondence.....	1
MTH053	Introduction to Trigonometry with Geometry (or higher).....	3
Term 3		
BLD153	Building Codes 3.....	3
BLD155	Building Department Administration.....	3
BLD182A	Mechanical Codes 2.....	3
BLD193C	Building Inspection Lab.....	2
BLD263	Structural Inspection–Concrete.....	3
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	4
Term 4		
BLD280L	Cooperative Work Experience (summer term)....	12
Term 5		
BLD162	Structural Inspection–Masonry.....	3
BLD193D	Building Inspection Lab.....	2
BLD269	Engineering for the Building Inspector.....	3
BLD291	One- and Two-Family Electrical Code.....	3
	or	
FRP172	International Fire Codes.....	3
BLD292A	International Residential Code (Structural).....	3
Term 6		
BLD193E	Building Inspection Lab.....	2
BLD260	Fire Protection for Buildings.....	3
BLD266	Structural Plan Review.....	3
BLD270	Engineering for the Building Inspector 2.....	3
BLD292B	International Residential Code (Mechanical).....	3
Term 7		
BLD193F	Building Inspection–Lab.....	2
BLD267	Non-Structural Plan Review.....	3
BLD268	Foundations, Excavation and Grading.....	3
PSY101	Psychology of Human Relations+ (or higher).....	4
	Social Science elective.....	3
	or	
	Humanities/Fine Arts elective.....	3
	or	
ART265	Digital Photography.....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Business Administration

(transfer course guideline)

See also Accounting, and Management. (Includes Accounting, Finance, International Business, Marketing and Management)

Oregon's state 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.

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 departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Business Technology Programs

bt.chemeketa.edu

Chemeketa offers 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 Office Fundamentals certificate is offered 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 administrative assistants, secretaries, office assistants, and support specialists. There are three two-year programs: Administrative Office Professional, 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 program.

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 approval of the program staff, you may enroll in BT280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Office Fundamentals Certificate will:

- Accurately produce, edit, and proofread business documents.
- Follow professional business procedures and standards.
- Store, locate, and retrieve information to support office personnel.

Students completing the Business Software Certificate will:

- Compose and accurately produce and proofread business documents using appropriate software and equipment within specified timelines.
- Utilize a wide range of software knowledge in a variety of settings.
- Integrate computer, computation, and communication skills to accomplish personal and professional tasks.

Students completing the Business Technology Certificate will:

- Compose and accurately produce and proofread business documents using appropriate software and equipment within specified timelines.
- Follow professional business procedures and standards.
- Store, retrieve, distribute and manage information to support office personnel.
- Integrate computer, computation, and communication skills to accomplish office tasks.

Students completing the Accounting Administrative Assistant AAS will:

- Compose, proofread, and produce business documents using appropriate software and equipment to meet mailability standards within specified timelines.
- Follow professional business procedures and standards.
- Store, retrieve, distribute, and manage information to support office and management personnel.
- Integrate computer, computation, communication, and critical thinking skills to accomplish complex office tasks, enter bookkeeping data, prepare and review financial records, and solve problems.
- Apply knowledge of the internal organization and management of an office.
- Work both independently and as part of a team.

Students completing the Administrative Office Professional AAS will:

- Compose, proofread, and produce a wide range of business documents using appropriate software and equipment to meet mailability standards within specified timelines.
- Follow professional business procedures and standards.
- Store, retrieve, distribute, and manage information to support office and management personnel.
- Integrate computer, computation, communication, and critical thinking skills to accomplish complex office tasks and solve problems.
- Apply knowledge of the internal organization and management of an office.
- Work both independently and as part of a team.

Students completing the Medical Administrative Assistant AAS will:

- Compose, proofread, and accurately produce medical and other business documents using appropriate software and equipment within specified timelines.
- Follow professional business procedures and standards.

- Store, retrieve, distribute, and manage information to support office and management personnel.
- Integrate computer, computation, communication, and critical thinking skills to accomplish medical office tasks and solve problems.
- Work both independently and as part of a team.
- Determine the relationships among law, ethics, and health care professionals.

Many courses have prerequisites; check the course descriptions in the back of this catalog for details.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college's free placement test. The second step is to obtain your scores from the Counseling and Career Services staff. Next, see a Business Technology (BT) advisor. If your scores show you need pre-program classes, your BT advisor will help you determine if you need one or more of the following:

BT104	Business English 1	3
CA121	Keyboarding (if less than 25 wpm)	3
MTH020	Basic Mathematics.....	4
RD090	College Textbook Reading.....	3

If you have questions about the requirements, call the Business Technology program office at 503.399.6094 or 503.399.3524. Failure to be assessed may delay your entry into program classes.

Administrative Office Professional Office Fundamentals Certificate of Completion

The Office Fundamentals program allows you to concentrate on developing the basic skills required of a receptionist, file clerk, document processor, and/or an employee in other related positions. Course content includes keyboard skillbuilding, records management, business English, and basic word processing, spreadsheet, database, and presentation software. If you wish to refresh specific skills, you may enroll in other electives as your schedule allows.

You may work toward the Office Fundamentals program on the Salem campus and at Chemeketa's outreach campuses and centers in Dallas, Yamhill Valley, and Woodburn. For additional information, call 503.399.3524.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$1,355; class fees, \$100; universal fee, \$279; equipment and supplies, \$155. 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 31 credit hours with a grade of "C" or better in all courses.

**Office Fundamentals core requirements and electives
(31 credit hours):**

Course	Title	Credit Hours
BT105	Business English 2	3
BT116	Office Procedures.....	3
BT128	Introduction to Records Management	2
BT130	Customer Service	3
BT186	Personal and Professional Development.....	3
CA118A	Microsoft Windows Basic	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118D	Internet for the Office Environment	1
CA118E	Outlook Basics.....	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CIS101	Introduction to Microcomputer Applications.....	3
	Office Fundamentals elective*	3

*Office Fundamentals electives (select 3 credit hours): Courses with BA, BT, CA, and CIS prefixes. Recommended: BA115, BT280C, FE205B.

Administrative Office Professional

Business Software Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$800; class fees, \$100; universal fee, \$180; equipment and supplies, \$80. 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 20 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
CA118A	Microsoft Windows Basics.....	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 1.....	1
CA118D	Internet for the Office Environment	1
CA118F1	PowerPoint Basics 1	1
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
	Business Software electives*	6

*Choose a minimum of six credits from the list of electives below. Some of these courses have prerequisites. Check the college catalog.

***Business Software electives**

BA214	Business Communications.....	3
BT210	Professional Communication Skills.....	4
CA117	Microsoft Publisher.....	3
CA118E	Outlook Basics.....	1
CA208	Workplace Presentations Using PowerPoint	3
CA220	Quickbooks: Computerized Bookkeeping	3
CIS101	Introduction to Microcomputer Applications.....	3

One-Year Certificate of Completion Programs

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

Administrative Office Professional

Business Technology Certificate of Completion

This certificate prepares you to work as a word processing operator, general office clerk, receptionist, document processor, file clerk, secretary, bookkeeping assistant, and/or accounting clerk. You may enroll part time or full time. 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, \$2,035; class fees, \$100; universal fee, \$495; equipment and supplies, \$220. 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 55 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT105	Business English 2	3
BT112	Proofreading/Editing.....	3
BT116	Office Procedures.....	3
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
BT131	Electronic Calculators.....	2
BT186	Personal and Professional Development.....	3
BT210	Professional Communications Skills+	4
CA118A	Microsoft Windows Basics*	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118C1	Access Basics 1.....	1
CA118D	Internet for the Office Environment	1
CA118E	Outlook Basics.....	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications*	3
MTH060	Introductory Algebra+.....	4
	Business Technology Certificate electives**.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*In order to be most successful, take CA118A and CIS101 prior to other CA and CIS courses in your program.

**Choose BA104 or any BA, BT, or CA course.

Two-Year Associate of Applied Science Degrees

Chemeketa's Business Technology two-year programs are designed for those who want to become an accounting assistant, administrative office professional, medical assistant, office coordinator or manager, and/or another type of administrative support specialist.

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

The program has three options: Accounting Administrative Assistant, Administrative Office Professional, and Medical Ad-

ministrative 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.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college's free placement test. The second step is to obtain your scores from the Counseling and Career Services staff. Next, see a Business Technology (BT) advisor. If your scores show you need pre-program classes, your BT advisor will help you determine if you need one or more of the following:

BT104	Business English 1	3
CA121	Keyboarding (if less than 25 wpm)	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading.....	3

If you have questions about the requirements, call the Business Technology program office at 503.399.6094. Failure to be assessed may delay your entry into program classes.

Administrative Office Professional

Accounting Administrative Assistant Associate of Applied Science Option

The Accounting Administrative Assistant degree prepares you for office positions where bookkeeping tasks are emphasized.

This program provides you with basic education in bookkeeping—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 required courses listed below are books, \$3,700; class fees, \$255; universal fee, \$900; equipment and supplies, \$400. 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 100 credit hours with a grade of "C" or better in all courses.

Accounting Administrative Assistant first-year core requirements (49 credit hours):

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT105	Business English 2	3
BT112	Proofreading/Editing.....	3
BT116	Office Procedures.....	3
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
BT131	Electronic Calculators.....	2
BT210	Professional Communication Skills.....	4
CA118A	Microsoft Windows Basics.....	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 2.....	1
CA118D	Internet for the Office Environment	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CA220	QuickBooks-Computerized Bookkeeping.....	3
CIS101	Introduction to Microcomputer Applications.....	3

Accounting Administrative Assistant second-year core requirements (51 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA104	Business Applications Using Mathematics+ (or higher).....	4
BA177	Payroll.....	4
BA211	Financial Accounting 1	4
BA214	Business Communications+	3
BA226	Business Law 1	4
BA228	Computer Accounting Applications.....	4
BA251	Office Management	3
BT186	Personal and Professional Development.....	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics.....	1
CA208	Workplace Presentations Using PowerPoint	3
CA225	Advanced Document Production	3
PSY104	Psychology in the Workplace	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Administrative Office Professional

Associate of Applied Science

The Administrative Office Professional program prepares you for a variety of positions in administrative support. This work requires you to be able to organize a variety of tasks, accept responsibility, and work effectively as a team member. The program emphasizes project management; internet/intranet communications and research; document production and retrieval; customer service; composition; efficient use of a variety of software packages; and public relations.

As a statewide cooperative effort among several Oregon community colleges, this program is transferable to the following participating schools: Blue Mountain Community College, Clackamas Community College, Clatsop Community College, Klamath Community College, Lane Community College, Linn-Benton Community College, Mt. Hood Community College,

Portland Community College, and Southwestern Oregon Community College. Consult with Counseling and Career Services or a Chemeketa advisor on course transferability.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$3,500; class fees, \$212; universal fee, \$828; equipment and supplies, \$368. 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 92 credit hours with a grade of "C" or better in all courses.

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

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT105	Business English 2	3
BT112	Proofreading/Editing	3
BT116	Office Procedures	3
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
BT131	Electronic Calculators	2
BT210	Professional Communication Skills	4
CA118A	Microsoft Windows Basics	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C1	Access Basics 1	1
CA118C2	Access Basics 2	1
CA118D	Internet for the Office Environment	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3

Administrative Office Professional second-year core requirements (46 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business	4
BA104	Business Applications Using Mathematics+ (or higher)	4
BA214	Business Communications+	3
BA226	Business Law	4
BA251	Office Management	3
BT186	Personal and Professional Development	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics	1
CA119	Office Desktop Publishing 1	4
CA208	Workplace Presentations Using PowerPoint	3
CA220	QuickBooks-Computerized Bookkeeping	3
CA225	Advanced Document Production	3
PSY104	Psychology in the Workplace	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Medical Administrative Assistant Associate of Applied Science

The Medical Administrative Assistant prepares you to work in medically-related offices where you may make appointments, manage patient records, meet patients, type correspondence,

transcribe patient records, maintain financial records, and complete insurance forms.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$3,600; class fees, \$250; universal fee, \$864; equipment and supplies, \$384. 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 96 credit hours with a grade of "C" or better in all courses.

Medical Administrative Assistant first-year core requirements (48 credit hours):

Course	Title	Credit Hours
BT105	Business English 2	3
BT112	Proofreading/Editing	3
BT210	Professional Communication Skills	4
CA118A	Microsoft Windows Basics	1
CA118B1	Excel Basics 1	1
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C1	Access Basics 1	1
CA118C2	Access Basics 2	1
CA118D	Internet for the Office Environment	1
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
HM101	Medical Law and Ethics	3
HM110	Health Information Systems Procedures 1	4
HM114	CPT-IV Coding/Reimbursement	3
HM115	ICD-9-CM Coding/Reimbursement	3
HM120	Medical Terminology 1	3
HM121	Medical Terminology 2	3

Medical Administrative Assistant second-year core requirements (48 credit hours):

BA104	Business Applications Using Mathematics+ (or higher)	4
BA115	Introduction to Accounting	4
BA214	Business Communications+	3
BI171	Introduction to Human Anatomy and Physiology 1	3
BI172	Introduction to Human Anatomy and Physiology 2	3
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
BT131	Electronic Calculators	2
BT186	Personal and Professional Development	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics	1
CA122	Keyboard Skillbuilding	3
CA225	Advanced Document Production	3
PSY104	Psychology in the Workplace	4
	Medical Administrative Assistant electives*	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Choose a minimum of three credits from the list of electives below. Some of these courses have prerequisites. Check the college catalog and contact a Business Technology advisor.

Medical Administrative Assistant electives

CA208	Workplace Presentations Using PowerPoint	3
CA220	Quickbooks: Computerized Bookkeeping	3
HM113	Medical Insurance Billing	3
SOC204	The Sociological Perspective	4
SP115	Introduction to Intercultural Communication	4
WR227	Technical Writing	4

Chemistry

(transfer course guideline)

Oregon's state 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 (SOU), University of Oregon, and Western Oregon University. SOU also offers a Business-Chemistry co-major.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Chiropractic

(transfer course guideline)

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, and/or biology courses.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Computer Information Systems–Health Informatics Program

healthinformatics.chemeketa.edu

Health Informatics is an emerging field that combines the disciplines of computer information systems and health services management. The program offers an Associate of Applied Science degree that prepares students to coordinate the computer information systems used in hospitals and medical clinics. Program coursework covers health data collection, storage and communication, and data processing to be used for the support of administrative and clinical decision-making, and the computer and telecommunications technology applied to these processes.

As a statewide cooperative effort among several Oregon community colleges, this program is transferable to the following participating schools: Lane Community College, Linn-Benton

Community College, Portland Community College, Southwestern Oregon Community College, and Umpqua Community College. Consult with Counseling and Career Services or a Chemeketa advisor on course transferability.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Computer Information Systems–Health Informatics AAS will:

- Develop, implement, and evaluate a health information management system.
- Manage the acquisition, storage, retrieval and use of health information.
- Apply operational health care knowledge to address health informatics system needs.
- Create and query databases and user interfaces using advanced SQL concepts.
- Select appropriate technology tools by recognizing tool capabilities and limitations.
- Work effectively alone or as part of a team.
- Communicate orally and in written form explain concepts, components and processes.
- Plan, manage and control costs of a health care system.
- Identify and evaluate local and wide area network requirements for a health care organization.
- Install, manage and troubleshoot issues in a network environment.
- Specify, purchase and assemble hardware and software for a local area network.
- Communicate effectively with vendors and users.
- Define systems requirements for projects; use project management software and practices, apply accounting principles to increase profitability and decrease costs.

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. The second step is to discuss your scores with the Counseling and Career Services staff. Next, see a Health Informatics program advisor. If your scores show you need pre-program classes, your advisor will help you determine if you need one or more of the following:

CIS101	Introduction to Microcomputer Applications	3
HM120	Medical Terminology 1	3
MTH070	Elementary Algebra	4
RD115	Academic Reading and Thinking	3
WR115	Introduction to Composition	4

If you have questions about the requirements contact Health Informatics faculty James Finholt at 503.589.7813 or Cheryl Davis at 503.399.2669. Failure to be assessed may delay your entry into the program.

In addition to tuition, estimated costs for students who complete the entire AAS program listed above are books: \$4,580; class fees: \$725; universal fee: \$927; equipment and supplies, \$400. 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 106 credit hours.

Course	Title	Credit Hours
Term 1		
BA211	Financial Accounting 1	4
CIS120	Digital Literacy	4
CIS133SC	Fundamentals of Scripting Languages.....	4
	or	
CIS133J	Fundamentals of Java Programming.....	4
MTH095	Intermediate Algebra+.....	4
WR121	English Composition - Exposition+.....	4
Term 2		
CIS121	Introduction to Programming.....	4
CIS125A	Micro Database Software - Access.....	3
CIS140B	Microcomputer Operating Systems	3
HM112	Health Information Systems and Procedures 2	4
HM121	Medical Terminology 2.....	3
Term 3		
BA224	Human Resource Management.....	4
CIS140U	UNIX/Linux	3
CIS179	Introduction to Client-Server Networks.....	4
PSY201	General Psychology - Mind and Body+	4
Term 4		
BA214	Business Communications.....	3
	or	
WR122	English Composition-Argumentation and Research.....	4
CIS276A	Introduction to Oracle: SQL.....	4
	or	
CIS276D	Oracle Academy 1-SQL.....	4
CS275	Database Management.....	4
HM210	Introduction to Health Services.....	3
HM250	Health Services Management 1	3
Term 5		
CIS145	Microcomputer Hardware	4
CIS276B	Oracle Program with PL/SQL	4
	or	
CIS276E	Oracle Academy 2-PL/SQL	4
CIS278	Data Communications.....	4
HM251	Health Services Management 2	3
SP111	Fundamentals of Public Speaking	4
Term 6		
CIS244	Systems Analysis 1	4
CIS276C	Oracle Reports Developer/Bldg Reports	4
CIS280C	Cooperative Work Experience	3
CIS288	Advanced Client Server.....	4
HM252	Health Services Management 3	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Computer Information Systems Programs

cis.chemeketa.edu

The Computer Information Systems program offers an Associate in Applied Science degree in Computer Systems and Information Technology that allows students to design a customized curriculum consisting of a broad foundation of general technology courses and one or more technical specialties. This specialized degree prepares students for a wide variety of employment opportunities in the computer information services industry. Students may also complete an Associate of Arts Oregon Transfer degree combined with computer science lower division transfer courses that provides the first two years

of study towards a four-year bachelor's degree in computer science. This program is transferable to any public University in Oregon and is also accepted by many private universities. The Computer Information Systems program additionally provides a broad array of professional continuing education classes and certificates for professionals already working in the field and provides technology service classes for students studying in other disciplines.

The Computer Systems and Information Technology core degree, in combination with one or more specialized areas of study, prepares students for a wide variety of technical career opportunities. The Computer Programming Certificate prepares traditional programmers and analysts who are responsible for all phases of program design and development. The Computer Support Certificate prepares the student for work in the design and implementation of business systems solutions, software and systems troubleshooting, technical support and end user training. The Systems Administration Certificate offers career opportunities in enterprise and workgroup systems administration. This certificate provides a pathway to the LINUX+, Microsoft Certified Systems Engineer, Microsoft Certified IT Professional, and Microsoft Certified Technical Specialist certifications. The Database Developer Certificate prepares professionals to be an integral member of development and support teams in information systems environments. The Web Developer Certificate opens the door to careers in web application design, development and administration of dynamic, data-driven web sites (Web masters and Web developers). The Security and Forensics Certificate graduate may work in computer crime law enforcement, corporate information systems or private computer security consulting.

As a student in the program, you are expected to work with a department advisor in planning term-by-term class schedules leading toward fulfillment of all program requirements. If you plan to earn a bachelor's degree, you are responsible for learning the departmental requirements of the school to which you plan to transfer.

Getting started

The first step to entering the following program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services 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:

CA121	Keyboarding (if less than 25 wpm)	3
MTH095	Intermediate Algebra	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition.....	4

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Acquire new information and adapt to changes in the computer technology field.
- Apply a logical and systematic approach to solve problems.

- Use written, oral, and visual interpersonal skills to communicate with individuals or small groups.
- Install, configure, use, maintain software systems, and deal with security issues involved in a business environment.
- Configure and maintain workstation and server operating systems, and hardware resources.
- Research and interpret technical materials as they relate to areas of specialization.
- Apply project life cycle concepts to assist in finding solutions to business needs.
- Conduct and evaluate individual and small group instruction for information technology topics such as application software.

In addition to the AAS outcomes, students completing the Computer Programming Certificate will:

- Design and implement computer software applications in various languages.
- Develop an application for an N-tiered environment.
- Evaluate, discuss, and plan software project requirements for a specific industry need.

In addition to the AAS outcomes, students completing the Computer Systems Support Certificate will:

- Manage workgroup resources including file shares, print shares, and physical connections.
- Install, configure and support industry required applications to the enterprise environment.
- Use integrated software packages to analyze and support business problems related to the IT infrastructure.

In addition to the AAS outcomes, students completing the Computer Systems Administration Certificate will:

- Manage enterprise resources including file shares, print shares, and physical connections.
- Install, configure and support industry required operating systems for the enterprise environment.
- Utilize enterprise tools to support remote access, security and redundancy of the enterprise environment.

In addition to the AAS outcomes, students completing the Database Developer Certificate will:

- Develop data-gathering models using current data gathering software.
- Organize data within current data-mining models.
- Extract data using best practices data-mining techniques into correct report models.
- Use current database languages technologies to create and build database objects.

In addition to the AAS outcomes, students completing the Network Management and Systems Security Certificate will:

- Use logical analysis to resolve workstation and network problems related to internal and external data security breaches.
- Conduct and evaluate individual and small group investigations related to current information technology security concerns.
- Analyze and develop a defensible security plan for an enterprise environment.

In addition to the AAS outcomes, students completing the Web Developer Certificate will:

- Design and maintain websites using a variety of software packages and editing languages.
- Evaluate accessibility, compatibility, and globalization issues in web design.

- Develop and analyze organizational web design needs through individual and group assessments.

Computer Systems and Information

Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire AAS program listed above are books: \$3,250; class fees: \$685; universal fee \$885; equipment and supplies, \$400. 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 96 credit hours. You must complete all CS/CIS core required courses with a grade of "C" or better.

General Education requirements (23 credit hours)

MTH105	Introduction to Contemporary Mathematics+	4
	or	
MTH111	College Algebra+	5
PSY104	Psychology in the Workplace+	4
SP111	Fundamentals of Public Speaking	4
WR121	English Composition-Exposition+	4
WR227	Technical Writing	4
	Humanities/Fine Arts elective	3

Computer Systems and Information Technology Core Requirements (53 credit hours):

Course	Title	Credit Hours
CIS102A	Cyber Security and Safety	4
CIS120	Digital Literacy	4
CIS120A	Computer Information Sciences Pathway	1
CIS121	Introduction to Programming Concepts	4
CIS125A	Micro Database Software - Access	3
CIS133SC	Scripting Languages.....	4
CIS140B	Microcomputer Operating Systems	3
CIS140U	UNIX/Linux	3
CIS145	Microcomputer Hardware	4
CIS178I	Introduction to the Internet.....	3
CIS179	Introduction to Client Server Networks.....	4
CIS244	Systems Analysis	4
CIS278	Data Communications.....	4
CIS288	Advanced Client Server Networks	4
CS275	Database Management.....	4
	CIS/CS related electives*	20

To complete the two-year AAS in Computer Systems and Information Technology, each student is required to take an additional 20 hours of credits from the list of courses below:

Course	Title	Credit Hours
ART115	Basic Design.....	3
BA101	Introduction to Business.....	4
BA202	Personal Effectiveness.....	3
BA277	Business Ethics.....	3
CIS060	Techniques of User Training.....	2
CIS125E	Excel Workbooks.....	4
CIS125G	Intro to Computer Game Development.....	4
CIS125H	xHTML Basics.....	4
CIS133J	Fundamentals of Java Program 1.....	4
CIS133JS	JavaScript Web Programming 1.....	4
CIS133VB	Visual Basic.....	4
CIS178W	Fundamentals of Web Design.....	4
CIS186	Computer Forensics.....	4
CIS195	Web Site Development.....	4
CIS233J	Fundamentals of Java Programming 2.....	4
CIS234J	Fundamentals of Java Programming 3.....	4
CIS276A	Introduction to Oracle SQL.....	4
CIS276B	Oracle: Programming with PL/SQL.....	4
CIS276C	Database Reports and Forms Developer.....	4
CIS276D	Oracle Academy 1-SQL.....	4
CIS276E	Oracle Academy 2-PL/SQL.....	4
CIS277A	Database Admin Fundamentals 1.....	4
CIS277B	Database Admin Fundamentals 2.....	4
CIS279	Network Management.....	5
CIS280A-L	Cooperative Work Experience.....	0-12
CIS289	Advanced Network Applications Support.....	4
CIS295	Web Applications Development.....	4
CJ101	Criminology.....	3
CS133U	C++ Language.....	4
CS160	Introduction to Computer Science.....	4
CS161	Computer Science 1.....	4
CS162	Computer Science 2.....	4
CS260	Computer Science 3: Data Structures.....	4
CS271	Principles of Computer Organization.....	4
FE205B	Resumes and Job Search Correspondence.....	1
FE205C	Interviewing for Success.....	1

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Computer Systems and Information Technology

Computer Programming Certificate of Completion

The Computer Programming Certificate 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 as an entry-level computer programmer. The Computer Programming Certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the Computer Programming pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Programming Certificate listed above are books: \$962; class fees: \$210; universal fee: \$270; equipment and supplies: \$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 the required 31 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA202	Personal Effectiveness.....	3
	or	
BA101	Introduction to Business.....	4
CIS133J	Fundamentals of Java Programming 1.....	4
CIS133VB	Visual Basic–Event Driven Programming.....	4
CIS233J	Fundamentals of Java Programming 2.....	4
CIS234J	Fundamentals of Java Programming 3.....	4
CS133U	C++ Programming.....	4
CIS133JS	Java Script Web Programming.....	4
CIS133SC	Fundamentals of Scripting Languages.....	4

Computer Systems and Information Technology

Computer Support Specialist Certificate of Completion

This certificate prepares you for a career as a software support specialist. The software support specialist has a strong foundation in computer systems concepts with an emphasis in microcomputer applications and practical experience. The Computer Support Specialist Certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Support Specialist Certificate listed above are books: \$1,550; class fees: \$240; universal fee: \$310; equipment and supplies: \$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 the required 34 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA202	Personal Effectiveness.....	3
	or	
BA101	Introduction to Business.....	4
CIS060	Techniques of User Training.....	2
CIS120	Digital Literacy.....	4
CIS125A	Micro Database Software-Access.....	3
CIS125E	Excel Workbooks.....	4
CIS145	Microcomputer Hardware.....	4
CIS179	Introduction to Client-Server Networks.....	4
CIS278	Data Communications.....	4
CIS288	Advanced Client-Server Networks.....	4
FE205B	Resume and Job Search Correspondence.....	1
FE205C	Interviewing for Success.....	1

Computer Systems and Information Technology

Computer Systems Administration Certificate of Completion

The Computer Systems Administration Certificate prepares students with the knowledge and skills to design, install,

implement, monitor, maintain, and manage enterprise and workgroup-level computer systems. The certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the Computer Systems Administration pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Systems Administrator Certificate listed above are books: \$1,550; class fees: \$266; universal fee: \$350; equipment and supplies: \$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 the required 38 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA202	Personal Effectiveness.....	3
	or	
BA101	Introduction to Business.....	4
CIS133VB	Visual Basic–Event Driven Programming.....	4
CIS140B	Microcomputer Operating Systems	3
CIS140U	UNIX/Linux	3
CIS145	Microcomputer Hardware	4
CIS179	Introduction to Client-Server Networks.....	4
CIS278	Data Communications.....	4
CIS279	Network Management	5
CIS288	Advanced Client-Server Networks	4
CIS289	Advanced Network Applications Support.....	4

Computer Systems and Information Technology

Database Developer Certificate of Completion

The Database Developer Certificate is for students who wish to become professional data analysts and database developers. As a graduate of this program, you will meet the minimum educational and experience requirements to qualify as an entry-level database developer. The Database Developer Certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the Database Developer pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Database Developer Certificate program listed above are books: \$1,750; class fees: \$210; universal fee: \$270; equipment and supplies: \$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 the required 30 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA202	Personal Effectiveness.....	3
	or	
BA101	Introduction to Business.....	4
CIS125A	Micro Database Software–Access.....	3
CIS276A	Introduction to Oracle: SQL	4
	or	
CIS276D	Oracle Academy 1-SQL.....	4
CIS276B	Oracle: Program with PL/SQL	4
	or	
CIS276E	Oracle Academy 2-PL/SQL	4
CIS276C	Oracle Reports Developer/Building Reports.....	4
CIS277A	Oracle Database Administration Fundamentals 1	4
CIS277B	Oracle Database Administration Fundamentals 2	4
CS275	Database Management.....	4

Computer Systems and Information Technology

Network Management and Systems Security Certificate of Completion

The Network Management and Systems Security Certificate prepares students to obtain an entry-level position in local or federal law enforcement, or as a private computer security consultant or in corporate computer security. The Network Management and Systems Security Certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the Network Management and Systems Security pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Network Management and Systems Security program listed above are books: \$1,665; class fees: \$260; universal fee: \$335; equipment and supplies: \$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 the required 37 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA277	Business Ethics	3
CIS102A	Cyber Security and Safety	4
CIS140B	Microcomputer Operating Systems	3
CIS140U	UNIX/Linux	3
CIS179	Introduction to Client Server Networks.....	4
CIS186	Computer Forensics	4
CIS278	Data Communications.....	4
CIS279	Network Management	5
CIS288	Advanced Client Server Networks	4
CJ101	Criminology.....	3

Computer Systems and Information Technology

Web Developer Certificate of Completion

The Web Developer Certificate prepares students for employment in the area of web applications development. The web developer designs, implements, and maintains websites using various editors, web development applications, HTML, XML, data-driven web applications, and client and server-side web scripting languages. Web developers typically interface with

business stakeholders, users, provide customer support, and have an appreciation for the importance of web presence for the company (eCommerce). The Web Developer certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics. Alternatively, you can choose to complete the Web Developer pathway as a stand alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Web Developer Certificate listed above are books: \$680; class fees \$220; universal fee: \$279; equipment and supplies: \$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 the required 31 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
ART115	Basic Design.....	4
CIS133JS	JavaScript Web Programming 1.....	4
CIS133SC	Fundamentals of Scripting Languages.....	4
CIS133VB	Visual Basic - Event-Driven Programming.....	4
CIS178I	Introduction to the Internet/World Wide Web.....	3
CIS178W	Fundamentals of Web Design.....	4
CIS195	Web Site Development.....	4
CIS295	Web Applications Development.....	4

Computer Science

(transfer course guideline)

Chemeketa offers a program of study that closely follows the first two years in Computer Science at most Oregon public and private universities. In most cases, students are able to complete the first two years of a Bachelor of Science degree in Computer Science at Chemeketa before transferring to a university for completion.

All of Oregon's public universities offer Bachelor of Arts and/or Bachelor of Science degrees in Computer Science, Software Engineering, or Information Systems. In general, most Computer Science transfer students should combine the two-year AAOT transfer degree along with the CS transfer sequence classes which include CS160, CS161, CS162, CS260 and CS271. Transfer students will also need additional math courses commonly including MTH231, MTH251 and MTH252.

As a prospective student, you are required to meet with Chemeketa's Computer Science instructor, Mitchel Fry (503.589.7649 or mitch.fry@chemeketa.edu) or Counseling and Advising Career Services to develop your educational plan. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in academic requirements.

Criminal Justice Programs

cj.chemeketa.edu

Graduates of Chemeketa's Criminal Justice program may become law enforcement officers, adult or juvenile correctional officers, federal protection service workers, progress toward

a career with homeland security (customs, border patrol, Transportation Security Administration, port security, Federal Bureau of Investigation, drug enforcement agency), or 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 jobs in 9-1-1 telecommunications, intake and release work in correctional institutions, and in private and public security work. As a graduate, you may also qualify for work in a related field as an insurance adjuster, an agency investigations officer, 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 Counseling and Career Services and an advisor at the institution to which you plan to transfer.

Students are required to complete a minimum of three credit hours of Cooperative Work Experience. With the approval of the program chair, you may enroll in CJ280B-L 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 with the 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 online.

The Criminal Justice program, with the assistance of career professionals, identified two career areas that are in high demand in the Willamette Valley. Therefore, Career Pathways certificates of completion are offered in Basic Corrections and Basic Law Enforcement. The certificates are designed to provide the knowledge and skills needed for these positions. The certificates of completion are educational "stepping stones" and fit wholly into the Criminal Justice Associate of Applied Science degree, allowing you to work in your field while earning your degree.

Chemeketa also offers a one-year certificate in Juvenile Corrections; for information refer to page 122.

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

Due to the sensitive nature and hiring standards of the Criminal Juvenile Justice employment qualifications, this program has special admission requirements for entry into the second year.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Basic Corrections Certificate will:

- Identify the historical and philosophical evolution of criminal justice sanctions and punishment.
- Describe the constitutional and statutory foundation for offender treatment within correctional facilities.

Students completing the Basic Law Enforcement Certificate will:

- Identify the historical and philosophical evolution of law enforcement in the United States.
- Identify and describe the legal foundation for law enforcement officers working under "color of law."

Students completing the AAS will:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- Describe and relate the constitutional rights and responsibilities of citizens, offenders, and victims as they apply to state, federal, and procedural laws.
- Describe the processes and technology used to gather, investigate, manage, and report information in the criminal justice field.
- Identify the legal responsibilities of criminal justice professionals as they relate to cultural diversity and establishing positive community relationships.

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 Career Services staff. You may need to complete pre-program courses.

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
MTH020	Basic Mathematics.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition	4
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5163. Failure to be assessed may delay your entry into program classes.

Criminal Justice

Basic Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$931; class fees, \$20; universal fee, \$272. 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 37 required credit hours with a grade of "C" or better in all courses.

General Education requirements (12 credit hours):

MTH060	Introductory Algebra (or higher).....	4
PSY201	Introduction to Psychology–Mind and Body.....	4
WR121	English Composition–Exposition.....	4

Basic Corrections core requirements (25 credit hours):

CJ101	Criminology.....	3
CJ103	Program Application and Employment Standards*	1
CJ130	Introduction to Corrections Process.....	3
CJ132	Introduction to Parole and Probation.....	3
CJ134	Contraband and Search	1
CJ136	Transportation, Escorting, and Restraints.....	1
CJ147	Criminal Personality and Errors in Thinking.....	1
CJ203	Crisis Intervention Seminar.....	3
CJ232	Introduction to Corrections Casework	3
CJ253	Introduction to Penology	3
CJ280C	Cooperative Work Experience	3

*Another course may be substituted for the CJ103 requirement upon proof of current employment in the field of criminal justice/law enforcement. Minimum degree credit hour requirements must be met.

Criminal Justice

Basic Law Enforcement Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,212; class fees, \$40; universal fee, \$304. 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 42 required credit hours with a grade of "C" or better in all courses.

General Education requirements (17 credit hours):

MTH060	Introductory Algebra (or higher).....	4
PE185PA	Personal Defense–Beginning	1
PSY201	Introduction to Psychology–Mind and Body.....	4
SP218	Interpersonal Communication.....	4
WR121	English Composition–Exposition.....	4

Basic Law Enforcement core requirements (25 credit hours):

CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
CJ103	Program Application and Employment Standards*	1
CJ110	Introduction to Law Enforcement.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Introduction to Criminal Investigations 1: Crimes vs. Persons	3
CJ220	Introduction to Substantive Law and Oregon Criminal Code	3
CJ280C	Cooperative Work Experience	3

*Another course may be substituted for the CJ103 requirement upon proof of current employment in the field of criminal justice/law enforcement. Minimum degree credit hour requirements must be met.

Criminal Justice

Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,984; class fees, \$65; universal fee, \$752. 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 101 required credit hours with a grade of "C" or better in all courses. These include the 67 credit hours listed under general education requirements, 19 credit hours of Criminal Justice core requirements, and 15 credit hours of Criminal Justice electives.

General Education requirements (67 credit hours):

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH060	Introductory Algebra+ (or higher)	4
	Physical Education elective (3 different activities) .	3
	or	
HPE295	Health and Fitness for Life.....	3
SP218	Interpersonal Communication.....	4
	or	
	Speech elective	4
WR121	English Composition–Exposition+	4
WR122	English Composition–Argumentation and Research.....	4
WR227	Technical Writing.....	4
	or	
CJ212	Police Report Writing	3
	General Education electives.....	18
	Humanities electives*	12
	Psychology or Sociology electives+**	12

Criminal Justice core requirements (19 credit hours):

CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
CJ103	Program Application and Employment Standards***	1
CJ206	Crime and Delinquency.....	3
CJ210	Introduction to Criminal Investigations 1: Crimes vs. Persons	3
CJ226	Introduction to Constitutional Law	3
CJ280C	Cooperative Work Experience	3

Criminal Justice electives (15 credit hours):

CJ110	Introduction to Law Enforcement.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ130	Introduction to Corrections Process.....	3
CJ132	Introduction to Parole and Probation.....	3
CJ134	Contraband and Search	1
CJ136	Transportation, Escorting and Restraints.....	1
CJ138	Security Threat Groups.....	1
CJ146	Officer Survival Mindset.....	3
CJ147	Criminal Personality and Errors in Thinking.....	1
CJ200	Family Violence and Deviancy	3
CJ203	Crisis Intervention Seminar.....	3
CJ209	Introduction to Victimology	3
CJ211	Property Crimes: Behavior and Evidence.....	3
CJ212	Police Report Writing	3
CJ217	Interview and Interrogation	3
CJ220	Introduction to Substantive Law and Oregon Criminal Code	3
CJ222	Profiling Serial Killers.....	3
CJ224	Missing and Abducted Children.....	1
CJ232	Introduction to Corrections Casework	3
CJ253	Introduction to Penology	3
CJ255	Preparation for Oral Boards	2

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Suggestions for students: Due to current bilingual hiring preferences, students are urged to take SPN111, 112, 113 for Humanities electives.

**Law enforcement and adult corrections students are encouraged to take PSY201 and 202 for Psychology electives. Students with an interest for a juvenile justice emphasis are encouraged to pursue the Juvenile Corrections Certificate. Juvenile Certificate courses may be integrated into the Criminal Justice AAS degree.

***Another course may be substituted for the CJ103 requirement upon proof of current employment in the field of criminal justice/law enforcement. Minimum degree credit hour requirements must be met.

Criminal Justice

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Criminal Justice are Western Oregon University, Southern Oregon University (degree in Criminology), and Portland State University.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

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

Dental Assisting Program

dental.chemeketa.edu

The Dental Assisting program offers technical training to people 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 Web site is 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, assisting with clinical procedures, expanded functions, 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 insurance billings, and is responsible for the general appearance of an office.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Perform basic and expanded chairside functions to facilitate the completion of restorative and advanced operative procedures.
- Manipulate dental materials to support chairside and laboratory procedures.
- Perform basic office procedures necessary to assist in managing a dental practice.
- Demonstrate proficiency in exposing, processing, and mounting dental radiographs.
- Practice professional behaviors as applied to the workplace environment.
- Manage asepsis, infection control, and hazard control protocol to promote a safe work environment.

Getting started

This program has special admission requirements and enrollment limits. 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 Career Services 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
CIS101	Introduction to Microcomputer Applications.....	3
RD115	Academic Thinking and Reading (or higher).....	3
SP111	Fundamentals of Public Speaking	4

If you have questions about the requirements, contact 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, program offices, and the Chemeketa website (www.chemeketa.edu).

To enroll, you must have a high school diploma or GED certificate. Students are required to submit a copy of their current CPR card and immunizations prior to fall registration. You must also pass a criminal background check and possibly a drug test. Successful completion of the Dental Assisting program requires that you 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 infection control, general chairside, and radiation health and safety.

Dental Assisting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$668; lab fees, \$430; universal fee, \$423; uniform and shoes, \$265; exam fees, \$620; immunizations, \$150; criminal background check, \$30; CPR certification, \$70; professional membership fee, \$40. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to spring practicum travel.

You may earn a Certificate of Completion by successfully completing the 56 required credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
DEN150	Dental Sciences.....	3
DEN151	Introductory Concepts in Dental Assisting.....	3
DEN153	Dental Materials 1	3
DEN156	Dental Anatomy	4
DEN165	Dental Office Emergency Management.....	2
MTH060	Introductory Algebra+ (or higher)	4

Term 2

DEN160	Dental Specialties.....	2
DEN161	Dental Assisting Practicum 1.....	3
DEN162	Intermediate Clinical Skills.....	2
DEN163	Dental Materials 2.....	3
DEN164	Dental Radiology 1.....	3
DEN170	Dental Office Management.....	2
PSY101	Psychology of Human Relations+ (or higher).....	4

Term 3

DEN171	Dental Assisting Practicum 2.....	9
DEN172	Expanded Functions.....	3
DEN174	Dental Radiology 2.....	2
WR121	English Composition–Exposition+.....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Dental Hygiene

(transfer course guideline)

Pacific University offers a Bachelor of Science degree in Dental Hygiene.

Admission to the Dental Hygiene program is competitive; only a limited number of applicants are 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.

Oregon Institute of Technology offers, in partnership with Chemeketa, a Bachelor of Science degree in Dental Hygiene on the Salem campus. The program requires one year of prerequisite coursework (see below) prior to entry into the professional program. Entry into the professional program is limited and students are selected by an application process. The application and other program information is available at www.oit.edu/dentalthygiene. The pre-dental hygiene curriculum is outlined below:

Course	Title	Credit Hours
Term 1		
CH104	Chemistry for Allied Health*	5
DHE100	Introduction to Dental Hygiene**	2
HM120	Medical Terminology 1.....	3
MTH111	College Algebra*	5
Term 2		
BI231	Human Anatomy and Physiology.....	4
CH105	Chemistry for Allied Health.....	5
SOC204	The Sociological Perspective.....	4
WR121	English Composition–Exposition.....	4
Term 3		
BI232	Human Anatomy and Physiology.....	4
BI234	Microbiology.....	4
CH106	Chemistry for Allied Health.....	5
WR122	English Composition–Argumentation and Research.....	4
Term 4		
BI233	Human Anatomy and Physiology.....	4
NFM225	Nutrition.....	4
SP111	Fundamentals of Public Speaking.....	4

*Prerequisite is MTH095.

**Available through OIT online at <http://www.oit.edu/dist/courses>.

Design

(transfer course guideline)

Oregon State University offers a Bachelor of Science degree in Apparel Design, Interior Design, Housing Studies, and Merchandising Management.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at OSU to learn of any possible changes in an academic area.

Drafting Technology–CAD Programs

drafting.chemeketa.edu

Drafting Technology offers training for entry into careers in Computer-Assisted Drafting (CAD). The CAD program focuses primarily on drafting skills required for the fields of architecture and construction, with a minor focus on mechanical drafting. Students will learn a variety of the latest 2D and 3D software as they draw buildings, bridges, roadways and mechanical parts. Many design projects are carried across several courses to help students put together basic concepts into integrated, complex design solutions required in real-world projects.

Students may choose to enroll in individual courses, or work toward a Certificate or 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. In your third term or later, with the approval of the program chair you may enroll in DRF280B-L Cooperative Work Experience and earn college credit hours. Opportunities are subject to availability. For more information, look under Cooperative Work Experience in the catalog index.

After graduation, with specific course substitutions, some credits will transfer to a four-year engineering or engineering technology program.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the CAD Certificate will:

- Produce accurate 2D and 3D drawings using CAD software.

Students completing the Architectural Drafting Certificate will:

- Produce accurate 2D and 3D drawings using CAD software.
- Produce sets of architectural drawings suitable for planning division approval.
- Produce sets of structural drawings to industry standards.

Students completing the Computer-Assisted Drafting (CAD) AAS will:

- Produce accurate 2D and 3D drawings using CAD software.
- Use effective communication skills as a team member to research data and generate drawings.

- Produce sets of architectural drawings suitable for planning division approval.
- Produce sets of structural drawings to industry standards.
- Produce sets of civil drawings including streets, lots, and utilities for a subdivision suitable for planning division approval.
- Draft sets of mechanical drawings including detail and assembly drawings of related parts.

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. The second step is to discuss your scores with the Counseling and Career Services staff. Next, see a Drafting Technology program advisor. If your scores show you need pre-program classes, your advisor will help you determine if you need one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications.....	3
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR080	Basic Writing	4

Note: In many cases students can enroll in program courses without completing all of the above prerequisite courses.

If you have questions about the requirements, contact Drafting Technology program staff at 503.399.5069. Failure to be assessed may delay your entry into program classes.

Computer-Assisted Drafting (CAD)

Computer-Assisted Drafting (CAD) Certificate of Completion

The CAD Certificate program is for students seeking a basic working knowledge of CAD systems. Full-time students can complete the program in three terms, although full-time enrollment is not required. Many required courses are available online to provide maximum flexibility to non-traditional and working students. This certificate provides initial training for entry-level CAD operator positions.

Completion of the CAD Certificate includes a competency-based AutoCAD Assessment Exam. All credits apply toward the Associate of Applied Science degree in CAD Drafting Technology.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$700; class fees, \$250; universal fee, \$396; certification exam, \$50. 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 44 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
DRF112	Sketching.....	1
DRF114	Drafting Orientation.....	2
DRF130	CAD 1.....	3
MTH070	Elementary Algebra+ (or higher).....	4
PSY104	Psychology in the Workplace+.....	4

Term 2

COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition-Exposition+.....	4
DRF110	Applied Engineering Computations	2
DRF131	CAD 2.....	3
DRF150	Architectural Drafting 1	3
DRF220	GIS 1.....	2

Term 3

DRF095C	Special Projects in Drafting and Design.....	3
DRF132	CAD 3.....	3
DRF140	3D Modeling with Inventor	3
DRF170	AutoCAD Certification Preparation.....	2
DRF240	Architectural Drafting 2.....	3
	Drafting elective*	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Drafting elective: Select a course with a CVL, DRF, EGR or CAM prefix.

Computer-Assisted Drafting (CAD)

Architectural Drafting Certificate of Completion

The Architectural Drafting certificate prepares students to work as a drafter or entry-level designer in the areas of home design, architecture, engineering, and construction. All credits earned in this program may be applied toward the Computer-Assisted Drafting (CAD) AAS degree. **Note:** Students must have completed DRF130 and DRF131 prior to beginning this certificate.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$800; class fees, \$350; universal fee, \$423; 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 the required 47 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
CVL143	Introduction to Civil Survey.....	3
DRF112	Sketching.....	1
DRF150	Architectural Drafting 1	3
DRF271	Commercial Drafting with Revit 1	4
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).....	4
DRF110	Applied Engineering Computations	2
DRF240	Architectural Drafting 2	3
DRF272	Commercial Drafting with Revit 2	4
PSY104	Psychology in the Workplace +.....	4

Term 3

DRF132	CAD 3.....	3
DRF160	Spreadsheet and Database Applications.....	3
DRF241	Structural Drafting.....	3
DRF243	Architectural Design.....	3
DRF273	Commercial Drafting with Revit 3.....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Computer-Assisted Drafting (CAD)**Associate of Applied Science**

Students graduating from the CAD program may become technicians in civil, mechanical, structural, or architectural drafting. Additional career opportunities include Geographic Information Systems (GIS), mapping, and technical illustration. Training encompasses computer-aided drafting in all of the fields listed; application of software and mathematical concepts to solve real-world problems; and broader skills in communication, teamwork and human relations.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,500; class fees, \$450; universal fee, \$900; 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 100 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
CVL143	Introduction to Civil Survey.....	3
DRF110	Applied Engineering Computations.....	2
DRF112	Sketching.....	1
DRF114	Drafting Orientation.....	2
DRF130	CAD 1.....	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+ (or higher).....	4
CVL144	Intermediate Civil Survey.....	3
DRF131	CAD 2.....	3
DRF220	GIS 1.....	2
MTH082	Technical Mathematics 2.....	4
	or	
MTH112	Trigonometry (or higher).....	5
Term 3		
DRF132	CAD 3.....	3
DRF140	3D Modeling with Inventor.....	3
DRF150	Architectural Drafting 1.....	3
DRF160	Spreadsheet and Database Applications.....	3
DRF221	GIS 2.....	3
DRF241	Structural Drafting.....	3
Term 4		
DRF155	Mapping and Platting.....	3
DRF210	Parametric Design with SolidWorks.....	3
DRF230	Introduction to MicroStation PC.....	3
DRF271	Commercial Drafting with Revit 1.....	4
PH121	Applied Physics.....	4

Term 5

CVL232	Applied Statics and Strengths.....	4
DRF231	Advanced MicroStation.....	3
DRF240	Architectural Drafting 2.....	3
DRF245	Civil Drafting and Design.....	4
DRF272	Commercial Drafting with Revit 2.....	4

Term 6

DRF165	CAD System Administration.....	3
DRF243	Architectural Design.....	3
DRF246	Project Development.....	3
DRF273	Commercial Drafting with Revit 3.....	4
PSY104	Psychology in the Workplace+.....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Early Childhood Education Programs

ece.chemeketa.edu

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 childcare aides, assistants, and teachers in preschools, day care centers, kindergartens, Head Start programs, and therapeutic relief nurseries.

Articulation agreements with Oregon State University and Portland State University allow Chemeketa's Early Childhood Education graduates to enroll with third-year standing. See an advisor for details.

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, or career pathway certificates in Infant/toddler or preschool specializations. Students in the program must earn grades of "C" or better in all Early Childhood Education (ECE) and Human Development and Family (HDF) courses. 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 relating to your program. With the approval of the program chair, you may enroll in ECE280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes**Students completing the Infant/Toddler certificate will:**

- Understand the developmental stages of children, prenatal to three years.
- Plan and implement appropriate curriculum.
- Demonstrate strategies that encourage healthy social and emotional attachment.

- Be prepared to assess and, if needed, refer children for early intervention screening.
- Use appropriate communication skills with parents of young children.

Students completing the Preschool certificate will:

- Understand the developmental stages of children age two-and-a-half to six years.
- Plan and implement appropriate curriculum.
- Demonstrate strategies that encourage health social and emotional attachment.
- Understand assessment methods and use of appropriate referral agencies in the community.
- Use appropriate communication skills with parents of young children.

Students completing the certificate will:

- Apply principles and skills in observing children—birth to age eight—to select guidance techniques to promote autonomy.
- Plan and implement nutrition plans.
- Practice appropriate communications skills—both written and verbal—with supervisors, colleagues, and parents.
- Plan and implement activities to work with children of diverse ages, backgrounds, and abilities based on developmentally-appropriate theories and observations.

Students completing the AAS will:

- Plan and implement curriculum in early childhood education settings that support the physical, social, emotional, and cognitive development of all young children from birth to age eight, based on knowledge of children’s development.
- Use communication strategies to establish positive, collaborative relationships with families and colleagues.
- Self-assess and evaluate professional practices based on a theoretical framework of child development.
- Practice standards for professional ethics as applied to the early childhood workplace environment.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Counseling and Career Services 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.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition	4
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.6077. Failure to be assessed may delay your entry into program classes.

Early Childhood Education

Infant/Toddler Certificate of Completion

This certificate provides students with basic skills in the early care and education of infants and toddlers. It is designed for students just entering the early care and education field, those who wish to focus their education and work experience with infants and toddlers, and for those already employed in child

care, but who need an immediate certificate to continue working in an Oregon licensed facility. A student may continue to seek the associate degree seamlessly, since all of the certificate classes are wholly contained within the degree program.

In addition to tuition, estimated costs for students who complete the program listed below are books, \$347 class fees, \$35; universal fee, \$120; immunization fees, \$10; basic first-aid card, \$35; food handler card, \$10; criminal records check, \$3-83. 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 15 credit hours with a grade of “C” or better in all courses. Proof of first aid/CPR and food handler cards will be required upon completion of the program.

Course	Title	Credit Hours
Term 1		
HDF225	Prenatal, Infant, and Toddler Development.....	3
HDF249	Introduction to Working with Infants and Toddlers.....	3
Term 2		
ECE151	Observing and Guiding Behavior.....	3
HDF222	Family Relationships.....	3
Term 3		
ECE161	Infant/Toddler Practicum.....	3

Early Childhood Education

Preschool Certificate of Completion

This certificate provides students with basic skills in the early care and education of preschool children age two-and-a-half to six years. It is designed for students just entering the early care and education field, those who wish to focus their education and work experience with preschoolers, and for those already employed in child care, but who need an immediate certificate to continue working in an Oregon licensed facility. A student may continue to seek the associate degree seamlessly, since all of the certificate classes are wholly contained within the degree program.

In addition to tuition, estimated costs for students who complete the program listed below are books, \$347 class fees, \$35; universal fee, \$112; immunization fees, \$10; basic first-aid card, \$35; food handler card, \$10; criminal records check, \$3-83. 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 14 credit hours with a grade of “C” or better in all courses. Proof of first aid/CPR and food handler cards will be required upon completion of the program.

Course	Title	Credit Hours
Term 1		
HDF222	Family Relationships.....	3
HDF247	Preschool Child Development	3
Term 2		
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
Term 3		
ECE162	Early Childhood Educator Orientation.....	2

Early Childhood Education

Early Childhood Certificate of Completion

In addition to tuition, estimated costs for students who complete the one-year program listed below are books, \$456; class fees, \$35; universal fee, \$440; equipment and supplies, \$36; immunization fees, \$10; basic first-aid card, \$35; food handler card, \$10; criminal records check, \$3-70; 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 the required 56 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences.....	1
ECE150	Introduction and Observation in Early Childhood Education	3
HDF222	Family Relationships+	3
HDF225	Prenatal, Infant, and Toddler development.....	3
HDF249	Introduction to Working with Infants and Toddlers.....	3
MTH060	Introductory Algebra+ (or higher)	4
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
ECE068B	Observing Preschool Experiences.....	1
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition.....	2
	or	
NFM225	Nutrition	4
ECE161	Infant/Toddler Practicum	3
ECE162	Early Childhood Educator Orientation.....	2
HDF247	Preschool Child Development	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

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Early Childhood

Associate of Applied Science

Once an Associate of Applied Science degree in Early Childhood Education is completed, a student is eligible to take advantage of the transfer agreements with Oregon State University, Portland State University, and Western Oregon University.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$924; class fees, \$55; universal fee, \$760; equipment and supplies, \$72; immunization fees, \$10; basic first-aid card, \$35; food handler card, \$10; criminal records check, \$3-70; 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 the required 98 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences.....	1
ECE150	Introduction and Observation in Early Childhood Education	3
HDF222	Family Relationships+	3
HDF225	Prenatal, Infant, and Toddler Development	3
HDF249	Introduction to Working with Infants and Toddlers.....	3
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
ECE068B	Observing Preschool Experiences.....	1
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition.....	2
	or	
NFM225	Nutrition	4
ECE161	Infant/Toddler Practicum	3
ECE162	Early Childhood Educator Orientation	2
HDF247	Preschool Child Development	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, Early Childhood Education***	6
HDF285	Professional Issues in Early Childhood Education	3
MTH060	Introductory Algebra+ (or higher)	4
Term 5		
ECE280D	Cooperative Work Experience	4
HDF257	Home, School and Community	3
HDF258	Teaching in an Anti-Bias Classroom***	3
	Humanities/Fine Arts elective*	4
	or	
	Science/Applied Science elective*.....	4
	or	
	Communications elective* **	4
	Computer Science elective**	3
Term 6		
ECE262	Student Teaching 2, Early Childhood Education***	6
ECE295	Administration of Early Childhood Education Programs	3
	Humanities/Fine Arts elective*	4
	or	
	Science/Applied Science elective*.....	4
	or	
	Communications elective*	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Selection may not be repeated.

**See Associate of Applied Science Degree guidelines.

***Students transferring to Western Oregon University should see advisor.

****Requires recommendation from two Early Childhood faculty members.

Economics

(transfer course guideline)

Oregon's state 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. U of O also offers a five-year program combining an undergraduate economics major and a master of business administration.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Education

See also **Early Childhood Education and Speech-Language Pathology Assistant.**

Elementary Education

(transfer course guideline)

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

Students planning on attending WOU will complete a specific series of courses leading to the Associate of Arts Oregon Transfer Degree (AAOT). Students should see a Chemeketa advisor to obtain detailed requirements. Students planning to attend EOU will also complete the AAOT, then earn a bachelor's degree in Multidisciplinary Studies with a minor in education. Students should see a Chemeketa advisor and 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, or 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 educational guideline outlined in the catalog for the academic major which they plan to complete before entering a fifth-year program.

Elementary Education majors planning to transfer to Concordia University should contact Counseling and Career Services at 503.399.5120 for transfer information.

Secondary Education

(transfer course guideline)

Oregon's state universities offering secondary education programs are Eastern Oregon University, Oregon State 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, University of Oregon, and Western Oregon University, which offer a fifth-year secondary education program. University of Oregon 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 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 Western Oregon University 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 departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Electronics Technologies Programs

electronics.chemeketa.edu

Career opportunities in the electronics field are diverse, exciting, and rewarding. Chemeketa's electronics department offers seven programs of study to meet the present and future challenges of the electronics industry: certificates in the areas of Process Control and Electronics, and associate degrees in Electronic Engineering Technician, Computer Electronics, Industrial Electronics, Process Control Technology, and Renewable Energy Management.

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 ELT280A-H Cooperative Work Experience. For more information, look under Cooperative Work Experience in the catalog index or contact Roger White at 503.399.5068.

For additional information or tours of the electronics laboratory, visit electronics.chemeketa.edu.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes:

Students completing the Electronics Certificate will:

- Apply professional and environmental safety practices associated with the workplace.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.
- Use test equipment and perform basic test procedures.

Students completing the Process Control Certificate will:

- Apply skills in system performance and control processes to quickly adapt to new equipment processes and changes in manufacturing technology.
- Use standard process control terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Students completing the Electronic Engineering AAS will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, co-workers, and customers.
- Identify and solve technology problems related to electronic circuits and devices, mechanical systems, and computer hardware or software.
- Perform test procedures and use equipment to diagnose, maintain, and/or repair electronic/computer-based circuits and systems.
- Read and interpret written materials, including manuals, technical bulletins, schematics, and procedures to maintain and repair equipment or systems.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.
- Practice skills and attitudes—individually and as a member of a team—that reflect quality management procedures and professional standards in the workplace.
- Apply professional and environmental safety practices associated with the workplace.

In addition to the Electronic Engineering outcomes, students completing the Computer Electronics AAS will:

- Identify and solve technology problems related to the manufacture, installation, or maintenance of computers or computer-like equipment.

In addition to the Electronic Engineering outcomes, students completing the Industrial Electronics AAS will:

- Identify and solve technology problems related to the development, manufacturing, installation, and servicing of computer integrated manufacturing systems, semiconductor and microelectronic manufacturing equipment, process control equipment, and robotic and other electromechanical systems.

In addition to the Electronic Engineering outcomes, students completing the Process Control Technology AAS will:

- Apply skills in system performance and control processes to quickly adapt to new equipment processes and changes in manufacturing technology.
- Identify and solve technology problems related to the development, manufacturing, installation, and servicing of process control systems including food processing, agriculture, pulp and paper, chemical, biofuel, and applications that require control.

In addition to the Electronic Engineering outcomes, students completing the Renewable Energy Management AAS will:

- Evaluate the energy use and recommend appropriate alternative energy solutions as well as energy conservation methods for various applications.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Counseling and Career Services 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:

CA121	Keyboarding (if less than 25 wpm)	3
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR090	Fundamentals of Writing.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120. Failure to be assessed may delay your entry into program classes.

Electronic Engineering Technician Electronics Certificate of Completion

The Electronics Pathway Certificate is a three-term program, which focuses on core electronics concepts, use of testing and monitoring equipment, a basic understanding of electronics-related materials, including blueprints, schematics, and work procedures, as well as industry recognized safety practices. The certificate is designed to provide graduates with the basic skills and knowledge of electronics. Courses are wholly contained in the Renewable Energy Management AAS.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,490; class fees, \$215; equipment and supplies, \$3; and Intel-compatible computer, \$900. 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 43 credit hours with a grade of “C” or better in all courses.

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition-Exposition+.....	4
ELT111	Electronics Orientation.....	1
ELT131	Electronic Concepts 1.....	4
MTH111	College Algebra+.....	5
	or	
MTH081	Technical Mathematics 1+.....	4
Term 2		
ELT132	Electronic Concepts 2.....	4
ELT141	Transistor Fundamentals.....	4
ELT151	Digital Fundamentals.....	4
MTH112	Trigonometry.....	5
	or	
MTH082	Technical Mathematics 2.....	4
Term 3		
COM053	Technical Report Writing.....	3
	or	
WR227	Technical Writing.....	4
ELT133	Electronic Concepts 3.....	4
ELT142	Semiconductor Optoelectronic Devices.....	3
ELT161	Linear IC Fundamentals.....	4
FE205B	Resumes and Job Search.....	1

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Electronic Engineering Technician

Process Control Certificate of Completion

The Process Control Certificate is a three-term program with focused concentration in the areas of electronics, systems design and safety, and instrumentation. It is for students seeking to specialize in process control systems. This certificate is wholly contained in the Process Control Technology degree which prepares students to monitor and operate processing systems and instrumentation. Process control technology skills go across manufacturing industries. Students will gain skills in system performance and control processes which will allow them to more quickly adapt to new equipment processes and changes in manufacturing technology. The skill sets in this program are aligned with the International Society of Automation (ISA) standards.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,590; class fees, \$245; equipment and supplies, \$925; and Intel-compatible computer, \$900. 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 37 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT121	Programming Concepts 1.....	4
MT101	Introduction to Process Control.....	2
MT211	Sensors and Control Elements 1.....	2
MT281	Process Control Practicum 1.....	2

Term 2		
MT212	Sensors and Control Elements 2.....	3
MT215	Instrumentation.....	3
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
MT231	Programmable Logic Controllers 1.....	3
MT282	Process Control Practicum 2.....	2
Term 3		
ELT293	Flexible Manufacturing Systems and Processes....	3
MT232	Programmable Logic Controllers 2.....	2
MT235	Human Machine Interfaces.....	2
MT241	System Calibration and Standards.....	2
MT283	Process Control Practicum 3.....	4

Electronic Engineering Technician

Computer Electronics Associate of Applied Science Option

Graduates of the Computer Electronics program begin careers with companies that manufacture, install, debug, 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, 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 program, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the coursework required for a bachelor's degree. If you wish to transfer, declare your intent before the first term and work closely with electronics advisor Charles Sekafetz (503.399.6254), and the institution to which you plan to transfer.

Students entering this program must have an Intel-compatible computer (Pentium 4 or better) and be computer literate (type approximately 20 wpm, and be familiar with the Windows operating system and word processing and spreadsheet software).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,650; class fees, \$430; universal fee, \$840; equipment and supplies, \$410; and Intel-compatible computer, \$900. 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 102 credit hours with a grade of "C" or better in all courses.

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+	4
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals.....	4
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Optoelectronic Devices	3
ELT143	Pulse Circuit Fundamentals.....	3
WR227	Technical Writing.....	4
	Electronics electives*.....	4
Term 4		
ELT121	Programming Concepts 1	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics.....	4
SP111	Fundamentals of Public Speaking.....	4
	Electronics electives*.....	4
Term 5		
ELT253	Microprocessor Systems.....	4
ELT254	Computer Hardware.....	4
	or	
CIS145	Microcomputer Hardware	4
PSY104	Psychology in the Workplace+	4
	Electronics elective*	4
Term 6		
ELT222	Programming Concepts 2	4
	or	
CIS140U	UNIX/Linux	3
	or	
CIS179	Introduction to Client-Server Networks.....	4
FE205B	Resumes and Job Search Correspondence	1
ELT256	Advanced Computer Architecture	4
ELT283	Logical Troubleshooting.....	4
	Electronics elective*.....	4

***Computer Electronics electives :**

Term 3		
ELT161	Linear IC Fundamentals.....	4
	or	
NET141	Networks for Small Business	4
Term 4		
ELT244	Electronic Circuit Analysis	4
	or	
NET142	Medium Business Networks	4
Term 5		
CIS278	Data Communications.....	4
	or	
NET143	Routing and Switching Systems	4

Term 6		
ELT255	Advanced Data Communications.....	4
	or	
CIS279	Network Management	5
	or	
NET144	Network Design and Support	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Electronic Engineering Technician Associate of Applied Science

Upon graduation from the Electronic Engineering Technician program, 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 program, you may choose to transfer to a school such as Oregon Institute of Technology to complete the coursework 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 (Charles Sekafetz, 503.399.6254) and the institution to which you plan to transfer.

Students entering this program must have an Intel-compatible computer (Pentium 4 or better) and be computer literate (type approximately 20 wpm, and be familiar with the Windows operating system and word processing and spreadsheet software).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,820; class fees, \$430; universal fee, \$816; Intel-compatible computer, \$900; equipment and supplies, \$410. 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 103 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
DRF101	Basic CAD for Electronics.....	2
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+	4
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals.....	4
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4

Term 3

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

Term 4

ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics	4
	or	
PH201	General Physics	4
SP111	Fundamentals of Public Speaking	4

Term 5

ELT253	Microprocessor Systems.....	4
ELT262	Linear IC Applications	3
ELT281	Antennas and Transmission Lines.....	2
ELT282	Telecommunications.....	3
PH122	Applied Physics	4
	or	
PH202	General Physics	4
FE205B	Resumes and Job Search Correspondence	1

Term 6

ELT283	Logical Troubleshooting.....	4
ELT291	Control, Robotics and Power Systems	4
PSY104	Psychology in the Workplace+	4
	Electronics electives*.....	6

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Electronics electives (select 6 credits):**

(For second-year students only; must have prior approval of program chair.)

CH121	College Chemistry.....	5
CH201	Chemistry for Engineers.....	4
CIS145	Microcomputer Hardware	4
ELT222	Programming Concepts 2	4
ELT254	Computer Hardware.....	4
ELT255	Advanced Data Communications.....	4
ELT256	Advanced Computer Architecture	4
ELT280C	Cooperative Work Experience*	3
ELT293	Flexible Manufacturing Systems and Processes....	3
MT101	Introduction to Process Control	2
MT110	Microelectronics and Solar Cell Manufacturing....	3
MT211	Sensor and Control Elements 1.....	2
MT212	Sensor and Control Elements 2.....	3
MT215	Instrumentation	3
MT221	Fluid and Vacuum Systems.....	4
MT223	High Vacuum Technology.....	3
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
MT231	Programmable Logic Controllers 1	3
MT232	Programmable Logic Controllers 2	2
MT235	Human Machine Interfaces.....	2
MT241	System Calibration and Standards	2
MT281	Process Control Practicum 1.....	2
MT282	Process Control Practicum 2.....	2
MT283	Process Control Practicum 3.....	4
MTH241	Elementary Calculus.....	4
MTH243	Probability and Statistics 1	4
MTH251	Differential Calculus (or higher).....	5
PH203	General Physics	4
RNW110	Solar Energy Systems.....	3
RNW120	Wind Energy Systems.....	3
RNW130	Biomass Energy Systems.....	3
RNW140	Hydroelectric and Geothermal Energy Systems ...	3
RNW180	Energy Management.....	3

Electronic Engineering Technician**Industrial Electronics Associate of Applied Science Option**

Students selecting the Industrial Electronics program 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, and robotic, and other electromechanical systems. This program stresses mechanical, computer, and electronic theory, as well as the communication and human relation skills needed for career advancement.

As a graduate of this program, you may choose to transfer to a school such as Oregon Institute of Technology to complete the coursework required for a bachelor's degree. If you intend to transfer, declare your intent before the first term and work closely with the Industrial Electronics advisor (Charles Sekafetz at 503.399.6254) and the institution to which you plan to transfer.

Students entering this program must have an Intel-compatible computer (Pentium 4 or better) and be computer literate (type approximately 20 wpm, and be familiar with the Windows

operating system and word processing and spreadsheet software).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,625; class fees, \$430; universal fee, \$808; Intel-compatible computer, \$900; equipment and supplies, \$455. 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 103 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
DRF101	Basic CAD for Electronics.....	2
ELT111	Electronics Orientation.....	1
ELT131	Electronic Concepts 1	4
MT110	Microelectronics and Solar Cell Manufacturing.....	3
MTH081	Technical Mathematics 1+.....	4
	or	
MTH111	College Algebra+ (or higher)	5
WR121	English Composition–Exposition+	4
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals.....	4
ELT151	Digital Fundamentals	4
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Optoelectronic Devices	3
ELT143	Pulse Circuit Fundamentals.....	3
ELT161	Linear IC Fundamentals.....	4
WR227	Technical Writing	4
Term 4		
ELT121	Programming Concepts 1	4
	or	
CIS133J	Fundamentals of Java Programming 1.....	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics	4
	or	
PH201	General Physics	4
SP111	Fundamentals of Public Speaking	4
Term 5		
ELT253	Microprocessor Systems.....	4
ELT262	Linear IC Applications	3
FE205B	Resumes and Job Search Correspondence	1
PH122	Applied Physics.....	4
	or	
PH202	General Physics	4
	Technical elective*.....	3
Term 6		
ELT291	Control, Robotics and Power Systems	4
PSY104	Psychology in the Workplace+	4
	Technical electives*	9

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Technical electives:**

CH121	College Chemistry.....	5
CH201	Chemistry for Engineers.....	4
CIS145	Microcomputer Hardware	4
DRF251	Power Transmission Design.....	3
ELT254	Computer Hardware.....	4
ELT283	Logical Troubleshooting.....	4
ELT293	Flexible Manufacturing Systems and Procedures..	3
MT221	Fluid and Vacuum Systems.....	4
MT223	High Vacuum Technology.....	3
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
MTH243	Probability and Statistics 1	4

**Electronic Engineering Technician
Process Control Technology Associate
of Applied Science Option**

Students in this program will gain skills in system performance and control processes which will allow them to more quickly adapt to new equipment and procedures in the manufacturing industry. Process control technology skills cross all segments of the manufacturing industry. Graduates of this program may find work with solar, silicon, biofuel, and food processing companies, or a variety of other manufacturing entities.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2850; class fees, \$400; equipment and supplies, \$465; and Intel-compatible computer, \$900. 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 92 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT111	Electronics Orientation.....	1
ELT131	Electronic Concepts 1	4
MT101	Introduction to Process Control	2
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics+.....	4
WR121	English Composition - Exposition+	4
	or	
COM051	Communication Skills 1+.....	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals.....	4
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Optoelectronic Devices	3
ELT161	Linear IC Fundamentals.....	4
FE205B	Resumes and Job Search Correspondence	1
WR227	Technical Writing	4
	or	
COM053	Technical Report Writing	3

Term 4		
ELT121	Programming Concepts 1	4
MT211	Sensors and Control Elements 1	2
MT281	Process Control Practicum 1.....	2
PH121	Applied Physics	4
	or	
PH201	General Physics	4
SP111	Fundamentals of Public Speaking	4

Term 5		
MT212	Sensors and Control Elements 2	3
MT215	Instrumentation	3
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
MT231	Programmable Logic Controllers 1	3
MT282	Process Control Practicum 2.....	2

Term 6		
ELT293	Flexible Manufacturing Systems and Processes....	3
MT232	Programmable Logic Controllers 2	2
MT235	Human Machine Interfaces.....	2
MT241	System Calibration and Standards	2
MT283	Process Control Practicum 3.....	4
PSY104	Psychology in the Workplace+	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Electronic Engineering Technician Renewable Energy Management Associate of Applied Science Option

The Renewable Energy Management program coursework prepares students for employment designing, installing, and managing renewable energy systems. They may find work with national and international installation contractors in the areas of marketing and sales, materials estimating, and sizing and design. Students of this program will follow the first-year curriculum of the Electronics Engineering Technician program.

During the second year, students in the Renewable Energy Management program will take coursework covering solar, wind, biomass, hydroelectric, and geothermal energy systems. A course in energy management systems will provide a capstone experience for students in the program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,650; class fees, \$355; equipment and supplies, \$625; and Intel-compatible computer, \$900. 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 94 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition-Exposition+	4
ELT111	Electronics Orientation.....	1
ELT131	Electronic Concepts 1	4
MT110	Microelectronics and Solar Cell Manufacturing....	3
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics 1+.....	4

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

Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	4
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Optoelectronic Devices	3
ELT161	Linear IC Fundamentals.....	4

Term 4		
ELT121	Programming Concepts 1	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics	4
	or	
PH201	General Physics	4
RNW110	Solar Energy Systems	3
SP111	Fundamentals of Public Speaking	4

Term 5		
FE205B	Resumes and Job Search Correspondence	1
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
PH122	Applied Physics	4
	or	
PH202	General Physics	4
RNW120	Wind Energy Systems.....	3
RNW130	Biomass Energy Systems.....	3

Term 6		
ELT291	Control, Robotics, Power Systems	4
ELT293	Flexible Manufacturing Systems.....	3
PSY104	Psychology in the Workplace+	4
RNW140	Hydroelectric and Geothermal Energy Systems ...	3
RNW180	Energy Management.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Emergency Medical Technology–Paramedic Program

emt.chemeketa.edu

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 hospital and pre-hospital clinical training sites. The program is accredited by the Oregon Department of Education, the Oregon Department of Health Services/Emergency Medical Services (DHS-EMS), 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 and national registry 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 480–600 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.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Assess patients and apply treatment protocols in emergency medical situations.
- Use oral and written skills to communicate effectively in anxiety producing situations with patients, families, and members of the health care team.
- Perform all basic and advanced life support skills in a safe and timely manner.
- Provide on-scene leadership in emergency medical care situations.
- Apply professional values and ethical behaviors individually and as a member of a team in providing emergency care.

Emergency Medical Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,920; class fees, \$1,613; universal fee, \$800. 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 104 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
BI231	Human Anatomy and Physiology	4
EMT151	Emergency Medical Technician Basic, Part 1	5
EMT175	Introduction to Emergency Medical Service	3
	or	
ES172	Introduction to Emergency Services	4
HM120	Medical Terminology 1	3
WR121	English Composition–Exposition+ (or higher).....	4
Term 2		
BI232	Human Anatomy and Physiology	4
EMT152B	Emergency Medical Technician Basic, Part 2	5
ES115	Crisis Intervention.....	3
MTH070	Elementary Algebra+ (or higher).....	4

Term 3		
BI233	Human Anatomy and Physiology	4
EMT169	EMT Rescue.....	3
	or	
FRP256	Fire Service Rescue Practices	4
EMT176	Emergency Response Patient Transportation.....	2
	or	
FRP153	Fire Incident Related Experience 3	3
EMT177	Emergency Response Communication/ Documentation	2
PSY101	Psychology of Human Relations+ (or higher)	4
	or	
	Human Relations course.....	4
SP111	Fundamentals of Public Speaking	4
Term 4		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
EMT296	EMT Paramedic, Part 1	14
Term 5		
EMT297	EMT Paramedic, Part 2.....	14
	Social Science/Humanities elective	4
Term 6		
EMT280H	Cooperative Work Experience	8
EMT298	EMT Paramedic, Part 3.....	4
HPE295	Health and Fitness for Life.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Employment Skills Training

The Employment Skills Training program provides individuals the opportunity to receive a state-approved Certificate of Completion for an individualized 12-to-44 credit program that leads to skills and knowledge necessary for employment in an occupation or career field. Students who enroll in this short-term program will receive instruction based on a curriculum personalized for their chosen occupation and their individual abilities, knowledge, and skills. This program may include a combination of classroom and on-the-job experiences. Students can enroll at the beginning of any term of the academic year.

Engineering

(transfer course guideline)

engineering.chemeketa.edu

Oregon State University (OSU) and Portland State University (PSU) offer Bachelor of Science degrees in Engineering. OSU offers degrees in Biological, Chemical, Civil, Ecological, Electrical and Computer, Environmental, Industrial and Manufacturing, Mechanical, and Nuclear Engineering, as well as Construction Engineering Management. PSU offers degrees in Civil, Computer, Electrical, Environmental, and Mechanical Engineering.

Students can transfer at the junior level into engineering programs at OSU or PSU or Bachelor of Science engineering programs available at other institutions by successfully completing coursework at Chemeketa. Specific required courses vary according to discipline and school selected. As a prospective student, you are required to meet with Chemeketa Engineering instructor (Mark Miller 503.399.5225, or mark.

miller@chemeketa.edu), or Counseling and Career Services to develop your educational plan. Also, you should make early contact with an engineering advisor at the institution to which you plan to transfer to learn of any possible changes in program requirements.

English

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

English as a Non-Native Language Program

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, and listening skills entry-level prerequisites for each course. To have your language skill levels assessed for placement in any of these classes, contact the ESOL office at 503.399.6298 or Counseling and Career Services at 503.399.5120.

The length of time you will need to complete the program will depend on your skills in each of these areas. 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 ESOL office at 503.399.6298 for more information.

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

Course	Title	Credit Hours
Grammar:		
ENL031G	ESL Intermediate Grammar 1	3
ENL032G	ESL Intermediate Grammar 2	3
ENL041G	Introduction to College Grammar 1	3
ENL042G	Introduction to College Grammar	3
ENL151G	ENL College Grammar 1	3
ENL152G	ENL College Grammar 2	3

Listening and Speaking:

ENL031L	Intermediate Listening 1	3
ENL031S	Intermediate Speaking 1	3
ENL032L	Intermediate Listening 2	3
ENL032S	Intermediate Speaking 2	3
ENL040A	Introduction to Academic Listening and Speaking	3
ENL150A	Academic Listening and Speaking	3
ENL151L	ENL Academic Listening 1	3
ENL151S	ENL Academic Speaking 1	3

Pronunciation:

ENL031P	Basic English Pronunciation 1	3
ENL032P	Basic English Pronunciation 2	3
ENL041P	Introduction to English Pronunciation 1	3
ENL042P	Introduction to English Pronunciation 2	3
ENL151P	Advanced English Pronunciation 1	3
ENL152P	Advanced English Pronunciation 2	3

Reading:

ENL031R	ESL Intermediate Reading 1	3
ENL032R	ESL Intermediate Reading 2	3
ENL041R	Introduction to College Reading 1	3
ENL042R	Introduction to College Reading 2	3
ENL151R	ENL College Reading 1	3
ENL152R	ENL College Reading 2	3

Technology:

ENL033T	Technology for ESL	3
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TOEFL

ENL046I	TOEFL Test Preparation Workshop	1
ENL056I	TOEFL Test Preparation: Listening	1
ENL057I	TOEFL Test Preparation: Speaking	1
ENL058I	TOEFL Test Preparation: Reading	1
ENL059I	TOEFL Test Preparation: Writing	1

Writing:

ENL031W	ESL Intermediate Writing 1	3
ENL032W	ESL Intermediate Writing 2	3
ENL041W	Introduction to College Writing 1	3
ENL042W	Introduction to College Writing 2	3
ENL151W	ENL College Writing 1	3
ENL152W	ENL College Writing 2	3

Fire Protection Technology Programs

fire.chemeketa.edu

The Fire Protection program offers career training in Fire Suppression and Fire Prevention. Both programs include training and education for those entering the career field and for those already employed. Chemeketa has a well-equipped fire station and training center on the Salem campus and at the Emergency Services Regional Training Center in nearby Brooks, Oregon. Coursework 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 online or by correspondence. For information about distance education call 503.584.7342.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Fire Suppression AAS will:

- Operate safely and effectively under general supervision as an integral member of an emergency response team and under close supervision when engaged in hazardous activities.
- Initiate, relay, and respond to verbal or written communications in both non-emergency and emergency situations.
- Demonstrate and explain the daily operations of a fire station.
- Conduct risk reduction activity through hazard identification and public education.
- Interact with others in a diverse workforce using formal and informal rules to accomplish organizational goals.
- Assist as a member of an advanced life support team to improve patient outcomes by performing basic life support procedures including infection control, CPR, bleeding control, and shock management.
- Drive and perform pumping operations including establishing a water supply and directing the flow of water through hose lines and appliances in appropriate volumes and pressures.

Students completing the Fire Prevention AAS will:

- Operate safely and effectively under general supervision to prevent the occurrence and severity of hostile fires, to mitigate the effect of fire on people, and to assist in the determination of the cause of such fires.
- Use fire department communications equipment to initiate, relay, and respond to verbal or written communications.
- Conduct risk reduction inspections through employing hazard identification, interpreting and applying codes and standards, and applying hazard abatement process.
- Use appropriate media to educate a variety of audiences in risk reduction.
- Conduct, coordinate, and complete basic fire cause and origin investigation and participate, under supervision, in the investigation of complex fire situations.
- Interact formally and informally with others in a diverse workforce to accomplish organizational goals.
- Use communication skills and media to meet the needs of internal and external customers, resolve conflicts, and explain fire prevention concepts in a manner that places a high priority on customer satisfaction.

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 staff. You may need to complete pre-program courses. Then, fire program faculty will help you develop an individualized program of study.

The Fire Suppression degree program can be coordinated with the Emergency Medical Technician-Paramedic program so that both degrees can be earned in between nine and 11 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 Associate of Applied Science

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, \$2,248; class fees, \$203; universal fee, \$800; equipment and supplies, \$850. 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 105 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
EMT151	Emergency Medical Technician Basic, Part 1	5
FRP150	Introduction to Fire Protection	3
	or	
ES172	Introduction to Emergency Services	4
FRP151	Fire Incident Related Experience 1	3
FRP157	Hazardous Materials Operations	3
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
CIS101	Introduction to Microcomputer Applications (or higher)	3
EMT152B	Emergency Medical Technician Basic, Part 2	5
FRP152	Fire Incident Related Experience 2	3
FRP266	Building Construction for Fire Suppression	3
PH111	Physical Science for Fire Science and Emergency Services (or higher)	5
Term 3		
CH110	Foundations of General, Organic, and Biochemistry	5
FRP153	Fire Incident Related Experience 3	3
FRP154	Water Supply Operations	3
FRP158	Fire Dump Construction and Operation	3
FRP169	Fire Department Leadership	3
	Fire Suppression elective*	3
Term 4		
FRP260	Fundamentals of Fire Prevention	3
FRP261	Fire Incident Related Experience 4	3
HPE295	Health and Fitness for Life	3
SOC204	The Sociological Perspective	4
	or	
SOC205	United States Society	4
	or	
SOC206	Social Problems	4
WR121	English Composition-Exposition+ (or higher)	4

Term 5

FRP172	International Fire Codes.....	3
FRP256	Fire Service Rescue Practices	4
FRP262	Fire Incident Related Experience 5	3
SP115	Introduction to Intercultural Communications.....	4

Term 6

FRP171	Fire Protection Systems and Extinguishers.....	3
FRP179	Wildland Urban Interface	3
FRP263	Fire Incident Related Experience 6	3
PSY101	Psychology of Human Relations+ (or higher)	4
WR227	Technical Writing	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Fire Suppression electives:**

BI231	Human Anatomy and Physiology	4
BI232	Human Anatomy and Physiology	4
BI233	Human Anatomy and Physiology	4
BLD151	Building Codes 1.....	3
BLD152	Building Codes 2.....	3
BLD260	Fire Protection for Buildings.....	3
EMT167A	Emergency Medical Technician Intermediate, Part 1	5
EMT167B	Emergency Medical Technician Intermediate, Part 2	5
EMT175	Introduction to Emergency Medical Services.....	3
EMT280F	Cooperative Work Experience	6
ES115	Crisis Intervention.....	3
FRP160	Incident Safety Officer.....	1
FRP161	Fire Management Practices.....	1
FRP162	Managing Fire Personnel	1
FRP163	Planning Fire Protection	1
FRP164	Fire Department Budgets.....	1
FRP165	Public Relations, Public Information, and Public Education	1
FRP166	Firefighter's Law.....	1
FRP170	Fire Fighting Tactics and Strategies	3
FRP173	Law for Emergency Services.....	3
FRP174	Fire Investigation.....	4
FRP175	Crash/Rescue for Non-Commercial Aircraft	1
FRP259	Major Emergency Strategy and Tactics	3
FRP277	NFPA Fire Instructor 1	3
FRP278	NFPA Fire Instructor 2	3
FRP286	Advanced Detection and Protection Systems.....	3
HE262	Cardiopulmonary Resuscitation.....	2
HM120	Medical Terminology 1	3

Fire Prevention Associate of Applied Science

Graduates of the Fire Prevention program 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 FRP280B-L 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, \$2058; class fees, \$534; universal fee, \$792; equipment and supplies, \$25. 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 103 credit hours with a grade of "C" or better in all courses. For information call 503.399.6241.

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1.....	3
FRP150	Introduction to Fire Protection	3
	or	
ES172	Introduction to Emergency Services	4
FRP260	Fundamentals of Fire Prevention	3
FRP266	Building Construction for Fire Suppression.....	3
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
BLD152	Building Codes 2.....	3
CIS101	Introduction to Microcomputer Applications (or higher).....	3
FRP172	International Fire Codes.....	3
PH111	Physical Science for Fire Science and Emergency Services (or higher).....	5
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
BLD267	Non-Structural Plan Review	3
CH110	Foundations of General, Organic and Biochemistry.....	5
FRP171	Fire Protection Systems and Extinguishers.....	3
SP115	Introduction to Intercultural Communication	4
WR227	Technical Writing	4
Term 4		
FRP174	Fire Investigation.....	4
FRP257	Hazardous Materials for Inspectors	3
FRP280C	Cooperative Work Experience	3
PSY101	Psychology of Human Relations+ (or higher)	4
	Fire Prevention elective*	3
Term 5		
FRP173	Law for Emergency Services.....	3
FRP281	Fire Prevention Inspection.....	3
FRP286	Advanced Detection and Protection Systems.....	3
	or	
BLD260	Fire Protection for Buildings.....	3
FRP280C	Cooperative Work Experience	3
FRP288	Fire Prevention Education Programs.....	3
Term 6		
FRP154	Water Supply Operations.....	3
FRP179	Wildland Urban Interface	3
FRP277	NFPA Fire Instructor 1	3
FRP280C	Cooperative Work Experience	3
FRP282	Juvenile Fire Setters Intervention.....	3
FRP284	Public Information for the Fire Services	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Fire Prevention electives (select 3 credits):**

BLD181A	Mechanical Codes 1	3
BLD260	Fire Protection for Buildings.....	3
CJ210	Introduction to Criminal Investigations	3
FRP157	Hazardous Materials Operations.....	3
FRP169	Fire Department Leadership	3
FRP170	Fire Fighting Tactics and Strategies	3
FRP272	International Fire Codes 2.....	3
FRP278	NFPA Fire Instructor 2	3
FRP160	Incident Safety Officer.....	1
FRP161	Fire Management Practices.....	1
FRP162	Managing Fire Personnel	1
FRP163	Planning Fire Protection	1
FRP164	Fire Department Budgets.....	1
FRP165	Public Relations, Public Information, and Public Education	1

Fire Service Supervision and Management Certificate of Completion

The Fire Service Supervision and Management 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 certificate program, you must be certified as Firefighter 1—or equivalent—and actively be pursuing Firefighter 2 or have an associate’s 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, Bill Klein (503.399.6240), 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, \$1109; class fees, \$80; universal fee, \$424; equipment and supplies, \$120. 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 56 credit hours with a grade of “C” or better in all courses.

Course	Title	Credit Hours
Term 1		
FRP169	Fire Department Leadership	3
FRP173	Law for Emergency Services.....	3
	or	
FRP166	Firefighter’s Law.....	1
FRP174	Fire Investigation.....	4
FRP277	NFPA Fire Instructor 1	3
MTH095	Intermediate Algebra+ (or higher)	4
	Communications elective*+	4
	Human Relations elective**+	4
Term 2		
FRP154	Water Supply Operations.....	3
FRP160	Incident Safety Officer.....	1
FRP161	Fire Management Practices.....	1
FRP162	Managing Fire Personnel	1
FRP163	Planning Fire Protection	1
FRP170	Fire Fighting Tactics and Strategy	3
FRP266	Building Construction for Fire Suppression.....	3
	Science elective***	4

Term 3

FRP164	Fire Department Budgets.....	1
FRP165	Public Relations, Public Information, and Public Education	1
FRP172	International Fire Codes.....	3
FRP259	Major Emergency Strategy and Tactics.....	3
PS203	State and Local Government	4
	Science elective***	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Communications electives:**

BA214	Business Communications.....	3
COM051	Communication Skills 1 (or higher).....	3
WR115	Introduction to Composition (or higher)	4
WR121	English Composition–Exposition (or higher)	4
WR227	Technical Writing.....	4

****Human Relations electives:**

PSY101	Psychology of Human Relations (or higher)	4
SOC204	The Sociological Perspective (or higher).....	4

*****Science electives:**

CH110	Foundations of General, Organic, and Biochemistry (or higher)	5
	and	
PH111	Physical Science for Fire Science and Emergency Services (or higher).....	5
	or	
	Any combination of one Chemistry and one Phys- ics course of at least four credit hours each, which include a lab component.	

Foreign Languages

(transfer course guideline)

Oregon’s state 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; U of O offers degrees in Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, and Spanish; SOU offers a Bachelor of Arts in Language and Culture with options in French, German, Spanish (see SOU catalog); and WOU offers a degree in Spanish. EOU offers degrees in Liberal Studies with a concentration in French, German, or Spanish.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa’s Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Forestry

(transfer course guideline)

The Oregon State University (OSU) College of Forestry offers several Bachelor of Science degrees in forestry, including Forest Management. Some of those degrees articulate course-work from Chemeketa.

It is important to check the OSU catalog for the requirements of specific majors and to make early contact with an OSU advisor to learn of any possible changes in an academic area.

General Science

See **Biology**.

General Studies

(transfer course guideline)

Most of Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Geography

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Geology

(transfer course guideline)

Oregon's state 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 (Earth Science).

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Geomatics and Engineering Technology Program

civil.chemeketa.edu

The Geomatics and Engineering Technology program offers a one-year Certificate of Completion. The one-year certificate program prepares the student for entry-level surveying and drafting positions. Curricula include courses and field experiences in drafting and surveying. All credits apply toward the Associate of Applied Science degree in CAD Drafting Technology.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Apply skills and attitudes that reflect professional behavior in the field and office.
- Work as a member of a team to set up and operate surveying equipment to gather data for site plans.
- Perform basic survey calculations.

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. The second step is to discuss your scores with the Counseling and Career Services staff. Next, see a Geomatics and Engineering Technology program advisor. If your scores show you need pre-program classes, your advisor will help you determine if you need one or more of the following:

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR080	Basic Writing	4

If you have questions about the requirements, contact Geomatics and Engineering Technology faculty at 503.399.5069. Failure to be assessed may delay your entry into program classes.

Geomatics and Engineering Technology Survey Technology Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$700; class fees, \$250; universal fee, \$450; equipment and supplies, \$400. 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 50 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition-Exposition+ (or higher)	4
CVL130	Work Zone Safety and First Aid.....	1
CVL143	Introduction to Civil Survey	3
DRF110	Applied Engineering Computations	2
DRF112	Sketching.....	1
DRF130	CAD 1.....	3
MTH081	Technical Mathematics 1+.....	4
	or	
MTH111	College Algebra + (or higher)	5
Term 2		
CVL144	Intermediate Civil Survey	3
DRF131	CAD 2.....	3
DRF220	GIS 1.....	2
GEG105	Physical Geography.....	4
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
CVL162A	Plane Surveying 2-Lecture.....	2
CVL162B	Plane Surveying 2-Lab.....	2
DRF132	CAD 3.....	3
DRF160	Spreadsheet and Database Applications	3
DRF221	GIS 2.....	3
PSY104	Psychology in the Workplace+	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Graphic Design

See Visual Communications Programs.

Health, Health Education

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health, Health Education and/or Public Health Education are Eastern Oregon University (EOU), Oregon State University (OSU), Portland State University (PSU), Southern Oregon University (SOU) and Western Oregon University (WOU). EOU's degree is in Physical Education and Health. OSU offers options in Health Management and Policy, Health Promotion, and Health Behavior; PSU offers Health Education; SOU offers a Health and Physical Education degree; WOU offers a degree in Community Health, and Health Education with a non-teaching and a teaching option.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with

Chemeketa's Counseling and Career Services or Health and Human Performance program staff at 503.399.5082 for transfer course recommendations. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

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.

Health Services Management Programs

healthservices.chemeketa.edu

The Health Services Management program offers one- 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, medical coder, insurance biller, or other health management support staff. The two-year Health Services Management program leads to an Associate of Applied Science Degree. Students must earn grades of C or better in all required courses.

For admission to the program, an application is required. This is a separate step from the testing and assessment process. Applications are available in Counseling and Career Services, at the Enrollment Center, in program offices, and on the web at www.chemeketa.edu.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Medical Coding and Insurance Billing Certificate will:

- Assign diagnostic and procedure codes using ICD coding system.
- Assign procedure codes using HCPCS/CPT coding system.
- Adhere to security, privacy and confidentiality policies.
- Use computers to process information.
- Support data collection and reimbursement system.
- Communicate in a professional manner.
- Model professional and ethical behaviors.

Students completing the Health Information Technology Certificate will:

- Use health records to abstract, collect, and analyze data for use by a range of health care professions and health-related organizations.
- Apply current technology and basic assessment tools to manage and maintain health information.
- Use knowledge of structure, function, and terminology related to the human body to communicate in health care systems.
- Apply the principles of professional ethics and diversity to medical-legal matters, including confidentiality, medical records management, release of information, patient rights, workplace rights, informed consents, and electronic information in the health care facility.
- Use interpersonal and communication skills that build and maintain cooperative working relationships in the health care profession.
- Use the specific skills associated with their scope of practice such as medical coding, medical reimbursement, health records management, or health services management.
- Integrate and apply theory and skill in a health care organization through a work site experience.

In addition to the certificate outcomes, students completing the Health Services Management AAS will:

- Apply advanced theoretical concepts of management to the health service organization.

- Analyze and interpret health care data and statistics for decision making in health care organizations.
- Identify the characteristics of major health care systems to manage the health care environment.
- Apply skills in leadership, motivation, and team building in health care settings.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services. 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:

AH115	Healthcare Career Success Strategies.....	2
CA121A	Keyboarding A (If less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications.....	3
RD090	College Textbook Reading (or higher).....	3
WR115	Introduction to Composition (or higher).....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.5058. Failure to be assessed may delay your entry into program classes.

Health Services Management

Medical Coding and Insurance Billing Certificate of Completion

The Medical Coding and Insurance Billing Certificate Program is designed to prepare students to meet the demand for qualified medical coders. This increased need has been created due to the constantly changing regulations for reimbursement of health care services. The program instructs students in ICD-9-CM and CPT coding systems, and third party reimbursement methods. Upon completion the student is prepared for entry level employment as a medical coder. The program is designed to prepare the student to take the certified coding associate (CCA) examination offered by the American Health Information Management Association. The CCA Certified Coding Associate is intended for entry-level coding candidates with minimal coding experience or graduates of coding certificate or training programs.

A job as a Medical Coding and Insurance Billing Specialist includes analysis of patients' records and assigning correct codes for each diagnosis and procedure. The Medical Coding and Insurance Billing Specialist must have expertise in the ICD-9-CM and CPT coding systems and be knowledgeable in anatomy and physiology, medical terminology, content of patient records, ethical issues and legal aspects affecting health information.

Opportunities for employment include all types of health care environments such as hospitals, outpatient facilities, clinics, physician offices, medical billing companies, and insurance companies. A Medical Coding and Insurance Billing Specialist is a valuable member of the health information team who is responsible for translating diagnostic and procedural information into coded form.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,120.50; class fees, \$82; universal fee, \$315; equipment and supplies, \$15.

You may earn a Certificate of Completion by successfully completing the required 35 credit hours with a grade of "C" or better in all required courses:

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 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 1.....	3
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2.....	3
	or	
BI232	Human Anatomy and Physiology	4
HM112	Health Information Systems Procedures 2	4
HM113	Medical Insurance Billing	3
HM115	ICD-9-CM Coding/Reimbursement.....	3
HM121	Medical Terminology 2.....	3
Term 3		
HM114	CPT-IV Coding/Reimbursement	3
HM122	Medical Terminology 3/Human Diseases.....	3

Health Services Management

Health Information Technology Certificate of Completion

As a graduate of the Health Information Technology program, you may become a health information technician, a medical coder, an insurance biller, or other health management support staff. You may continue in this program to earn your Associate of Applied Science degree in Health Services Management or you may transfer to Central Oregon Community College or Portland Community College to earn an associate degree as a registered health information technician. You must meet college graduation requirements including general education, math, and English competencies. Consult a program advisor for help in planning general education classes. You may also continue on to Public Health or Health Care Administration at four-year institutions.

As a health information technician, your duties may include medical coding or insurance billing; maintaining and using a variety of health record indexes, special registries, and 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.

You must pass a criminal background check prior to enrollment in the program. Health care institutions may also require drug tests, CPR certification, and/or specific immunizations before a student can be placed at the facility for externship, practicum, or cooperative work experience.

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.5275. 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, \$1,784; class fees, \$75; universal fee, \$459; equipment and supplies, \$15; criminal background check, \$30. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn a Certificate of Completion by successfully completing the required 55 credit hours with a grade of "C" or better in all required courses:

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics.....	3
HM105	Professional Development A.....	1
	or	
FE205B	Resumes and Job Search Correspondence	1
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology 1	3
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM106	Professional Development B.....	1
	or	
FE205C	Interviewing for Success.....	1
HM112	Health Information System Procedures 2.....	4
HM113	Medical Insurance Billing	3
HM115	ICD-9-CM Coding/Reimbursement.....	3
HM121	Medical Terminology 2.....	3
Term 3		
HM114	CPT-IV Coding Reimbursement.....	3
HM122	Medical Terminology 3/Human Diseases.....	3
HM130	Health Information Technology Practicum	5
HM131	Health Information Technology Seminar.....	1
MTH060	Introductory Algebra+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Health Services Management Associate of Applied Science

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 adminis-

tration. The combination of career and technical education courses and transfer courses will give you a wide variety of options.

To be eligible for practicum, you must complete all HM and BI classes offered in terms 1 through 5 and be eligible for graduation. You must pass a criminal background check prior to practicum placement. Health care institutions may also require drug tests, CPR certification, and/or specific immunizations before a student can be placed at the facility for externship, practicum, or cooperative work experience.

In addition to tuition, estimated costs for students who complete the entire second year listed below are books, \$2,486; class fees, \$99; universal fee, \$891; equipment and supplies, \$15; criminal background check, \$30. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an Associate of Applied Science degree by successfully completing the required 99 credit hours with a grade of "C" or better in all courses. 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		
BI171	Introduction to Human Anatomy and Physiology 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 1	3
WR121	English Composition-Exposition+ (or higher).....	4
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM112	Health Information Systems Procedures 2	4
HM113	Medical Insurance Billing	3
HM115	ICD-9-CM Coding/Reimbursement.....	3
HM121	Medical Terminology 2.....	3
Term 3		
HM114	CPT-IV Coding/Reimbursement	3
HM122	Medical Terminology 3/Human Diseases.....	3
MTH070	Elementary Algebra+ (or higher).....	4
WR227	Technical Writing	4
	Computer Elective***.....	3
Term 4		
HM105	Professional Development A.....	1
	or	
FE205B	Resumes and Job Search Correspondence	1
HM210	Introduction to Health Services.....	3
HM250	Health Services Management 1	3
MTH095	Intermediate Algebra+ (or higher)	4
	or	
BA115	Introduction to Accounting+	4
PSY201	Introduction to Psychology-Mind and Body+ (or higher).....	4
	Business elective*.....	3

Term 5	
HM106	Professional Development B 1 or
FE205C	Interviewing for Success 1
HM217	Quality Data Management in Health Services 3
HM251	Health Services Management 2 3
	General Education elective** 3
	Social Science elective 3
	or
	Economics elective 3
	or
	Business elective 3
	Humanities/Fine Arts elective 3

Term 6	
HM230	Health Services Management Practicum 5
HM231	Health Services Management Seminar 1
HM252	Health Services Management 3 3
	Business elective* 3
	General Education elective** 3

*Business electives: Choose BA courses 200 level or higher: BA214 or BA202 recommended for Term 4; BA224 recommended for Term 6.

**General Education electives: Choose courses 100 level or higher. SP218 recommended for Term 5; HPE295 recommended for Term 6.

*****Computer electives:**

CA117	Microsoft Publisher (or higher) 3
CIS102A	Cyber Security and Safety (or higher) 4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Hemodialysis Technician Program

hemodialysis.chemeketa.edu

The Hemodialysis Technician program prepares the graduate to provide hemodialysis treatments for clients with end-stage renal failure under the supervision of a registered nurse or physician in outpatient dialysis centers or a hospital outpatient unit. Students participate in theoretical and clinical learning environments to prepare for the duties and responsibilities of a clinical hemodialysis technician. Practica in a hemodialysis facility provide students an opportunity to develop and practice the skills of the hemodialysis technician and participate as a member of the dialysis team under the supervision of faculty and professional dialysis mentors. The curriculum is driven by federal and state regulations specific to the provisions of hemodialysis and includes all theoretical and practical instruction to prepare graduates to sit for the national certification exam leading to a Certified Clinical Hemodialysis Technician (CCHT) designation.

This occupation requires medium physical activity and lifting and handling objects weighing 10 to 50 pounds. Technicians often stand for long periods of time. To qualify for the program, students must have a high school diploma or GED certificate, along with CPR and basic first aid certification.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Certificate will:

- Provide safe and effective hemodialysis treatments for clients in outpatient hemodialysis facilities.
- Perform hemodialysis procedures in a professional manner, adhering to federal and state standards required to maintain the safety of patients.
- Have received CPR and first aid certification.
- Be prepared to sit for national certification as a Certified Clinical Hemodialysis Technician (CCHT).

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 Career Services. 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.....	4
WR080	Basic Writing	4

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 entire program listed below are books, \$750; materials, supplies, and class fees, \$450; universal fee, \$405; criminal background check and drug testing, \$50; CPR and first aid certification, \$69; immunizations, \$250; scrubs, \$50. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn a Certificate of Completion by successfully completing the required 49 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
HEM101	Hemodialysis Technology 1	8
HM120	Medical Terminology 1	3
CIS101	Introduction to Microcomputer Applications	3
WR090	Fundamentals of Writing+	4
Term 2		
HEM102	Hemodialysis Technology 2	8
HM121	Medical Terminology 2	3
MTH060	Introductory Algebra + (or higher)	4
Term 2		
HEM103	Hemodialysis Technology 3	8
PSY104	Psychology in the Workplace+	4
NFM225	Nutrition	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

History

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Horticulture Programs

The Horticulture programs offer career training in Horticulture and the emerging field of Phytotechnology. Both programs include training and education for those entering the career field and for those already employed. Chemeketa has a well-equipped greenhouse and an on-site wetlands management laboratory area in which students will acquire the hands-on training in the basic knowledge and technical skills required for successful employment in these fields.

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 HOR280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Horticulture Associate of Applied Science

The Horticulture program prepares students for occupations in greenhouse and nursery production, propagation, or plant protection as managers, crew leaders, inventory controllers, irrigation specialists, and plant sales or customer service representatives. The program offers a two-year Associate of Applied Science (AAS) degrees.

For more information about the program, contact Gail Gredler at 503.365.4692

Program outcomes

Students completing the Horticulture AAS will:

- Perform skills and use equipment necessary to propagate, transplant, fertilize, irrigate, prune, and otherwise regulate growth of plants produced in the nursery and greenhouse.
- Recognize, name, and understand management requirements for plants commonly grown in the Oregon nursery and greenhouse industry and their associated pests.
- Demonstrate knowledge of government regulations related to nursery and greenhouse operations, workplace safety, water regulations, pesticide safety, and crop sanitation requirements to effectively manage a nursery or greenhouse.
- Evaluate production practices in terms of currently understood principles of sustainability.

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 Career Services. 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
RD115	Academic Thinking and Reading	3
	or	
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

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 entire program listed below are books, \$2,675; class fees, \$357; universal fee, \$873. 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 with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
BI153	Fundamentals of Plant Biology	4
CIS101	Introduction to Microcomputer Applications (or higher).....	3
HOR111	Introduction to Horticulture.....	3
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
HOR211	Plant Propagation.....	4
HOR260	Soils, Media, and Nutrition.....	4
MTH070	Elementary Algebra+ (or higher).....	4
PSY104	Psychology in the Workplace+ (or higher)	4
	Topics in Ecological Horticulture**	2
Term 3		
HOR221	Nursery Production and Management	3
HOR236	Integrated Pest Management: Weeds	3
SP111	Fundamentals of Public Speaking (or higher).....	4
	or	
SP115	Introduction to Intercultural Communication (or higher).....	4
WR227	Technical Writing (or higher).....	4
Term 4		
HOR113	Mathematical Applications in Horticulture	2
HOR237	Integrated Pest Management: Insects and Diseases	4
SPN111	Beginning Spanish Conversation Term 1 (or higher).....	3
	Horticulture elective*	2
	Topics in Ecological Horticulture**	2
	Plant Identification course***	3
Term 5		
HOR112	Pesticides and Safety	2
HOR224	Horticulture Practicum.....	3
HOR225	Greenhouse Production and Management.....	4
SPN112	Beginning Spanish Conversation Term 2 (or higher).....	3
	Plant Identification course***	3
Term 6		
VMW256	Agricultural Business Management.....	3
	Horticulture elective*	4
	Topics in Ecological Horticulture**	4
	Plant Identification course***	3

Term 7

HOR280F Cooperative Work Experience 6
 +Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Horticulture electives (select 6 credit hours):**

BI131 Environmental Science 1 4
 BI132 Environmental Science 2 4
 BI133 Environmental Science 3 4
 CH121 College Chemistry (or higher) 5
 HOR115 Nursery and Greenhouse Equipment and Safety.. 3
 HOR212 Advanced Plant Propagation..... 2
 HOR238 Plant Problem Diagnosis 2
 HOR240 Sustainable Landscape Design..... 4
 HOR254 Wetland Plant Identification 3
 HOR256 Identification of Herbaceous Plants 2 2
 HOR257 Horticultural Marketing 3
 HOR259 Marketing Plant Ecological Services..... 2
 HOR273-279 Topics in Ecological Horticulture 2 ea.

****Topics in Ecological Horticulture (select 8 credit hours):**

HOR116 Introduction to Phytotechnology 4
 HOR269 Plant Selection for Phytotechnology 3
 HOR273 Urban and Community Forestry 2
 HOR274 Wetlands Design and Management..... 4
 HOR275 Innovative Strategies for Water Management
 in Nurseries 2
 HOR276 Organic Gardening..... 2
 HOR277 Composting..... 2
 HOR278 Ecological Problem Solving..... 4
 HOR279 Edible Crops in Urban Landscapes 2

*****Plant Identification courses (select 9 credit hours):**

HOR226 Fall Plant Identification 3
 HOR227 Winter Plant Identification..... 3
 HOR228 Spring Plant Identification 3
 HOR255 Identification of Herbaceous Plants 1 3

Horticulture

Phytotechnology Associate of Applied Science Option

The Phytotechnology option of the Horticulture degree program provides instruction and training required for successful employment in a wide range of environmental and horticultural disciplines. Students will be prepared for occupations in landscape construction and/or design; horticulture/landscape management; nursery/garden center sales and marketing; remediation industries (wastewater treatment, hazardous site clean-up, etc.); environmental consulting; urban sustainability or transportation planning; natural resource agencies; or research. Entry into these fields could be at the technician, assistant, coordinator, or customer service level. Students will also be prepared to pursue a higher degree in environmental engineering, hydrology, urban planning, landscape architecture, or scientific research.

For more information about the program, contact Gail Gredler at 503.365.4692.

Program outcomes

Students completing the Phytotechnology AAS will:

- Perform skills necessary to support the design and construction of functional landscape technologies including greenroofs, living walls, raingardens, bioswales, and wetlands.
- Recognize wetland and other commonly used functional plant species and understand basic management requirements for healthy growth and functional performance of plants in natural or urban landscapes.
- Demonstrate knowledge of markets, incentives, and government regulations related to water quality, wastewater treatment, stormwater treatment, wetlands, hazardous/superfund sites, carbon sequestration, and ecosystem services.
- Evaluate functional landscape situations and environmental resource challenges from an ecological problem solving perspective that utilizes critical thinking skills and an ability to see beyond the immediate scale.
- Integrate currently understood principles of sustainability into phytotechnology projects.

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 Career Services. 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
 MTH070 Elementary Algebra..... 4
 RD115 Academic Thinking and Reading 3
 or
 SSP112 Effective Learning..... 3
 WR115 Introduction to Composition..... 4

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 entire program listed below are books, \$2,324; class fees, \$646; universal fee, \$927. 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 103 credit hours with a grade of “C” or better in all courses:

Course	Title	Credit Hours
Term 1		
BI131	Environmental Science 1	4
BI153	Fundamentals of Plant Biology	4
HOR116	Introduction to Phytotechnology	4
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
BI132	Environmental Science 2	4
BI230	Introductory Microbiology.....	4
HOR268	Urban Stormwater Treatment and Systems Design	4
SP111	Fundamentals of Public Speaking	4

Term 3	
BI133	Environmental Science 3 4
CIS101	Introduction to Microcomputer Applications (or higher) 3
WR227	Technical Writing (or higher) 4
	Core elective** 4
	Phytotechnology Elective* 2
Term 4	
CH121	College Chemistry (or higher) 5
HOR278	Ecological Problem Solving 4
MTH095	Intermediate Algebra+ (or higher) 4
	Core elective** 4
Term 5	
CH122	College Chemistry (or higher) 5
HOR269	Plant Selection for Phytotechnology 3
HOR260	Soils, Media, and Nutrition 4
	Phytotechnology elective* 3
Term 6	
CH123	College Chemistry (or higher) 5
PSY104	Psychology in the Workplace+ (or higher) 4
HOR254	Wetland Plant Identification 3
HOR259	Marketing of Plant Ecological Services 2
	Phytotechnology elective* 2
Term 7	
HOR280F	Cooperative Work Experience 6

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Phytotechnology electives (select 7 credit hours):**

HOR226	Fall Plant Identification 3
HOR228	Spring Plant Identification 3
HOR229	Phytotechnology Landscape Practicum 3
HOR236	Integrated Pest Management: Weeds 3
HOR238	Plant Problem Diagnosis 2
HOR273	Urban and Community Forestry 2
HOR275	Innovative Strategies for Water Management in Nurseries 2
HOR279	Edible Crops in Urban Landscapes 2
HOR281	Phytoremediation Research Survey 2
VMW256	Agricultural Business Management 3

****Core electives (select 8 credit hours):**

HOR240	Sustainable Landscape Design 4
HOR267	Greenroof/Living Wall Design and Management.. 4
HOR274	Wetlands Design and Management 4

Hospitality Management Programs

hospitality.chemeketa.edu

See also **Tourism and Travel Management**.

The Hospitality Management curriculum focuses on the management aspects of Oregon's fastest-growing industry: hospitality. The program covers lodging, meeting, event, and convention management; food and beverage; and casino management. Upon graduation, students may enter the hospitality industry working in such areas as hotel marketing, sales and operations, innkeeping, meeting, convention and special event planning, restaurant management, catering and banquet operations, and casino supervision.

The intent of the program is for students with an Associate of Applied Science degree and one-year certificate to obtain

entry-level management positions within the hospitality industry. Students will also be advised on opportunities to continue their education by working toward a four-year degree in hospitality management through other universities.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Hospitality Management Certificate will:

- Apply marketing and sales principles in the hospitality industry.
- Establish the guest-host relationship inherent to the hospitality industry.
- Use cost control terms and techniques to review hospitality operations.

Students completing the Event Management Certificate will:

- Organize and manage a special event or meeting utilizing appropriate operational coordination.
- Coordinate critical and unique impacts of the hospitality and tourism industry on event planning.
- Formulate a marketing plan to promote and/or sell an event.

Students completing the AAS will:

- Design a strategic marketing plan.
- Apply quality guest service standards to deliver competitive guest experiences to diverse cultural groups.
- Analyze hospitality industry functions, their operations requirements and revenue impacts
- Describe techniques for maximizing hiring, training, development and retention of hospitality employees.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services. 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:

CIS101	Introduction to Microcomputer Applications 3
RD115	Academic Thinking and Reading 3
SSP112	Effective Learning 3
WR115	Introduction to Composition 4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or Hospitality Management program staff at 503.584.7540. Failure to be assessed may delay your entry into program classes.

Hospitality Management

Hospitality Management Certificate of Completion

The Hospitality Management Certificate focuses on hospitality industry careers related to hotel operations, marketing and sales; meeting, convention or special event planning; catering and banquet operations; or casino supervision. The certificate prepares students for direct entry into the workforce or offers

the ability to continue their education into the Hospitality Management Associate of Applied Science degree program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$994; class fees, \$70; universal fee, \$460. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

A Certificate of Completion is awarded upon successful completion of the required 46 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM100	Hospitality and Tourism Industry	3
HTM131	Customer Service Management 1	3
MTH060	Introductory Algebra+ (or higher)	4
WR121	English Composition-Exposition + (or higher)	4
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM109	Front Desk Operations	3
HTM143	Computer Reservation Systems 1	3
PSY104	Psychology in the Workplace+ (or higher)	4
	Hospitality Management elective*	3
Term 3		
HTM107	Hospitality Cost Control	3
HTM127	Selling in Hospitality and Tourism	3
HTM130	Beverages.....	3
SP218	Interpersonal Communication (or higher)	4
	Hospitality Management elective*	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Hospitality Management electives:**

HTM105	Food and Beverage Industry.....	3
HTM114	Travel Destination Geography 1.....	3
HTM115	Travel Destination Geography 2.....	3
HTM116	Travel Destination Geography 3.....	3
HTM125	Special Event Planning	3
HTM130	Beverages.....	3
HTM143	Computer Reservation Systems 1	3
HTM201	Customer Service Management 2.....	3
HTM203	Service Marketing: Promotion and Advertising.....	3
HTM206	Resort Management.....	3
HTM207	Gourmet Culture	3
HTM208	Attractions and Entertainment	3
HTM224	Catering Operations.....	3
HTM226	Event Management.....	3
HTM232	Menu Design.....	3
HTM233	Strategies in Tourism and Destination Marketing .	3
HTM235	Leadership in Tourism	3
HTM236	Tour Operations	3
HTM237	Tourism Transportation: Cruise, Air, Rail.....	3

Hospitality Management

Event Management Certificate of Completion

The Event Management Certificate prepares students for direct employment in meeting and event planning for large hotels, convention centers, local attractions, private catering or event management companies, or private corporations.

Courses focus on the separate but related business, operational, and sales aspects of meeting and event planning for conventions, special events such as weddings or parties, and corporate meetings. Students will develop the strategic project management and marketing and sales skills necessary for success in any of these related industry segments. Additionally, students will develop critical ancillary knowledge in food and beverage planning, catering, and banquet operations as they apply to the overall hospitality industry and to the industry segments indicated above. Students will also gain knowledge and applied skill in destination marketing principles and strategies.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$562; universal fee, \$300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

A Certificate of Completion is awarded upon successful completion of the required 30 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM127	Selling in Hospitality and Tourism	3
HTM224	Catering Operations.....	3
HTM226	Event Management.....	3
HTM232	Menu Design.....	3
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM201	Customer Service Management 2.....	3
HTM207	Gourmet Culture	3
Term 3		
HTM125	Special Events Planning	3
HTM130	Beverages.....	3
HTM203	Service Marketing: Promotion and Advertising.....	3

Hospitality Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,810; class fees, \$140; universal fee, \$920. 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 92 required credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM100	Hospitality and Tourism Industry	3
HTM131	Customer Service Management 1	3
MTH060	Introductory Algebra+ (or higher)	4
WR121	English Composition-Exposition+ (or higher)	4
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM105	Food and Beverage Industry.....	3
HTM109	Front Desk Operations	3
HTM143	Computer Reservation Systems 1	3
SP218	Interpersonal Communication (or higher)	4

Term 3

HTM107	Hospitality Cost Control.....	3
HTM127	Selling in Hospitality and Tourism	3
HTM130	Beverages.....	3
	Hospitality Management elective.....	3
	Humanities/Fine Arts elective	3

Term 4

HTM224	Catering Operations.....	3
HTM226	Event Management.....	3
HTM232	Menu Design.....	3
NFM215	Nutrition for Foodservice and Culinary Professionals.....	3
WR227	Technical Writing	4

Term 5

HTM201	Customer Service Management 2.....	3
HTM206	Resort Management.....	3
HTM207	Gourmet Culture	3
PSY104	Psychology in the Workplace+ (or higher)	4
	Hospitality Management elective*	3

Term 6

HTM125	Special Event Planning	3
HTM203	Service Marketing: Promotion and Advertising.....	3
HTM223	Computer Reservation Systems 2	3
HTM244	Practicum 1 - Hospitality and Tourism Management	4
	or	
HTM290	Operations Management.....	3
HTM230	Hotel, Restaurant, and Travel Law.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Hospitality Management electives:

HTM114	Travel Destination Geography 1.....	3
HTM115	Travel Destination Geography 2.....	3
HTM116	Travel Destination Geography 3.....	3
HTM208	Attractions and Entertainment	3
HTM233	Strategies in Tourism and Destination Marketing .	3
HTM235	Leadership in Tourism	3
HTM236	Tour Operations	3
HTM237	Tourism Transportation: Cruise, Air, Rail.....	3

Human Services Programs

humanservices.chemeketa.edu

The Human Services programs offer training for entry-level positions in human service agencies. These two-year career and technical education programs combine academic coursework with 25 credits of supervised field work at two different sites, each of which is at least two terms long. Students select one of two degrees: Addiction Studies or Social Services.

This program has special admissions requirements and enrollment limits. Students with criminal histories may be prevented from obtaining necessary field experience required for program completion. Parole and probation requirements must be completed prior to referral to a practicum site. Students recovering from chemical dependency who elect the Addiction Studies AAS degree must have a minimum of two years continuous sobriety in an unrestricted environment before they will be referred to practicum. For additional information, contact the Admissions Office at 503.399.5006.

Post B.A./B.S. students are also eligible to complete the Addiction Counselor Certification Preparation program and earn

a one-year certificate. Admission to the certificate program is assessed individually by Donna Hirt, 503.399.6157. Students recovering from chemical dependency must have a minimum of two years continuous sobriety in an unrestricted environment in order to be referred to practicum. Criminal history and parole/probation limitations apply to students in this program as well.

By enrolling in the CPL120 Credit for Prior Learning Résumé course, you may be able to earn credits for prior learning you acquired through your job, non-credit classes, community or volunteer service, or individual study.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS degrees will:

- Describe the nature of human systems: individual, group, organization, community, and society, and their major interactions.
- Describe the conditions that promote or limit optimal functioning and classes of deviations from desired functioning in the major human systems.
- Identify and select interventions that promote growth and goal attainment.
- Plan, implement, and evaluate interventions.
- Select interventions that are congruent with the values of one's self, clients, the employing organization, and the human services profession.
- Use process skills to plan and implement services.

In addition to the AAS outcomes, students completing Addiction Studies AAS and Addiction Counselor Certification Preparation will:

- Describe, identify, assess, and treat addictions.

In addition to the AAS outcomes, students completing Social Services AAS will:

- Adapt intervention and assessment skills to a variety of agency settings including, but not limited to: crisis counseling, employment services, children's protective services, self-sufficiency, housing, mental health, corrections, and advocacy.

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 Career Services. You may need to complete pre-program courses (HS152 and WR121 must be completed with a grade of C or better.) A counselor will help you develop an individualized program of study, which may include one or more of the following:

HS152	Stress Management.....	1
MTH020	Basic Mathematics.....	4
RD090	College Textbook Reading.....	3
WR121	English Composition–Exposition.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.5048. Failure to be assessed may delay your entry into program classes.

Addiction Studies Associate of Applied Science

The Addiction Studies AAS degree trains students to work in public and private agencies treating chemically-dependent people and their families. Training sites include both residential and out-patient programs.

The Addiction Studies programs are recognized by the National Association of Alcohol and Drug Abuse Counselors as an educational provider. Most courses may be used for continuing education requirements for many certified and licensed professionals. The curriculum includes courses in alcohol and drug information, family dynamics, case management, and individual and group counseling skills.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,646; class fees, \$231; universal fee, \$1,070; equipment and supplies, \$253; measles vaccine, \$15. 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 107 credit hours with a grade of "C" or better in WR227 and all Human Services courses. Twenty-five credits of practicum are required, at least 15 of which must be in an addiction studies 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
WR227	Technical Writing+ (or higher)	4
Term 2		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
HS260	Group Dynamics.....	3
HS284A-		
HS288A	Practicum-Human Services.....	4-8
PSY201	Introduction to Psychology–Mind and Body+.....	4
HS211	HIV, TB and Infectious Diseases	1
Term 3		
HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques.....	3
HS219	Case Management and Client Records.....	3
HS284A-		
HS288A	Practicum-Human Services.....	4-8
MTH060	Introductory Algebra+ (or higher)	4
Term 4		
HS156	Counseling Theories	3
HS213	Multicultural Practice.....	3
HS214	Advanced Interviewing and Counseling Skills.....	3
HS218A	Group Processes A.....	1
HS284A-		
HS288A	Practicum–Human Services	4-8
PSY239	Introduction to Abnormal Behavior.....	4

Term 5

HS216	Clinical Screening, Assessment and Treatment Planning	3
HS217	Group Counseling Skills.....	3
HS218B	Group Processes B	1
HS284A-		
HS288A	Practicum-Human Services.....	4-8
SOC204	The Sociological Perspective	4
SP111	Fundamentals of Public Speaking	4
	or	
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking.....	3

Term 6

HS201	Addiction and the Family System.....	3
HS209	Co-occurring Disorders	2
HS218C	Group Processes C.....	1
HS284A-		
HS288A	Practicum-Human Services.....	4-8
PSY237	Life Span Development.....	4
SOC205	United States Society	4
	or	
SOC206	Social Problems.....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Addiction Studies

Addiction Counselor Certification Preparation Certificate of Completion

This one-year certificate program is designed for individuals with a baccalaureate or master's degree seeking the necessary coursework 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, \$1,461; class fees, \$105; universal fee, \$510; equipment and supplies, \$210; measles vaccine, \$15. 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 51 credit hours with a grade of "C" or better in all Human Services courses and a minimum of 15 credits of practicum. This program is four terms in length, beginning with spring term. Students interested in this program must attend the winter term orientation or meet personally with Donna Hirt, 503.399.6157, advisor to the program, prior to beginning coursework.

Check the course descriptions in the back of this catalog for details.

Course	Title	Credit Hours
Term 1		
HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques.....	3
HS219	Case Management and Client Records.....	3

Term 2

HS156	Counseling Theories	3
HS213	Multicultural Practice	3
HS214	Advanced Interviewing and Counseling Skills.....	3
HS218A	Group Processes A	1
HS285A-		
HS288A	Practicum–Human Services	5-8

Term 3

HS216	Clinical Screening, Assessment and Treatment Planning	3
HS217	Group Counseling Skills	3
HS218B	Group Processes B	1
HS285A-		
HS288A	Practicum–Human Services	5-8

Term 4

HS201	Addiction and the Family System.....	3
HS209	Co-occurring Disorders	2
HS211	HIV, TB and Infectious Diseases	1
HS218C	Group Processes C	1
HS285A-		
HS288A	Practicum–Human Services	5-8

Social Services Associate of Applied Science

The Social Services degree program trains students for employment in social service agencies. These agencies provide services in areas such as crisis counseling, employment services, housing, mental health, corrections, and advocacy.

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,591; class fees, \$150; universal fee, \$1,060; equipment and supplies, \$260; measles vaccine, \$15. 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 106 credit hours with a grade of "C" or better in WR227 and all Human Services courses. 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	Introduction to Psychology–Mind and Body+.....	4
WR227	Technical Writing+ (or higher)	4
Term 2		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
HS260	Group Dynamics.....	3
HS284S-		
HS288S	Practicum-Human Services.....	4-8
HS129	Understanding Grief, Loss, and Transition	3
	Social Services elective*	1

Term 3

HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques.....	3
HS211	HIV, TB and Infectious Diseases	1
HS284S-		
HS288S	Practicum–Human Services	4-8
PSY237	Life Span Development.....	4

Term 4

HS156	Counseling Theories	3
HS213	Multicultural Practice	3
HS265	Casework Interviewing	3
HS284S-		
HS288S	Practicum–Human Services	4-8
MTH060	Introductory Algebra (or higher)+	4

Term 5

HS220	Aging and Society**	3
	or	
HS222	Aging and Behavior**	3
HS266	Case Management.....	3
HS284S-		
HS288S	Practicum–Human Services	4-8
SOC204	The Sociological Perspective	4
	Social Services elective*	3

Term 6

PSY239	Introduction to Abnormal Behavior.....	4
HS284S-		
HS288S	Practicum–Human Services	4-8
SOC205	United States Society	4
	or	
SOC206	Social Problems.....	4
SP111	Fundamentals of Public Speaking	4
	or	
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking.....	3
	Humanities/Fine Arts elective	3
	or	
	Science/Applied Science elective	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Social Services electives (four credit 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, Sign Language, or Credit for Prior Learning.

**Offered in alternate years. Consult program chair.

Interactive Media

See Visual Communications Programs.

Journalism

(transfer course guideline)

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 and Photojournalism.

Students planning to transfer to U of O should consult the U of O 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 departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Juvenile Corrections Program

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. The Juvenile Corrections certificate is designed to be integrated into the Criminal Justice Associate of Applied Science degree or Juvenile Justice Associate of Applied Science degree.

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 Oregon Community College, and Treasure Valley Community College. In addition, some courses may be applicable as electives toward a two-year degree. Consult with Counseling and Career Services or a Chemeketa advisor on course transferability.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Identify the distinct philosophical differences between adjudicating adolescents in the juvenile system and processing adults through the criminal justice system.
- Describe the social, legal, and rehabilitative strategies for adolescents who are adjudicated to the juvenile justice system.

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 Career Services 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.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition	4
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120. Failure to be assessed may delay your entry into program classes.

Juvenile Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program are books, \$700; universal fee, \$392. 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 52 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Juvenile Corrections general education requirements (31 credit hours):		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH060	Introductory Algebra+ (or higher)	4
PSY201	Introduction to Psychology–Mind and Body+.....	4
PSY202	Introduction to Psychology–Mind and Society.....	4
PSY237	Life Span Development.....	4
PSY239	Introduction to Abnormal Behavior.....	4
SOC206	Social Problems.....	4
WR121	English Composition–Exposition+	4

Juvenile Corrections core requirements (21 credit hours):

CJ101	Criminology.....	3
CJ203	Crisis Intervention Seminar.....	3
CJ206	Crime and Delinquency.....	3
CJ230	Introduction to Juvenile Corrections.....	3
CJ232	Corrections Casework	3
CJ235	Youth, Drugs, and Corrections	3
CJ280C	Cooperative Work Experience	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Juvenile Justice Program

The Juvenile Justice program prepares students to work in county and state custody facilities, probationary and parole services, alternative education and treatment services, residential and group home care facilities, and juvenile court diversion services. Overall, the program provides students with a strong theoretical, historical, professional, and technical base in the juvenile justice system. The program includes knowledge and skills in criminology, crime and delinquency, juvenile corrections, youth addiction, and corrections casework, in addition to a solid foundation in psychological principles.

The Juvenile Justice Associate of Applied Science (AAS) degree is a direct pathway from the statewide Juvenile Corrections Certificate of Completion (49 credits) in that all the courses can be applied to the degree.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Identify the distinct philosophical differences between adjudicating adolescents in the juvenile system and processing adults through the criminal justice system.
- Describe the social, legal, and rehabilitative strategies for adolescents who are adjudicated to the juvenile justice system.
- Identify the waiver decision making process for juveniles who will be tried in adult court.
- Identify the constitutional protections and applicable amendments for adhering to juvenile rights.

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 Career Services. 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.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition	4
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120. 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 CJ280B-L 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, \$1,200; class fees, \$20; universal fee, \$744. 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 99 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
CJ101	Criminology.....	3
CJ206	Crime and Delinquency.....	3
MTH060	Introductory Algebra+ (or higher)	4
PSY201	Introduction to Psychology–Mind and Body+.....	4

Term 2

CJ230	Introduction to Juvenile Corrections.....	3
CJ235	Youth, Drugs, and Corrections	3
PSY202	Introduction to Psychology–Mind and Society.....	4
PSY237	Life Span Development.....	4
WR121	English Composition–Exposition+	4

Term 3

CJ203	Crisis Intervention Seminar.....	3
CJ232	Corrections Casework	3
CJ280C	Cooperative Work Experience	3
PSY239	Introduction to Abnormal Behavior.....	4
SOC206	Social Problems.....	4

Term 4

HS150	Personal Effectiveness for Human Service Workers	3
SP111	Fundamentals of Public Speaking (or higher).....	4
WR122	English Composition–Argumentation and Research.....	4
	Humanities/Fine Arts elective	4
	Juvenile Justice elective* **	3

Term 5

HPE295	Health and Fitness for Life.....	3
	or	
HE250	Personal Health	3
HS155	Interviewing Theory and Techniques.....	3
HS214	Advanced Interviewing and Counseling Skills.....	3
WR227	Technical Writing.....	4
	Humanities/Fine Arts elective	4

Term 6

HS217	Group Counseling Skills.....	3
PHL203	Ethics.....	4
	or	
HS103	Ethics for Human Service Workers	2
	or	
CJ170	Juvenile Justice Ethics and Boundaries.....	3
	Humanities/Fine Arts elective	4
	Juvenile Justice elective**	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*CJ280C recommended.

**Juvenile Justice electives:

CA121	Keyboarding.....	3
CJ280C	Cooperative Work Experience (Recommended)...	3
HDF260	Child Abuse and Neglect.....	3
HE262	Cardiopulmonary Resuscitation Instruction.....	2
PE185PA	Personal Defense-Beginning.....	1
SOC204	The Sociological Perspective	4
SOC205	United States Society	4
SP115	Introduction to Intercultural Communication	4
SPN111	Beginning Spanish Conversation–Term 1.....	3
SPN112	Beginning Spanish Conversation–Term 2	3
SPN113	Beginning Spanish Conversation–Term 3	3

Machining Technology Programs

These programs offer training in using computer-controllers on CNC machine tools, manual machining tools, and computers as tools in machine tool control inspection (CMM), mechanical design, and engineering.

The Basic Manufacturing Technician serves as a pathway to higher level manufacturing-related training in a wide range of

certificate and degree programs, and also prepares students for entry-level employment in a variety of manufacturing-related settings.

The first year of study emphasizes basic machining skills as they relate to computer-numerical control (CNC) as well as manual machining, basic measuring and inspection, and print reading. Students completing the first year may find employment as entry-level machine tool operators.

Second-year classes build on previously-learned knowledge and skills and concentrate on further enhancement of CNC and manual skills in programming and machine tool set-ups. Students will use extended time in machining labs to solve increasingly complex "real world" programming and fixturing issues. After successful completion, graduates may find employment in the fields of machining/programming and engineering technology.

If you are interested in manufacturing, machining, manual operations, or CNC, contact program chair Sheldon Schnider (sheldon.schnider@chemeketa.edu or 503.589.7875).

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Basic Manufacturing Technician Certificate will:

- Analyze and discuss current manufacturing processes.
- Interpret and evaluate blueprints and specifications to determine accuracy.
- Apply workplace rules and safety and environmental standards used in the workplace.
- Identify and use measurement instruments to produce a product.
- Construct a product using industry acceptable manufacturing principles.

Students completing the CAM Fundamentals Certificate will:

- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.
- Set up and operate Computer Numerical Controlled (CNC) machine tools to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing the CNC Operator Certificate will:

- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.
- Set up and operate Computer Numerical Controlled (CNC) machine tools and program CNC machine tools at the machine control level to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing the Manual Machine Operator Certificate will:

- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.

- Set up and operate manual machine tools to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) AAS will:

- Produce accurate 2D and 3D drawings using CAD software.
- Use effective communication skills as a team member.
- Program CNC machine tools at the machine control level.
- Perform advanced set-ups and operations using manual and/or Computer Numerical Controlled (CNC) equipment to produce accurately sized parts.
- Create parametric solid models and generate CNC code through CAM software to manufacture parts on CNC machine tools.
- Design and build fixtures and tooling for manufacture production purposes to meet customer specifications.
- Determine optimal production process planning to meet customer requirements. Select and optimize available machines and equipment to meet product process requirements.
- Calculate power requirements, select drive and system components, and design criteria for mechanical systems.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services 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:

CIS101	Introduction to Microcomputer Applications	3
MTH020	Basic Mathematics.....	4
SSP051	Studying for College	3
	or	
RD090	College Textbook Reading.....	3
WR080	Basic Writing	4

If you have questions about the curriculum or the Getting started classes, please contact program chair Sheldon Schnider at 503.589.7975 (sheldon.schnider@chemeketa.edu); the office of the Dean of Applied Technologies, 503.399.5210; or Counseling and Career Services at 503.399.5120 or 503.399.5210. Failure to be assessed may delay your entry into program classes.

Basic Manufacturing Technician Certificate of Completion

The Basic Manufacturing Technician training covers the basics of machine tool fundamentals, measurement, and basic blueprint reading. Specialty areas for electives include welding, manual machining, and CNC mill operations. As a statewide cooperative effort this program is also offered by other community colleges, including Clackamas, Linn-Benton, Lane, and Portland.

In addition to tuition, estimated costs for students who complete the certificate listed below are books, \$215; class fees, \$54; universal fee, \$140; equipment and supplies, \$125. 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 Basic Manufacturing Technician required core of 10 credit hours, plus the additional credits in one area of specialization listed below.

Basic Manufacturing Technician core requirements (10 credit hours):

Course	Title	Credit Hours
CAM050	Orientation to Manufacturing Processes.....	2
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM111	Industrial Safety Seminar.....	1
MTH052	Introduction to Algebra and Geometry.....	3

Plus: Choose one area of specialization

Welding Specialization

WLD051	Basic Arc Welding	5
WLD056	Blueprint Reading and Sketching.....	2

CNC Mill Specialization

CAM110A	CNC/Manual Fundamentals.....	4
CAM120	CNC/Manual Milling.....	4

Machining Specialization

CAM110A	CNC/Manual Fundamentals.....	4
CAM140	Metallurgy for Manufacturing.....	2

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

Computer-Aided Manufacturing (CAM) Fundamentals Certificate of Completion

The CAM Fundamentals Certificate offers training in the knowledge and skills used by employees in manufacturing and related occupations. The certificate includes courses in manufacturing materials, interpretation of engineering drawings, measuring practices, bench and layout work, and basic set-up and operation of computer controlled mills and lathes. This certificate may qualify graduates for an entry position in a variety of manufacturing-related jobs.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$569; class fees, \$162; universal fee, \$240; equipment and supplies, \$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 the required 27 credits with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110A	CNC/Manual Fundamentals.....	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup Operation	4
MTH052	Introduction to Algebra and Geometry.....	3
	or	
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra+ (or higher)	5

Term 2

CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC-Lab	1
CAM140	Metallurgy for Manufacturing.....	2
COM051	Communication Skills 1	3
MTH053	Introduction to Trigonometry and Geometry.....	3

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

Computer Numerically Controlled (CNC) Operator Certificate of Completion

This CNC Operator Certificate builds on the training provided in the CAM Fundamentals certificate with an emphasis on the setup and operation of computer-controlled machines. The certificate includes courses in manual programming ("G code") for both mills and lathes. Graduates of this certificate may qualify to work as a CNC machine tool operator 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, \$719; class fees, \$234; universal fee, \$360; 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 the required 42 credits with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110A	CNC/Manual Fundamentals.....	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup/Operation.....	4
MTH052	Introduction to Algebra and Geometry.....	3
	or	
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher).....	5
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC-Lab	1
CAM140	Metallurgy for Manufacturing.....	2
CAM160	Programming CNC Mills	4
MTH053	Introduction to Trigonometry and Geometry.....	3
Term 3		
CAM150	Cutting Tools and Materials	3
CAM190	Programming CNC Lathes	4
CAM280D	Cooperative Work Experience	4
COM051	Communication Skills 1	3

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

Manual Machine Operator Certificate of Completion

The Manual Machine Operator certificate builds on the training provided in the CAM Fundamentals certificate with an emphasis on machining skills related to the setup and operation of manual machine tools such as drills, mills, lathes, saws,

and grinders. Graduates may qualify to work as a machine tool operator, entry-level machinist, 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, \$654; class fees, \$234; universal fee, \$360; 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 the required 42 credits with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110A	CNC/Manual Fundamentals.....	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup Operation.....	4
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher).....	5
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC-Lab	1
CAM120	CNC/Manual Milling.....	4
CAM140	Metallurgy for Manufacturing.....	2
MTH053	Introduction to Trigonometry and Geometry.....	3
Term 3		
CAM121A	CNC/Manual Lathe.....	4
CAM150	Cutting Tools and Materials	3
CAM280D	Cooperative Work Experience	4
COM051	Communication Skills 1	3

Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) Associate of Applied Science

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

The first year of study emphasizes machining skills as they relate to Computer Numerical Control machining. Students completing the first year may find employment as entry-level machine tool operators and CNC programmers.

Second-year classes concentrate on integrating mechanical design and computer-aided manufacturing programming and advanced manual machining skills. Students apply knowledge and skills to solve increasingly complex fixturing and machining problems. After successful completion, graduates may find employment in the fields of engineering technology and manufacturing operations. Graduates will use computers on the job for drafting, design and programming, and operating CNC machine tools.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,388; class fees, \$321; universal fee, \$736; hand tools and supplies, \$4,200. 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 the required 93 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110A	CNC/Manual Fundamentals.....	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup/Operation.....	4
DRF130	CAD 1.....	3
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Mathematics 1+.....	4
	or	
MTH111	College Algebra+ (or higher).....	5
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC Lab	1
CAM120	CNC/Manual Milling.....	4
CAM140	Metallurgy for Manufacturing.....	2
CAM160	Programming CNC Mills	4
MTH053	Introduction to Trigonometry with Geometry	3
	or	
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
CAM062	Practical Applications 2.....	2
	or	
CAM280B	Cooperative Work Experience	2
CAM121A	CNC/Manual Lathe.....	4
CAM150	Cutting Tools and Materials	3
CAM190	Programming CNC Lathes	4
COM051	Communication Skills 1+.....	3
	or	
WR121	English Composition–Exposition+ (or higher).....	4
Term 4		
CAM210A	Production/Assembly Control Methods.....	2
CAM210B	Production/Assembly Control Methods-Lab.....	2
CAM230	CAM Applications/Mills.....	3
DRF210	Parametric Design with SolidWorks	3
PH121	Applied Physics	4
	or	
PH201	General Physics (or higher).....	4
	or	
GS104	General Science: Physics.....	4
Term 5		
CAM220A	Advanced Lathe Processes.....	2
CAM220B	Advanced Lathe Processes-Lab.....	2
CAM260	CAM Applications/Lathes.....	3
DRF262	Machine Design	3
PSY104	Psychology in the Workplace+	4

Term 6

CAM290A	CAD/CAM Integrations.....	8
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	4
DRF260	Tool Design	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Management Programs

management.chemeketa.edu

See also Accounting and Business Administration.

The Management program offers both a one-year Certificate of Completion and a two-year Associate of Applied Science degree. The one-year certificate program prepares students for entry-level positions in the field of procurement management. As a graduate of Chemeketa's Management degree 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 a certificate or 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 CWE instructor/coordinator, you may enroll in BA280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

For more information about these programs, contact program chair Karen Edwards at 503.399.3996.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Management

Procurement Management Certificate of Completion

The Procurement Management Certificate program emphasizes skill development in public and private and procurement, contract administration, and project management. Graduates of this program may find work as purchasing and procurement clerks, purchasing agents, and purchasing managers.

Program outcomes

Students completing the Certificate of Completion will:

- Employ a basic understanding of procurement literacy through use of terms and definitions.
- Apply math and computer skills requisite with industry expectations.
- Apply standards in making ethical decisions in situations involving procurement activities.
- Use procurement sourcing methods to locate supplies or services through market research.
- Apply project management tools and processes for on-time and on-budget completion of projects.
- Relate contract administration and management activities to procurement practices.

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 Career Services. 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:

CA121	Keyboarding (if less than 25 wpm)	3
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading.....	3
WR121	English Composition–Exposition.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120. 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, \$1,200; class fees, \$200; universal fee, \$405; equipment and supplies, \$180. 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 46 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business.....	4
BA104	Business Applications Using Mathematics+	4
BA214	Business Communications.....	3
BA226	Business Law 1	4
BA234	Principles of Procurement	4
BA235	Principles of Public Procurement.....	4
BA236	Public Procurement and Contract Administration .	4
BA277	Business Ethics	3
CIS125E	Excel-Workbooks.....	4
PSY104	Psychology in the Workplace+	4
SP111	Fundamentals of Public Speaking	4
	or	
SP100	Introduction to Communication	4
WR227	Technical Writing+	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Management Associate of Applied Science

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.

Students completing the AAS will:

- Explain how the strategic plan of business interrelates with functions in order to fulfill the mission and purpose of an organization.
- Work as a team member and/or leader using effective communication strategies including writing, listening, speaking, negotiating, and persuading skills.
- Use technology to produce, research, and interpret financial, marketing, and business reports.
- Identify the legal, ethical, and/or financial consequences of decisions to business organizations.

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 Career Services. 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:

CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading.....	3
WR121	English Composition–Exposition.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120. 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, \$3,200; class fees, \$200; universal fee, \$837; equipment and supplies, \$1,000. 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 93 credit hours with a grade of "C" or better in all Business Administration (BA) courses:

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business.....	4
BA202	Personal Effectiveness in Business	3
BA211	Financial Accounting 1	4
CIS125E	Excel-Workbooks.....	4
Term 2		
BA203	Organizational Behavior.....	3
BA212	Financial Accounting 2	4
BA214	Business Communications+*	3
CIS125A	Micro Database Software-Access	3
MTH070	Elementary Algebra+ (or higher).....	4
Term 3		
BA204	Diversity in the Workplace	3
BA206	Business Management Principles.....	4
BA213	Managerial Accounting	4
PSY104	Psychology in the Workplace+	4
	or	
SOC204	The Sociological Perspective+	4
Term 4		
BA223	Principles of Marketing.....	4
BA226	Business Law 1	4
EC200	Introduction to Economics (or higher).....	4
SP111	Fundamentals of Public Speaking (or higher).....	4
Term 5		
BA222	Financial Management.....	4
BA238	Sales and Persuasion.....	3
BA277	Business Ethics	3
WR227	Technical Writing.....	4
	Business Elective**	3
Term 6		
BA224	Human Resource Management.....	4
	Business elective**	3
	Computer Science elective***	3
	Humanities/Fine Arts elective	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Placement in math and English determined by testing. Lower division collegiate classes may be substituted.

**Business electives: Choose BA104 or BA courses at the 200 level or above, or EC courses at the 200 level or above.

***Choose from CIS133 level or above, or CA200 level or above.

Mathematics

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Nursing Programs

nursing.chemeketa.edu

Chemeketa offers a career ladder program for those 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). You may contact NLNAC for information about the program's accreditation status. The address for NLNAC is 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326. The telephone number is 404.975.5000. The Web address is www.nlnac.org.

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's nursing program, please contact Counseling and Career Services for details at 503.399.5021. You should also make early contact with an advisor at the institution to which you plan to transfer.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Use a holistic approach in applying the nursing process at the practical nurse level when providing care for individuals and families across the lifespan.
- Use established guidelines to reinforce the teaching of health promotion concepts across the lifespan to groups in selected community settings.
- Communicate effectively with individual patients, families, and members of the health care team.
- Organize and prioritize components of care at the practical nurse level for two to four patients.
- Make decisions regarding patient care based on professional values at the practical nurse level while complying with identified legal/ethical standards (scope of practice regulations established by boards of nursing and Code of Practice guidelines established by the American Nurses Association).

Students completing the AAS will:

- Use a holistic approach to develop, implement, and evaluate plans of care for groups of patients that apply standard nursing care plans to meet individual needs.

- Communicate effectively and collaboratively in a self-directed manner with patients, families, and members of the health-care team.
- Use first-level management skills in providing care for individuals and groups of patients.
- Make decisions regarding patient care based on professional values and responsibilities at the associate degree nurse level while complying with identified legal/ethical standards (scope of practice regulations established by boards of nursing and Code of Practice guidelines established by the American Nurses Association).

Getting started

The following courses (completed with a grade of "C" or better) are required for application to the Nursing program for 2011-2012:

1. BI231 Anatomy and Physiology (completed within seven years).
2. MTH095 Intermediate Algebra+ (or higher). This requirement cannot be waived by a placement test score.

Note: Chemistry is a prerequisite for BI231. One term of accelerated college chemistry with a grade of "C" or better within the last seven years; CH110; successful completion of the Chemistry Proficiency Exam; completion of CH104 and concurrent enrollment in CH105; completion of CH121 and concurrent enrollment in CH122; or completion of CH221 and concurrent enrollment in CH222 are all acceptable for meeting this prerequisite. A full sequence of chemistry may be recommended for students planning to pursue a four-year degree. Contact Counseling and Career Services at 503.399.5120 for details.

In addition, the program has specific entry requirements for 2012-2013 as outlined in the nursing application packet available on Chemeketa's Web site, www.chemeketa.edu. Most pre-nursing students complete the majority of general education and science courses required for the nursing program in order to enhance their chance of admission. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact Counseling and Career 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:

Nursing

Practical Nursing Certificate of Completion

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, \$1,750; class fees, \$293 universal fee, \$530; clinical fee, \$1,005; equipment and supplies, \$500; drug testing fee, \$25; criminal background check fee, \$30; testing fee, \$459. 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 by successfully completing the required 53 credit hours with a grade of "C" or better in all

courses. You must earn grades of "C" or better in all required courses in order to progress to the next term. Completion of this level qualifies you to apply to take the National Council Licensure Exam (NCLEX-PN) to become a licensed practical nurse (LPN).

Course	Title	Credit Hours
Term 1		
BI232	Human Anatomy and Physiology	4
NUR106	Fundamentals of Nursing	9
PSY201	Introduction to Psychology–Mind and Body+	4
Term 2		
BI233	Human Anatomy and Physiology	4
NUR108	Care of Acutely Ill Patients and Developing Families 1	10
PSY237	Life Span Development.....	4
Term 3		
BI234	Microbiology	4
NUR109	Care of Acutely Ill Patients and Developing Families 2	10
WR121	English Composition–Exposition+	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

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 may be found in the Course Descriptions section of this catalog. Nursing courses are comprised of 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.

Nursing Associate of Applied Science

You may earn an associate's degree by successfully completing the required 97 credit hours with a grade of "C" or better in all courses. You must earn grades of "C" or better in all required courses in order to progress to the next term. An associate degree in nursing qualifies you to apply to take the National Council Licensure Exam (NCLEX-RN) 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, provide, 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 own professional development.

In addition to tuition, estimated costs for students in Level II listed below are books, \$600; class fees, \$290; universal fee, \$440; clinical fee, \$1,005; drug testing fee, \$25; equipment and supplies, \$275; licensure testing fee, \$452. 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		
CIS101	Introduction to Microcomputer Applications*	3
NUR206	Care of Patients with Complex Health Problems	11

Term 5

NUR208	Care of Patients in Situations of Crisis and in Community-Based Settings.....	10
	Social Science elective**	3
	Sociology elective	3

Term 6

NUR209	Preparation for Entry into Practice	8
	General Education elective	3
	Humanities/Fine Arts elective***	3
	or	
	Communications elective***	3

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

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Or CIS120 or higher CIS course with CIS101 as a prerequisite.

****Social Science electives:**

ATH101	Human Evolution (or higher)	4
CLA201	Introduction to Chicano/Latino Studies 1: Historical Overview (or higher)	4
EC200	Introduction to Economics (or higher).....	4
GEG105	Physical Geography (or higher)	4
HDF222	Family Relationships (or higher)	3
HST104	History of World Civilization (or higher)	4
PS201	American Government (or higher).....	4
PSY101	Psychology of Human Relations (or higher)	4
SOC204	The Sociological Perspective (or higher).....	4
WS101	Introduction to Women's Studies: Women in American Society (or higher)	4

*****Humanities/Fine Arts/Communications electives:**

ART101	Understanding Art (or higher)	4
ASL111	First Year American Sign Language, Term 1 (or higher).....	4
BA214	Business Communications.....	3
ENG104	Introduction to Fiction (or higher)	4
FA255	Understanding Movies: Film Styles (or higher).....	4
FR101	First Year French, Term 1 (or higher)	4
HUM251	Concept of Self: Classical Greece (or higher).....	3
JNL216	Newswriting (or higher)	3
JPN101	First Year Japanese, Term 1 (or higher)	4
MUS105	History of Rock and Roll (or higher).....	3
PHL201	Introduction to Philosophy	4
RD115	Academic Thinking and Reading (or higher).....	3
REL201	Asian Religions (or higher).....	4
RUS101	First Year Russian, Term 1 (or higher)	4
SP100	Introduction to Communication (or higher).....	4
SPN101	First Year Spanish, Term 1 (or higher).....	4
WR115	Introduction to Composition (or higher)	4

Specialized Courses

The college periodically offers specialized courses to help registered nurses, licensed practical nurses, and other health-care personnel keep abreast of current knowledge and new developments in nursing. A non-credit basic nursing assistant course approved by the Oregon State Board of Nursing is also available. For more information about courses, contact the nursing office, 503.399.5058.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work related to your program. With the approval of the program chair, you may enroll in NUR280C-D Cooperative Work Experi-

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

Nursing

(transfer course guideline)

Chemeketa is ready to help you plan your pre-nursing courses 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 degree program.

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's Nursing program, please contact Counseling and Career Services, 503.399.5120 for details.

Beginning fall 2011, students who are admitted to Chemeketa's Nursing program are dually admitted to Linfield College. Upon successful completion of the nursing program and passing the National Council Licensure Exam (NCLEX-RN) students may enroll in the online RN-BSN program at Linfield.

The college has also established inter-institutional agreements with Oregon Health Sciences University and a partnership agreement with University of Wisconsin-Green Bay. There are various other possibilities for students as well.

Admission to nursing programs is competitive. As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. 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 an academic area.

Nutrition and Food Management

Dietetics

Oregon State University (OSU) offers a Bachelor of Science degree in Nutrition and Food Management with a Dietetics Option. The Dietetics Option meets the American Dietetics Association academic and accreditation requirements for students interested in becoming Registered Dietitians. It is essential that you work closely with OSU's program advisor or Chemeketa's Dietetics program advisor to ensure that you choose the appropriate courses. To see a copy of the specific transfer guidelines, visit www.htmprograms.com and click on "Academic Programs."

Please contact the Hospitality and Tourism Management program at 503.399.5186 for further advising. For OSU advice about undergraduate course requirements, students can contact the OSU College of Health and Human Sciences Student Support and Advising Office at 541.737.8900. A program guideline is available at www.htmprograms.com.

Occupational Skills Training Program

ost.chemeketa.edu

The Occupational Skills Training (OST) program offers students with a career goal in mind 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 44 credits), you will receive hands-on training at a worksite 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.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Demonstrate specific work habits required for employment.
- Perform job skills based on industry standards of the chosen occupation.

Tuition costs are based on the number of training hours spent at the work site. In addition to tuition, estimated costs for students participating in this program are \$30 per term student fee and a \$300 one-time application fee. Books and supplies average \$250 per term if related courses are taken.

Some sites may receive a trainer incentive of \$336 per term in addition to the above costs if approved and paid by the sponsoring agency or insurer (if applicable).

You may earn a Certificate of Completion by successfully completing from 24 to 44 credits of ST050A-P Occupational Skills Training and related prescribed courses based upon the approved length of your training plan. Up to 12 credits may be applied toward the Associate of Arts Oregon Transfer degree. Up to 36 credits may be applied toward the Associate of General Studies degree, and variable credits may be applied toward the Associate of Applied Science degree as determined by each career and technical education program area.

Non-credit options (such as On-the-Job Evaluation, see page 39) are also available to evaluate potential sites as well as student skills and career potential.

Getting started

For an appointment with an OST employment specialist or to receive a schedule of OST orientations, contact a staff member on the Salem campus, 503.365.4713 or 503.399.7398.

Pharmacy Programs

pharmacology.chemeketa.edu

(If you plan to pursue a degree to become a registered pharmacist, see the Pre-Professional Study section on Page 133 of this catalog.)

The Pharmacy Technician and Pharmacy Management programs prepare students for pharmacy technician positions in community, clinic, and hospital pharmacies. Pharmacy technicians assist licensed pharmacists with preparation of medications. The program offers a one-year Pharmacy Technician Certificate with the option of continuing and completing a two-year Associate of Applied Science (AAS) degree in Pharmacy Management. The Pharmacy Technician certificate program is accredited by the American Society of Health-Systems Pharmacists.

Courses focus on the abilities needed to assist the pharmacist in collecting, organizing, and evaluating information for direct patient care. Content includes drug classification, pharmacokinetics and pharmacodynamics of prescription medications, as well as an introduction to non-prescription drugs; pathophysiology regarding diseases; pharmaceutical inventory control; laws and ethics that apply to pharmacy operations; introduction to specialty pharmacies; in-depth concepts of sterility and quality assurance processes; and multicultural aspects of health care. In addition, students will develop communication skills and essential mathematical concepts related to medication dosing. Students will also participate in workplace experiences.

The intent of the program is to prepare students to take the national certification examination to become Certified Pharmacy Technicians and be employed in a pharmacy setting.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Organize and maintain patient records and inventory control systems.
- Accurately compound and prepare prescriptions under the direction of a licensed pharmacist.
- Use aseptic technology to prepare prescriptions in specialized pharmaceutical settings.

Students completing the AAS will:

- Provide leadership as a Pharmacy Manager using effective communication strategies, including speaking, listening, writing, negotiating, and persuasion.
- Use accounting principles for inventory management and cost containment.
- Ensure regulatory compliance and patient safety within the pharmacy organization.

Getting started

This program has special admission requirements and enrollment limits. The first step to entering the following program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services 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:

AH115	Healthcare Career Success Strategies (suggested).....	2
CA121A	Keyboarding A (if less than 25 wpm prior to CIS101).....	1
CIS101	Introduction to Microcomputer Applications.....	3
HM120	Medical Terminology 1.....	3
MTH070	Elementary Algebra (or higher).....	4
RD115	Academic Thinking and Reading (or higher).....	3

If you have questions about the requirements, contact 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 testing and assessment. Applications are available in Counseling and Career Services, Enrollment Services, and program offices.

Students are required to submit a copy of their current CPR cards and completed immunization forms prior to fall registration. Students must also pass a criminal background check and possible drug test (pursuant to OAR 855-010-0045). Practicum sites also require student licensure from the Oregon Board of Pharmacy.

Pharmacy Management

Pharmacy Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$670; class fees, \$122; universal fee, \$486; equipment and supplies, \$60; criminal background check \$30; CPR certification, \$45; immunizations, \$250; examination fee, \$129. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn a Certificate of Completion by successfully completing the required 58 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
PHM101	Introduction to Pharmacy Technology	1
PHM115	Pharmacy Operations/Management.....	3
PHM220	Multicultural Patient Healthcare	2
PHM230	Pharmaceutical Drug Classifications	3
PHM231	Pharmacology 1	5
WR121	English Composition–Exposition+	4
Term 2		
PHM110	Pharmacy Calculations	3
PHM120	Pharmacy Operations/Laboratory	3
PHM205	Pharmacy Specialized Care	3
PHM210	Over-the-Counter (OTC) Products.....	2
PHM215	Sterile Compounding/Cytotoxic Medications	3
PHM232	Pharmacology 2	5

Term 3

MTH095	Intermediate Algebra+ (or higher).....	4
PHM130	Pharmacy Information/Law and Ethics	3
PHM150	Pharmacy Technician Practicum	4
PHM151	Pharmacy Seminar.....	1
PHM160	Hospital/Ambulatory Pharmacy Practicum.....	2
PHM233	Pharmacology 3	3
PSY201	Introduction to Psychology-Body and Mind+	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Pharmacy Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete second year courses listed below are books, \$1,495; class fees, \$27; universal fee, \$468; equipment and supplies, \$25. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an Associate of Applied Science degree by successfully completing 107 required credit hours of the two-year Pharmacy Management program (49 credits during the second year after 58 credits of Pharmacy Technician) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 4		
CIS125E	Excel-Workbooks.....	4
HS101	Addiction Pharmacology and Physiology	4
MTH111	College Algebra	5
WR227	Technical Writing	4
Term 5		
BA206	Business Management Principles.....	4
EC201	Introduction to Microeconomics (or higher).....	4
PHM240	Advanced Pharmacy Management 1	3
PSY237	Life Span Development (or higher)	4
SP218	Interpersonal Communication.....	4
Term 6		
BA224	Human Resources Management	4
HPE295	Health and Fitness for Life.....	3
PHM241	Advanced Pharmacy Management 2	3
	Humanities/Fine Arts elective*	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*200 level course

Philosophy

(transfer course guideline)

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

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Counseling and Career 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 53.

Physical Education and Human Performance

(transfer course guideline)

Oregon's state 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, Exercise Science, Physical Education Teacher Education, Pre-therapy and Applied Exercise 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Physics

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Political Science

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Pre-Engineering

See Engineering.

Pre-Law

(transfer course guideline)

University of Oregon is the only state university in Oregon that 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 that 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 English Composition; as well as Philosophy, Psychology and Sociology courses.

Pre-Professional Study (Medicine, Dentistry, Pharmacy, Veterinary Medicine)

(transfer course guideline)

Oregon Health Sciences University offers a DMD degree in Dentistry and an M.D. degree in Medicine, and Oregon State University offers a DVM in Veterinary Medicine and a PharmD. in Pharmacy.

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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Psychology

(transfer course guideline)

Oregon's state 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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Retail Management Program

retail.chemeketa.edu

The Retail Management certificate prepares students for careers in sales and management. The program emphasizes skill development in interpersonal communication; business accounting; marketing; human resource management and supervision; and focuses on professional growth, employment, and advancement opportunities. This certificate fulfills coursework leading to an Associate of Applied Science degree in Management.

As a statewide cooperative effort this program is also offered by other community colleges including: Clackamas, Lane, Linn-Benton, Oregon Coast, Mt. Hood, and Portland.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing this certificate will:

- Use communication skills with individuals and groups in retail settings.
- Apply math and computer skills requisite with industry expectations.
- Evaluate and select marketing and retailing strategies.
- Apply basic accounting theory and practice to a service or retail setting.
- Explain the impact, roles, skills, responsibilities, and accountability of supervisors/managers in managing, leading, and controlling human resources within an organization.

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 Career Services. 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:

CIS101	Introduction to Microcomputer Applications.....	3
MTH060	Introductory Algebra.....	4
RD090	College Textbook Reading.....	3
WR121	English Composition—Exposition.....	4

Retail Management Certificate of Completion

In addition to tuition estimated costs for students who complete the program listed below are books/software, \$1,500; universal fee, \$324; equipment and supplies, \$144. Please 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 36 credit hours with a grade of "C" or better in all Business Administration courses. Courses may be taken in Salem, at our outreach campuses or centers, or online. The following courses may be taken in any order providing prerequisites are met.

Course	Title	Credit Hours
BA104	Business Applications Using Mathematics.....	4
BA203	Organizational Behavior.....	3
BA206	Business Management Principles.....	4
BA211	Financial Accounting 1.....	4
BA214	Business Communications.....	3
BA223	Principles of Marketing.....	4
BA224	Human Resource Management.....	4
BA249	Principles of Retailing.....	3
CIS120	Computer Information Science 1.....	4
	or	
CIS125E	Excel-Workbooks.....	4
SP111	Fundamentals of Public Speaking.....	4
	or	
SP100	Introduction to Communication.....	4
	or	
SP130	Business and Professional Speaking.....	3

Small Business Management Programs

sbm.chemeketa.edu

The Small Business Management (SBM) programs are designed to provide practical skills to established owners of Willamette Valley area small businesses and their partners.

Each nine-month program features monthly interactive classroom learning plus personalized one-on-one advising. The SBM Program reviews the basics of business management, and the SBM-Strategic Program implements these practices by developing systems and structure.

Classroom and advising sessions cover a variety of topics including marketing and sales, recordkeeping and financials, employee and human resource issues, establishing and reaching goals, management and control, leadership, and various legal issues.

Business owners are enrolled annually. For more information or an application visit sbm.chemeketa.edu or call the Chemeketa Center for Business and Industry at 503.399.5088.

Sociology

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/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.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Speech

(transfer course guideline)

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, Mass Media Studies, and Journalism.

As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Speech-Language Pathology Assistant Programs

speechpathology.chemeketa.edu

The Speech-Language Pathology Assistant (SLPA) program is a comprehensive certificate and degree program of both theory and practical experience designed to prepare students to become certified Speech-Language Pathology Assistants (SLPAs).

An SLPA is a certified support person who works under the supervision of a licensed speech-language pathologist. The SLPA performs specific therapy-related tasks that are prescribed and directed by their supervising speech-language pathologist. The SLPA works closely with others in a variety of settings, including schools, hospitals, rehabilitation centers, and in private practice. As a member of a speech-language therapy team, the SLPA helps children and adults with communication disorders improve their ability to speak, listen, and interact with others. SLPAs are responsible for taking and tracking data, and following the direction of others while working independently to deliver therapy services to children and adults.

The SLPA program will heavily assess communication skills in the areas of speaking and writing. Students who are ESOL speakers must have a satisfactory TOEFL score or ESOL level. Students applying to the SLPA program will be required to: communicate clearly in English with clear articulation skills, use writing skills to take data, communicate clearly in chart notes, and use written discourse in taking descriptive therapy data and dialogue.

In order to be employed as a Certified Speech-Language Pathology Assistant in Oregon, one must hold current certification as a Speech-Language Pathology Assistant with the Oregon Board of Examiners for Speech Pathology and Audiology.

For more information, contact the Oregon State Board of Examiners for Speech Pathology and Audiology: 971.673.0220, www.oregon.gov/BSPA/index.shtml

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS or earning Certificate of Completion will:

- Conduct individual and small group speech and language therapy services as directed by supervising Speech-Language Pathologist.
- Accurately record and organize data taken from the therapy sessions and communicate findings to supervising Speech-Language Pathologist.

This SLPA program is a limited-enrollment program with special admission requirements. An application packet is required to apply for admission to this program. This is a separate step in addition to the placement testing and meeting with Counseling and Career Services department. Applications are available on the program Web site: speechpathology.chemeketa.edu. Application deadlines are typically July 15 for fall term entry and February 1 for spring term entry. Once admitted, students are required to follow the prescribed outline of the courses throughout the program. For those students who are taking only the SLPA program courses, a course load of 6-9 credits is considered part-time. The program typically takes 5-7 terms to complete attending part-time.

Students enrolled in the SLPA program are required to complete two terms of practicum coursework and 100 clinical interaction hours under the supervision of a speech-language pathologist. SLPA students must work with program staff to identify a suitable practicum supervisor and site. SLPA program students are required to submit and pass a national FBI criminal background check, including fingerprinting at their own expense, in order to continue coursework in the program.

Getting started

The first step to entering the SLPA program is to obtain the current SLPA program application from the SLPA program website: <http://speechpathology.chemeketa.edu>. Students may need to take part in an assessment process to demonstrate competent abilities in the pre-program coursework areas, including computer literacy, keyboarding, math, reading, and writing. Students are strongly encouraged to meet with the designated counselor for the SLPA program within Counseling and Career Services to formulate an individualized program of study, which may include the following pre-program courses:

CIS101	Introduction to Microcomputer Applications.....	3
MTH060	Introductory Algebra.....	4
RD115	Academic Thinking and Reading.....	3
WR115	Introduction to Composition.....	4

If you have any questions about the requirements, contact Counseling and Career Services at 503.399.5120.

Speech-Language Pathology Assistant

Speech-Language Pathology Assistant Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,100; universal fee, \$360; online fee, \$750. 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 57 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
MTH070	Elementary Algebra+ (or higher).....	4
PSY100	Introduction to Psychology+ (or higher).....	4
SLP180	Survey of Speech and Language Disorders	3
SLP181	Phonetics for Language.....	3
SLP182	Intervention Strategies for SLP Assistants	3
SLP183	Introduction to Language Development.....	3
SLP184	Language Therapy	3
SLP185	Anatomy and Physiology of Speech and Language	3
SLP186	Speech Intervention with Children, Adolescents and Adults	3
SLP187	Clinical Documentation and Materials Management for the SLPA.....	3
SLP188	Communication Disorders in Low Incidence Populations.....	3
SLP189	SLPA Practicum 1.....	3
SLP190	SLPA Practicum 2.....	3
SLP191	Ethical and Legal Considerations in Speech-Language Pathology	3
SLP192	Augmentative and Alternative Communication....	3
SLP193	Adult Communication Disorders.....	3
SLP194	Language, Culture and Society: Cross Cultural Communication.....	3
WR121	English Composition–Exposition+ (or higher).....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Speech-Language Pathology Assistant

Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,350; universal fee, \$720; online fee, \$1,050. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a two-year Associate of Applied Science degree as a Speech-Language Pathology Assistant by successfully completing 95 credit hours (57 credits for the certificate, and an additional 38 general education requirements) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
General Education requirements (38 credit hours):		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
SP100	Introduction to Communication (or higher).....	4
	Humanities/Fine Arts electives*	12
	Physical Education or Health.....	3
	Science/Applied Science electives*	8
	Social Science electives*	8

*For subject area, see page 55.

Tourism and Travel Management Programs

tourism.chemeketa.edu

See also Hospitality Management.

The Tourism and Travel Management program prepares students for a broad range of leadership positions in various types of destination marketing organizations such as convention and visitors bureaus (CVBs), chambers of commerce, and government agencies, as well as private tourism departments of large hotels, convention centers, resort complexes, and travel-related businesses.

Courses will focus on the knowledge, skills, and abilities needed to formulate and implement effective business and marketing strategies in a tourism context. Students will develop strong leadership and communication skills required to lead destination stakeholder groups and local business leaders. In addition, students will learn the administrative skills required to direct and manage other destination management professionals responsible for researching, developing, and promoting the tourism of their locality, region, or destination resort.

The intent of the program is for students with the AAS degree and certificate to obtain entry-level management positions within the tourism industry. Students will also be advised on opportunities to continue their education by working toward a four-year degree in tourism through other universities.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the Tourism and Travel Management Certificate will:

- Demonstrate effective customer service and selling techniques using tourism industry technology systems and applications.
- Use the key tourism industry elements to promote travel products and services to potential clients.

Students completing the Destination Marketing Certificate will:

- Practice approaches in tourism that help coordinate relationships among constituents in a community or property setting.
- Apply administrative skills and effective marketing techniques to research, develop, and attract visitors to destinations.
- Discuss the social, economic, and environmental consequences of tourism activities.

Students completing the AAS will:

- Design a strategic marketing plan.
- Analyze the visitor experience through the coordination of hospitality and tourism components.
- Research and prepare travel and tour packages for clients
- Apply relevant technology, including cost control techniques, to the operation of a tourism organization.

Getting started

The first step to entering the following programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Counseling and Career Services. 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:

CIS101	Introduction to Microcomputer Applications	3
RD115	Academic Thinking and Reading	3
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

If you have any questions about the requirements, contact Counseling and Career Services at 503.399.5120 or Tourism and Travel program staff at 503.584.7540. Failure to be assessed may delay your entry into program classes.

Tourism and Travel Management

Tourism and Travel Management Certificate of Completion

The Tourism and Travel Management one-year certificate focuses on travel-related careers in airline, tour operations, resort and hotel front-desk, or travel agency employment. The certificate prepares students for direct entry into the workforce or offers the ability to continue into Tourism and Travel Management AAS Degree program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$663; class fees, \$70; universal fee, \$450. 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 45 required credit hours with a grade of “C” or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM100	Hospitality and Tourism Industry	3
HTM114	Travel Destination Geography 1.....	3
HTM127	Selling in Hospitality and Tourism	3
HTM236	Tour Operations	3
MTH060	Introductory Algebra+ (or higher)	4
Term 2		
HTM115	Travel Destination Geography 2.....	3
HTM143	Computer Reservation Systems 1	3
HTM237	Tourism Transportation: Cruise, Air, Rail.....	3
PSY104	Psychology in the Workplace+ (or higher)	4
WR121	English Composition-Exposition+ (or higher)	4

Term 3

HTM116	Travel Destination Geography 3.....	3
HTM131	Customer Service Management 1	3
HTM208	Attractions and Entertainment	3
HTM223	Computer Reservation Systems 2	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Tourism and Travel Management

Destination Marketing Certificate of Completion

The Tourism and Travel Management certificate in Destination Marketing prepares students for direct employment in destination marketing organizations including convention and visitor bureaus (CVBs), chambers of commerce, economic development offices, and government agencies, as well as private local tour operators and the tour departments of large hotels, resorts, or convention centers.

Courses focus on the abilities needed to formulate and implement effective marketing and communications strategies in a destination context. Students will develop strong planning and communication skills needed to successfully coordinate, with local stakeholders, clients, and business leaders.

With this certificate, students can obtain direct entry-level employment positions as destination marketing specialists. Students will be advised on other related opportunities, as well as their career opportunities with the full Tourism and Travel Management Associate of Applied Science degree.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$478; universal fee, \$270. 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 27 required credit hours with a grade of “C” or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM100	Hospitality and Tourism Industry	3
HTM127	Selling in Hospitality and Tourism	3
HTM236	Tour Operations	3
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM201	Customer Service Management 2.....	3
HTM235	Leadership in Tourism	3
Term 3		
HTM107	Hospitality Cost Control.....	3
HTM226	Event Management.....	3
HTM233	Strategies in Tourism and Destination Marketing ..	3

Tourism and Travel Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,628; class fees, \$140; universal fee, \$920. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

If you have any questions about the requirements, contact Counseling and Career Services at 503.399.5120 or call the

HTM department at 503.584.7540. Failure to be assessed may delay your entry into program classes.

You may earn an Associate of Applied Science degree by successfully completing the required 92 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM100	Hospitality and Tourism Industry	3
HTM114	Travel Destination Geography 1.....	3
HTM131	Customer Service Management 1	3
MTH060	Introductory Algebra+ (or higher)	4
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM115	Travel Destination Geography 2.....	3
HTM143	Computer Reservation Systems 1	3
PSY104	Psychology in the Workplace+ (or higher)	4
WR121	English Composition–Exposition+ (or higher).....	4
Term 3		
HTM107	Hospitality Cost Control	3
HTM116	Travel Destination Geography 3.....	3
HTM127	Selling in Hospitality and Tourism	3
HTM223	Computer Reservation Systems 2	3
	Tourism and Travel Management elective*	3
Term 4		
HTM208	Attractions and Entertainment	3
HTM226	Event Management.....	3
HTM236	Tour Operations	3
SP218	Interpersonal Communication (or higher)	4
WR227	Technical Writing	4
Term 5		
HTM201	Customer Service Management 2.....	3
HTM206	Resort Management.....	3
HTM207	Gourmet Culture	3
HTM235	Leadership in Tourism	3
HTM237	Tourism Transportation: Cruise, Air, Rail.....	3
Term 6		
HTM125	Special Event Planning	3
HTM230	Hotel, Restaurant, and Travel Law.....	3
HTM233	Strategies in Tourism and Destination Marketing .	3
HTM244	Hospitality and Tourism Management Practicum 1.....	4
	or	
HTM290	Operations Management.....	3
	Humanities/Fine Arts or Science/Applied Science elective	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Tourism and Travel Management electives:**

HTM105	Food and Beverage Industry.....	3
HTM109	Front Desk Operations	3
HTM130	Beverages.....	3
HTM224	Catering Operations.....	3
HTM232	Menu Design	3

Vineyard Management Programs

vineyard.chemeketa.edu

Vineyard Management training includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment as a vineyard manager in the cool-climate wine industry. Training is appropriate for employees or potential employees of vineyards or for people 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 503.584.7254.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Evaluate the potential of a site for vineyard development through soil and environmental analysis.
- Perform skills necessary for the seasonal vineyard operations of pruning, disease and pest control, grapevine canopy management, and crop regulation.
- Prepare reports to track ripening data, vineyard pesticide applications, fertilizer requirements, and canopy measurements.

In addition to the certificate outcomes, students completing the AAS will:

- Project timing of vineyard operations and make correct decisions on relevant grapevine management choices.
- Use knowledge of government regulations related to vineyard operations, OSHA rules, employment requirements, pesticide application postings, and field sanitation requirements.
- Use computer skills to track vineyard operations; prepare and use budget information.
- Research and develop a vineyard business management plan.

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 Career Services. 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
WR090	Fundamentals of Writing.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Vineyard Management

Vineyard Operations Certificate of Completion

Coursework 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 people wanting to establish a vineyard. Students must begin this program winter term.

For more information about this program, contact Al MacDonald at 503.584.7254.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,366; class fees, \$128 universal fee, \$378. 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 42 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Winter Term		
MTH070	Elementary Algebra+ (or higher).....	4
VMW101	General Viticulture.....	3
VMW114	Winter Vineyard Practices	4
VMW261	Vine Physiology (or higher).....	4

Spring Term

PSY104	Psychology in the Workplace+ (or higher)	4
VMW115	Spring Vineyard Practices.....	4
VMW260	Soil and Plant Nutrition	4

Summer Term

VMW116	Summer Vineyard Practices.....	4
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Fall Term

CIS101	Introduction to Microcomputer Applications (or higher).....	3
VMW117	Fall Vineyard Practices.....	4
WR115	Introduction to Composition+ (or higher).....	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

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 Career Services. 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
MTH070	Elementary Algebra.....	4
RD115	Academic Thinking and Reading	3
	or	
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Vineyard Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,912; class fees, \$399; universal fee, \$882. 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 required 98 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CH121	College Chemistry (or higher)	5
MTH095	Intermediate Algebra+ (or higher)	4
VMW101	General Viticulture.....	3
	Vineyard Management elective *	4
Term 2		
CH122	College Chemistry (or higher)	5
CIS101	Introduction to Microcomputer Applications (or higher).....	3
VMW114	Winter Vineyard Practices	4
WR121	English Composition-Exposition+ (or higher)	4
Term 3		
CH123	College Chemistry (or higher)	5
CH172	Chemical Methods for Analysis of Musts and Wines	3
VMW115	Spring Vineyard Practices.....	4
WR227	Technical Writing (or higher).....	4
Term 4		
VMW116	Summer Vineyard Practices.....	4
Term 5		
SP111	Fundamentals of Public Speaking	4
SPN111	Beginning Spanish Conversation Term 1 (or higher).....	3
VMW117	Fall Vineyard Practices.....	4
	Vineyard Management elective*	4
Term 6		
PSY104	Psychology in the Workplace+ (or higher)	4
VMW105	Spanish in the Vineyard.....	3
	or	
SPN112	Beginning Spanish Conversation Term 2 (or higher).....	3
VMW122	Introduction to Winemaking	3
VMW261	Vine Physiology (or higher).....	4
VMW280C	Cooperative Work Experience	3
Term 7		
VMW256	Agriculture Business Management.....	3
VMW260	Soil and Plant Nutrition	4
VMW280C	Cooperative Work Experience	3
	Vineyard Management elective*	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Vineyard Management electives (select 12 credit hours):**

BI131	Environmental Science 1	4
BI132	Environmental Science 2	4
BI133	Environmental Science 3	4
BI153	Fundamentals of Plant Biology	4
CA220	QuickBooks-Computerized Bookkeeping	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel-Workbooks.....	4
HOR211	Plant Propagation.....	4
MTH070	Elementary Algebra.....	4
SPN112	Beginning Spanish Conversation Term 2	3
SPN113	Beginning Spanish Conversation Term 3	3
VMW102	Wine Industry Exploration	3
VMW131	Wine Appreciation	3
VMW132	Wines of the World	3
VMW134	Wines of the Pacific Northwest	3
VMW170	Introduction to Wine Marketing	3
VMW222	Science of Winemaking.....	3
VMW244	Wine Production.....	6
VMW245	Wine Clarification and Stabilization	4
VMW246	Wine Aging, Filtration and Bottling	4
VMW254	Winery Process Planning and Design.....	3
VMW280A-F		
	Cooperative Work Experience	1 - 6
WLD051	Basic Arc Welding	5

Visual Communications Programs

vc.chemeketa.edu

The Visual Communications programs offer two Associate of Applied Science degrees: Graphic Design and Interactive Media. All students have a common first year course of study which includes general education as well as program classes. During spring term of your first year, you will meet with your assigned faculty advisor to determine your degree path. Students completing coursework over a three year period may earn both degree options. During the second year, students take either the required graphic design or interactive media classes then come together again for the capstone portfolio class and show. Students work together closely in all classes, sharing common studio space and Mac lab facilities. Opportunities to work in traditional media alongside new media abound in both required and elective classes.

As part of these programs, all students will develop skills in graphic design, layout, typography, photography, web design, and digital media, as well as the teamwork and creative problem solving essential to a lifelong career. Students will produce a print and/or digital portfolio of work including a personal stationery package and résumé in preparation for entering the job market.

Either program option will take a minimum of two full years to complete, beginning in fall term. Most students spread their work over three years, which allows for more in-depth study and taking elective classes. Students interested in completing their bachelor's degree have several transfer options and should meet with the program chair before beginning the program. For more information and a complete application packet, visit the program web site at vc.chemeketa.edu.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS degrees will:

- Work with others in the creation and production of original ideas and graphic design and/or interactive media.
- Research and present design solutions to communication projects.
- Use current and evolving industry standard methods and processes in the production and crafting of graphic design and/or interactive communications.
- Articulate and apply the trade practices, ethics, and copyright laws related to graphic arts.
- Participate in a client-designer relationship in the implementation and evaluation of projects.
- Organize and present a portfolio of work that gives evidence of the skills, knowledge, and abilities to begin a graphic design and/or interactive media career or transfer to a four-year college for additional study.

Getting started

Apply early. These programs have special admissions prerequisites, requirements and enrollment limits. A portfolio is part of the application process. Attending a program overview is strongly recommended prior to submitting an application. Sessions are scheduled throughout the year. Check vc.chemeketa.edu for current dates.

The first step to entering these programs is to take part in an assessment process, which includes taking the college's free placement test. You may need to complete pre-program courses. The program chair may waive some prerequisites upon review of your application materials and will then help you develop your program of study, which may include one or more of the following:

ART115	Basic Design.....	4
MTH020	Basic Mathematics.....	4
RD115	Academic Thinking and Reading	3
	or	
RD120	Critical Thinking and Reading	3
WR121	English Composition-Exposition.....	4

All classes take place in a Macintosh computer lab and require extensive computer knowledge. Detailed information about the program and application process is available on the web. If you have questions about admission requirements, contact Counseling and Career Services at 503.399.5120. Contact the program chair at 503.399.6473 or email christine.linder@chemeketa.edu for additional information about the program.

Graphic Design Associate of Applied Science

In addition to tuition, estimated costs for the students who complete the entire Graphic Design program average \$948 per term. Costs include photographic supplies, books, high resolution output, presentation supplies, tracing paper, sketchbooks, and digital media. A digital SLR camera is required for all courses; details are on the web site. A portfolio, at a cost of up to \$250, is required for graduation. Class fees for Graphic Design total \$1,249 for required courses, and universal access fees are an additional \$1,010. Although not required, a home computer greatly enhances the student's ability to successfully complete coursework 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 maintaining a grade point average of 2.50 and successfully completing the 105 credit hours with a grade of "C" or better in all required courses.

Course	Title	Credit Hours
Term 1		
ART131	Introduction to Drawing 1 (or higher).....	4
ART265	Digital Photography	4
SP111	Fundamentals of Public Speaking	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics.....	4
Term 2		
ART224	Type Design 1	4
MTH060	Introductory Algebra+ (or higher)	4
VC115	Introduction to Interactive Media.....	4
VC151	Print Production.....	3
WR227	Technical Writing+.....	4
Term 3		
ART118	Digital Design and Color.....	4
ART225	Type Design 2	4
ART266	Studio Photography	4
VC121	Layout 1: Page Design	4
Term 4		
ART221	Graphic Design 1: Icons and Symbols.....	4
VC122	Layout 2: Intermediate Page Design.....	4
VC237	Web Design 1.....	4
VC246	File Prep	3
VC272A	Design Studio.....	2
Term 5		
ART222	Graphic Design 2	4
ART239	Introduction to Digital Illustration	3
PSY104	Psychology in the Workplace+	4
VC221	Layout 3: Publication Design.....	4
VC251	Color Correction.....	3
Term 6		
ART223	Graphic Design 3: Package Design.....	4
VC235	Interface Design	3
VC283	Business of Graphic Arts	4
VC284	Portfolio Preparation	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Graphic Design

Interactive Media Associate of Applied Science Option

Interactive Media students average \$783 per term. Costs include photographic supplies, books, high resolution output, presentation supplies, tracing paper, sketchbooks, and digital media. A digital SLR camera is required for all courses; details are on the web site. Class fees for the Interactive Media option total \$1,165 for required courses, and universal access fees are an additional \$990. Although not required, a home computer greatly enhances the student's ability to successfully complete coursework 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 maintaining a grade point average of 2.50 and successfully completing the 105 credit hours with a grade of "C" or better in all required courses.

Term 1

ART131	Introduction to Drawing 1 (or higher).....	4
ART265	Digital Photography	4
SP111	Fundamentals of Public Speaking	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics.....	4

Term 2

ART224	Type Design 1	4
MTH060	Introductory Algebra+ (or higher)	4
VC115	Introduction to Interactive Media.....	4
VC151	Print Production.....	3
WR227	Technical Writing+.....	4

Term 3

ART118	Digital Design and Color.....	4
ART225	Type Design 2	4
ART266	Studio Photography	4
VC121	Layout 1: Page Design	4

Term 4

ART221	Graphic Design 1: Icons and Symbols.....	4
FLM265	Documentary Filmmaking	3
VC122	Layout 2: Intermediate Page Design.....	4
VC135	Flash 1	2
VC237	Web Design 1.....	4

Term 5

FLM266	Narrative Filmmaking	3
PSY104	Psychology in the Workplace+	4
VC136	Flash 2	2
VC238	Web Design 2.....	4
VC251	Color Correction.....	3
VC272B	Web Studio	2

Term 6

VC235	Interface Design	3
VC239	Web Design 3.....	4
VC283	Business of Graphic Arts	4
VC284	Portfolio Preparation	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Welding Technology Programs

The Welding Technology program offers two options. A three-term welding 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 plate 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 (MIG) processes and have a working knowledge of shop blueprints and welding symbols, jig fabrication, and assembly processes.

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

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the certificate will:

- Set up and operate manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.
- Perform basic layout and fabrication skills to produce welded metal parts and products.
- Read and interpret engineering drawings to American Welding Society standards.
- Use welding process and procedure applications.
- Apply basic metallurgy knowledge to fabrication processes.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.

In addition to the certificate outcomes, students completing the AAS will:

- Perform basic set-ups and operations for manual and computer numeric controlled machining equipment.
- Design and carry out planning procedures for machining purposes.
- Select and use tools and equipment to manufacture, measure, and inspect parts in a machining environment.

Welding Fabrication

Welding Certificate of Completion

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, semi-automatic welding equipment operators, and TIG welders.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$402; class fees, \$488; universal fee, \$400; equipment and supplies, \$550; certification test, \$340 (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 51 required credit hours with a grade of "C" or better in all courses.

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		
COM051	Communications Skills 1+ (or higher).....	3
PSY101	Psychology of Human Relations+ (or higher)	4
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
Term 3		
WLD053	Advanced Arc Welding	3
WLD058	Weld Shop Problems.....	7
WLD063	Advanced Gas Metal Arc Welding (MIG)	3
WLD080	Metallurgy for Welders.....	2

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Welding Fabrication Associate of Applied Science

As a graduate of the Welding Fabrication program, you may qualify for 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 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, \$909; class fees, \$750; universal fee, \$736; equipment and supplies, \$700; certification test, \$340 (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 the required 93 credit hours with a grade of "C" or better in all courses.

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		
COM051	Communications Skills 1+ (or higher).....	3
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
Term 3		
WLD053	Advanced Arc Welding	3
WLD058	Weld Shop Problems.....	7
WLD063	Advanced Gas Metal Arc Welding (MIG)	3
WLD080	Metallurgy for Welders.....	2
Term 4		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110A	CNC/Manual Fundamentals	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup/Operation.....	4
GS104	General Science: Physics (or higher)	4
Term 5		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC-Lab	1
CAM140	Metallurgy for Manufacturing.....	2
CAM160	Programming for CNC Mills.....	4
MTH053	Introduction to Trigonometry with Geometry (or higher).....	3
PSY101	Psychology of Human Relations+ (or higher).....	4
Term 6		
CAM062	Practical Applications 2.....	2
CAM150	Cutting Tools and Materials	3
CAM190	Programming CNC Lathes	4
CAM280D	Cooperative Work Experience	4

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Wine Marketing Program

The Wine Marketing program includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in wine marketing. Wine marketing training prepares students for occupations, such as tasting room sales manager, wine steward, wine club supervisor, wine buyer or broker, wine marketing or sales manager, wine distribution manager, freelance wine marketing, winery public relations manager, or wine shop owner/manager.

Communication skills are emphasized, and students will gain on-the-job work experience through the Cooperative Work Experience program. Students have flexibility to choose electives that will help tailor the curriculum and training to their particular career interest in wine marketing.

For more information about this program, contact Barney Watson at 503.584.7255.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Develop a wine marketing plan for a variety of distribution channels.
- Create and present sales presentations.
- Develop a brand plan for a winery.

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 Career Services. 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
RD115	Academic Thinking and Reading	3
	or	
SSP112	Effective Learning.....	3
WR115	Introduction to Composition	4

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 entire program listed below are books, \$2,709; class fees, \$603; universal fee, \$891. 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 99 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA223	Principles of Marketing.....	4
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH070	Elementary Algebra+ (or higher).....	4
VMW101	General Viticulture.....	3
WR121	English Composition–Exposition+ (or higher).....	4
Term 2		
PSY104	Psychology in the Workplace+ (or higher)	4
SP111	Fundamentals of Public Speaking (or higher).....	4
VMW122	Introduction to Winemaking	3
	Wine Marketing electives*	6
Term 3		
BA238	Sales and Persuasion.....	3
VMW131	Wine Appreciation	3
VMW170	Introduction to Wine Marketing	3
WR227	Technical Writing (or higher).....	4
	Wine Marketing elective*.....	3
Term 4		
VMW280C	Cooperative Work Experience	3
Term 5		
VMW271	Wine Marketing–Brand Development.....	4
	General Education elective	3
	Wine Marketing electives*	6

Term 6

VMW132	Wines of the World	3
	or	
VMW134	Wines of the Pacific Northwest	3
VMW232	Sensory Evaluation of Wine Varietals	3
VMW272	Wine Marketing—Understanding the Wine Market Place.....	4
	Wine Marketing electives*	6

Term 7

VMW233	Sensory Evaluation of Wine Components.....	3
VMW256	Agriculture Business Management.....	3
VMW273	Wine Marketing— Assessing and Targeting the Market.....	4
VMW280C	Cooperative Work Experience	3
	Wine Marketing elective*.....	3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

*Wine Marketing electives (select 24 credit hours):

BA226	Business Law 1	4
BA277	Business Ethics	3
CA220	QuickBooks—Computerized Bookkeeping	3
CIS125A	Micro Database Software—Access	3
CIS125E	Excel—Workbooks.....	4
CIS178I	Introduction to the Internet/World-Wide Web	3
CIS195	Web Site Development.....	4
HTM103	Service Marketing Fundamentals.....	3
HTM125	Special Events Planning	3
HTM127	Selling Hospitality and Tourism	3
HTM131	Customer Service Management 1	3
HTM201	Customer Service Management 2.....	3
HTM203	Service Marketing: Promotion and Advertising.....	3
HTM226	Event Management.....	3
JNL225	Advertising/Public Relations	3
SPN111	Beginning Spanish Conversation Term 1	3
SPN112	Beginning Spanish Conversation Term 2	3
SPN113	Beginning Spanish Conversation Term 3	3
VMW102	Winery Industry Exploration	3
VMW254	Winery Process Planning and Design.....	3
VMW257	Tasting Room Management	3
VMW280A-		
F	Cooperative Work Experience	1-6

Winemaking Program

winemaking.chemeketa.edu

The Winemaking program includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment as a winemaker in the cool-climate wine industry. Training is appropriate for employees or potential employees of wineries or for people 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 Barney Watson at 503.584.7255.

Total required credit may vary due to three to four credit conversion. Chemeketa degree and certificate minimum requirements must be met.

Program outcomes

Students completing the AAS will:

- Evaluate wine grape maturity and make harvest decisions for quality wine production, including sensory and chemical analysis of juice, and must and chemical adjustments.
- Perform wine grape processing, fermentation management, and wine processing practices, including operating and maintaining winery equipment from primary processing through bottling.
- Use chemical and sensory quality control analysis techniques and appropriate winery processing practices for the chemical, microbial, and physical stability of wines.
- Research and develop a winery facility, including winery design, layout, operational systems, process calculations, and equipment selection.
- Comply with government regulations for wine production, including licensing, operating a winery premise, record-keeping, regulatory compliance, and health and safety programs.

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 Career Services. 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
MTH070	Elementary Algebra.....	4
RD115	Academic Thinking and Reading	3
	or	
SSP112	Effective Learning.....	3
WR115	Introduction to Composition	4

If you have questions about the requirements, contact Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Winemaking Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,816; class fees, \$635; universal fee, \$909. 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 101 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CH121	College Chemistry (or higher)	5
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH095	Intermediate Algebra+ (or higher)	4
VMW101	General Viticulture.....	3
Term 2		
BI230	Introductory Microbiology (or higher)	4
CH122	College Chemistry (or higher)	5
WR121	English Composition-Exposition+ (or higher)	4
VMW122	Introduction to Winemaking	3
	Winemaking elective*	3

Term 3	
CH123	College Chemistry (or higher) 5
CH172	Chemical Methods for Analysis of Musts and Wines 3
PSY104	Psychology in the Workplace+ (or higher) 4
VMW131	Wine Appreciation 3
VMW222	Science of Winemaking..... 3

Term 4	
SP111	Fundamentals of Public Speaking (or higher)..... 4
VMW244	Wine Production..... 6
WR227	Technical Writing (or higher)..... 4
	Winemaking elective* 3

Term 5	
VMW132	Wines of the World 3
	or
VMW134	Wines of the Pacific Northwest 3
VMW170	Introduction to Wine Marketing (or higher) 3
VMW245	Wine Clarification and Stabilization 4
VMW254	Winery Process Planning and Design..... 3
VMW280C	Cooperative Work Experience 3

Term 6	
VMW233	Sensory Evaluation of Wine Components..... 3
VMW246	Wine Aging, Filtration, and Bottling 4
VMW256	Agriculture Business Management..... 3
VMW280C	Cooperative Work Experience 3
	Winemaking elective* 3

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

***Winemaking electives (select 9 credit hours):**

BA223	Principles of Marketing..... 4
BA238	Sales and Persuasion 3
B1101	General Biology (or higher) 4
B1102	General Biology (or higher) 4
CA220	QuickBooks-Computerized Bookkeeping 3
CIS125A	Micro Database Software-Access 3
CIS125E	Excel-Workbooks..... 4
VMW102	Wine Industry Exploration 3
VMW114	Winter Vineyard Practices 4
VMW115	Spring Vineyard Practices..... 4
VMW116	Summer Vineyard Practices..... 4
VMW117	Fall Vineyard Practices..... 4
VMW232	Sensory Evaluation of Wine Varietals 3
VMW257	Tasting Room Management 3
VMW260	Soil and Plant Nutrition 4
VMW261	Vine Physiology 4
VMW271	Wine Marketing-Brand Development 4
VMW272	Wine Marketing-Understanding The Wine Market Place..... 4
VMW273	Wine Marketing-Assessing and Targeting the Market..... 4
VMW280A-F	Cooperative Work Experience 1-6

+Meets related instruction requirement, see page 43. For subject areas, see page 55.

Course Descriptions



About these course descriptions

This list of course descriptions reflects the diversity and scope of the many credit courses Chemeketa currently offers. 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 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 on the instructor's assessment of your readiness to enroll in the course.

Chemeketa also offers many non-credit personal enrichment courses not included here. They are also listed in the Schedule of Classes.

Note 1: The letters, **F**, **W**, **Sp**, and **Su** near the end of a course description indicate the term (fall, winter, spring, summer) the course is usually offered.

Note 2: The letters **IL** and **CL** at the end of a course description indicate courses which meet the new AAOT requirements for information literacy and cultural literacy. See Page 43 for details.

For information on when and where classes meet, consult the *Schedule of Classes* available each term.

How courses are numbered

The following course prefixes describe the primary intent of the courses offered:

Developmental Courses*

MTH: Mathematics
RD: Reading
SSP: Study Skills Program
WR: Writing

*Developmental courses numbered less than 50 do not meet the requirements of the AAOT, AAS, AS/OT-BUS or AGS degrees.

Career and Technical Courses

AH: Allied Health
APR: Apprenticeship
AUM: Automotive Technology
BLD: Building Inspection Technology
BT: Business Technology
CA: Computer Applications
CAM: Computer-Aided Manufacturing
CIS: Computer Information Science
CJ: Criminal Justice
COM: Communication Skills
CPL: Credit for Prior Learning
CVL: Civil Technology
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
FLM: Filmmaking
FRP: Fire Protection Technology
FT: Forest Management
HD: Human Development
HDF: Human Development and Family Studies
HEM: Hemodialysis Technician
HM: Health Services Management
HOR: Horticulture/Phytotechnology
HS: Human Services

HTM: Hospitality Management; Tourism and Travel Management
MT: Industrial
MFG: Manufacturing Technologies
NET: Network Technology
NUR: Nursing
PHM: Pharmacy Technician/Pharmacy Management
RD: Reading
RNW: Renewable Energy Management
SLP: Speech-Language Pathology Assistant
SSP: Study Skills
ST: Occupational Skills Training
VC: Visual Communications
VMW: Vineyard Management/Winemaking
WFB: Welding Fabrication
WLD: Welding

**Many career and technical courses are applicable to the baccalaureate degree; check with the four-year institution.

Lower Division Collegiate Courses (first two years of the baccalaureate degree)

ART: Art
ASL: American Sign Language
ATH: Anthropology
BA: Business Administration***/****
BI: Biology***
BOT: Botany
CG: Counseling and Guidance***
CH: Chemistry
CIS: Computer Information Science
CS: Computer Science
CJ: Criminal Justice****
CLA: Chicano/Latino Studies
CS: Computer Science***/****
EC: Economics
ECE: Early Childhood Education****
EGR: Engineering****
ENG: English
ENT: Entrepreneurship

FA: Film Arts
FR: French
FYE: First Year Experience
GE: General Engineering****
GEG: Geography
GEO: Geology
GS: General Science
HE: Health Education
HOR: Horticulture
HPE: Health and Physical Education
HS: Human Services****
HST: History
HUM: Humanities
JNL: Journalism
JPN: Japanese
MTH: Mathematics***
MUS: Music
NFM: Nutrition and Food Management
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
WR: Writing
WS: Women's Studies

*** A number below 100 indicates a support course, which is usually not transferable to a BA-granting institution.

****Many career and technical degrees have specific transfer articulation agreements; check with Counseling and Career Services.

Accounting

See BA–Business Administration.

AH

Allied Health

See also CH–Chemistry, DEN–Dental Assisting, EMT–Emergency Medical Technology, ES–Emergency Services, HE–Health Education, HM–Health Services Management, and NUR–Nursing

AH115 Healthcare Career Success Strategies

2 class hr/wk, 2 cr.

Presents an applied approach to the introduction of health careers. Includes health career options and preparation requirements, professional behavior, teamwork and leadership, customer service, introduction to legal and ethical concepts, societal issues, health promotion and wellness, preventive procedures, and safety practices. Integrates academic success strategies with healthcare applications. **F, W, Sp, Su**

APR

Apprenticeship

APR101 Trade Skills Fundamentals

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

Introduces the apprenticeship industry and the requirements necessary to enter an apprenticeship program. Includes employment and industry opportunities, and base construction and maintenance skills used in various crafts. Examines concepts in safety. Covers use of trade vocabulary, math, hand and power tools, blueprint reading, basic rigging, and basic principles of resume writing. **F, W, Sp, Su**

APR102 Advanced Trade Skills Fundamentals

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

Presents the second term of the Trade Skills Fundamentals courses. For registered youth apprentices in the construction trades. Covers CPR and First Aid, applied mathematics for limited maintenance electricians and millwrights, and print reading and construction drawings. **Prerequisite:** APR101, or recommendation of Registered Youth Apprenticeship Committee or approval of instructor. **Offered as needed**

APR104 TSF: Introduction to Plumbing Trade

3 class and 2 lab hr /wk, 4 cr.

Introduces basic plumbing practices and completion of minor repairs. Covers tools, safety, materials, codes, and plumbing career opportunities. Does not require previous knowledge or skill in plumbing; upon successful completion, students may acquire points for selection in the plumbing apprenticeship trade. **Su**

APR105A Electrical Level 1A

1 class and 2 lab hr /wk, 2 cr.

Covers hand bending, fasteners, and anchors; electrical theory; electrical test equipment; and introduces the National Electrical Code. **Prerequisite:** MTH020 or equivalent course as determined by instructor; or APR101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

APR105B Electrical Level 1B

1 class and 2 lab hr /wk, 2 cr.

Covers raceways, boxes, fittings, and conductors; introduces electrical blueprints, commercial and industrial wiring, and residential wiring. **Prerequisite:** MTH020 or equivalent course as determined by instructor; or APR101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

APR153A Electrician Apprenticeship Fundamentals

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

Provides training for the inside wire electrician apprentice. Includes trade history and concepts, trade math, basic electrical DC theory, and an introduction to the National Electrical Code. **Prerequisite:** MTH070 with a grade of C or better. **F**

APR153B Electrician Apprenticeship AC/DC Circuits

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

Provides training for the inside Wire Electrician apprentices. Covers mathematical formulas of equations, basic AC theory, use of test equipment, and applicable National Electrical Code (NEC). Includes safety procedures, first aid, and CPR. **Prerequisite:** APR153A or consent of instructor. **W**

APR153C Electrician Apprenticeship Measurements

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

Covers first year, Area II, inside Wireman Apprenticeship-Related Training. Includes direct current (DC) and alternating current (AC) electrical theory, practical residential wiring, and related National Electrical Code study. **Prerequisite:** APR153B. **Sp**

APR153D Electrician Apprenticeship Theory

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

Presents training for inside wire electrical apprentices. Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses and over-current devices, wire devices, hazardous locations, busways, residential calculation, and applicable National Electrical Code. **Prerequisite:** APR153C or consent of instructor. **F**

APR153E Electrician Apprenticeship Wiring and Print Reading

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

Provides training for inside Wire Electrical Apprentices. Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses and over-current devices, and wire devices. Covers hazardous locations, busways, residential calculation, and applicable National Electrical Code. **Prerequisite:** APR153D or consent of instructor. **W**

APR153F Electrician Apprenticeship Residential Installation

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

Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses, and over-current devices. Covers hazardous locations, busways, residential calculation, and application of National Electrical Code sections for inside wire electrician apprentices. **Prerequisite:** APR153E or consent of instructor. **Sp**

APR155A HVAC/R Apprenticeship Fundamentals

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

Focuses on general construction safety, use of hand and power tools, and construction math using whole numbers, common fractions, decimals, ratio proportion, percent, geometry, and math applications in measurement. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **F**

APR155B HVAC/R Soldering and Brazing

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

Focuses on soldering and brazing, bending and flaring tubing and steel piping. Introduces blueprints, reading mechanical and HVAC drawings, measuring, and drafting tools, refrigeration, matter and heat, compressors and condensers, evaporators, accessories, and minor components. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR155A or consent of instructor. **W**

APR155C HVAC/R Apprenticeship Introduction to Code

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

Focuses on code compliance, moist air properties, commercial and residential heat loss and gain, job requirement surveys, estimating installation costs, and system operating costs. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR155B or consent of instructor. **Sp**

APR155D HVAC/R Apprenticeship Trade Math

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

Focuses on using basic algebra and trigonometry functions for HVAC, freehand sketching, preparing sheet metal developments, building and roof construction details, insulation requirements, fluids, and pressure, and measuring temperature, fluids and pressure. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **F**

APR155E HVAC/R Apprenticeship Introduction to Refrigeration

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

Focuses on an introduction to air conditioners, including refrigerant types and properties, vapor compression cycle, refrigerant flow devices, refrigeration and A/C piping, cooling towers, spray ponds, material handling, refrigeration recovery, and system charging. Also covers fuses and circuit breakers, resistors, capacitors and inductors, conductors, insulation, conduit, electrical drawings, wiring diagrams, schematics, and single phase motors. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR155D or consent of instructor. **W**

APR155F HVAC/R Apprenticeship Electricity and Magnetism

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

Focuses on electricity and magnetism, basic electricity, alternating current, electrical symbols, low voltage circuits, communication skills, and codes and regulations. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR155E or consent of instructor. **Sp**

APR158A Plumber Apprenticeship Fundamentals

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

Introduces related training for plumber apprentices in trade theory and practices. Includes an introduction to the trade, basic math, related science, plumbing code, blueprint reading, first aid and CPR. **Prerequisite:** Indentured apprentice or consent of instructor. **F**

APR158B Plumber Apprenticeship Math and Print Reading

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

Continues related training for plumber apprentices to study theory and trade practices. Includes mathematics, installation practices, related plumbing code, health and safety, and blueprint reading and sketching. **Prerequisite:** APR158A or consent of instructor. **W**

APR158C Plumber Apprenticeship Pipe Sizing

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

Provides training for plumber apprentices in the interpretation of plumbing code theory and practice. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR158B or consent of instructor. **Sp**

APR158D Plumber Apprenticeship Basic Installation

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

Continues related training and trade practices for plumber apprentices. Includes installation and related codes, safety and CPR, welding and brazing, and blueprint reading. **F**

APR158E Plumber Apprenticeship Occupancy

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

Continues theory and trade practices for plumbing apprentices. Includes single occupancy installation and code, trade math calculations and related sources, properties of water, pressure and testing, and single occupancy. **Prerequisite:** APR158D or consent of instructor. **W**

APR158F Plumber Apprenticeship Advanced Waste Water Systems

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

Covers theory and trade practices for plumber apprentices. Includes installation standards (I.S.) and reviews. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR158E or consent of instructor. **Sp**

APR166A Sheet Metal Apprenticeship Fundamentals

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes introduction to the trade, terminology, tools, mathematics, safety, fasteners, rigging, and hoisting. **Prerequisite:** Indentured apprentice or permission of instructor. **F**

APR166B Sheet Metal Apprenticeship Fundamentals of Drawings

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes elements of blueprint reading, specifications, and application of SMACNA standard submittals, and mechanical codes. **Prerequisite:** APR166A. **W**

APR166C Sheet Metal Apprenticeship Fundamentals of Layout

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

Presents related training consistent with the minimum skill requirements of the sheet metal trade. Includes steel and other metals, principles of layout, sheetmetal processes, and introduction to fabrication. **Prerequisite:** APR166B. **Sp**

APR166D Sheet Metal Apprenticeship Basic Installation

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes parallel line development, hangers and supports, and insulation. **Prerequisite:** APR166C. **F**

APR166E Sheet Metal Apprenticeship Architectural Systems

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes architectural sheet metal, roof drainage systems, hoods, and ventilators. **Prerequisite:** APR166D. **W**

APR253G Electrician Apprenticeship Safety and Code

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

Provides training for Inside Wire Electrical Apprentices. Covers applied electrical theory, residential and commercial wiring practices, busways, motor fundamentals application, and the National Electrical Code. **Prerequisite:** APR153F or consent of instructor. **F**

APR253H Electrician Apprenticeship Motors and Controls

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

Offers training for inside wire electrical apprentices. Covers motors, generators, controls, and applicable national electrical code. **Prerequisite:** APR253G or consent of instructor. **W**

APR253I Electrician Apprenticeship Fiber Optics

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

Covers applied electrical theory, residential and commercial wiring practices, busways, and motor fundamentals. Applies National Electrical Code for inside wire electrician apprentices. **Prerequisite:** APR253H or consent of instructor. **Sp**

APR253J Electrician Apprenticeship Math/Test Equipment

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

Offers related training for inside wire electrical apprentices. Includes trade history, safety and first aid, blueprint reading, commercial and residential calculations, wiring methods, related theory, and applicable National Electrical Code. **Prerequisite:** APR253I. **F**

APR253K Electrician Apprenticeship Voltage

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

Offers training for inside wire electrician apprentices. Includes a thorough review of the National Electrical Code publications. Focuses on theory and application of motor controls, solid state fundamentals, special termination, layout, hazardous locations, and transformer locations. **Prerequisite:** APR253J or consent of instructor. **W**

APR253L Electrician Apprenticeship Code and Exam Preparation

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

Covers a thorough review of the National Electrical Code books for Inside Wire Electrician Apprentices. Includes theory and application of motor controls, solid state fundamentals, special termination, layout, hazardous locations and transformer locations. **Prerequisite:** APR253K or consent of instructor. **Sp**

APR255G HVAC/R Apprenticeship Fuels

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

Focuses on fuels and combustion, gas and oil-fired heating equipment, combustion air and venting, electric resistance heating, air-source pumps, and water-source heat pump systems. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR155F or consent of instructor. **F**

APR255H HVAC/R Apprenticeship Residential Air Distribution

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

Focuses on residential air distribution systems and concepts, commercial air distribution systems, standards and codes for ducts and insulation, variable air volume systems, testing and balancing air distribution systems, water treatment and hydronic systems, dual purpose water heater installations, hydronic radiant heating (HRH), and hydronic system start-up and balancing. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255G or consent of instructor. **W**

APR255I HVAC/R Apprenticeship Welding

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

Focuses on welding fundamentals and safety, gas and arc welding techniques, hydronic systems and controls, steam systems, and communicating with customers. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255H or consent of instructor. **Sp**

APR255J HVAC/R Apprenticeship Refrigeration Fundamentals

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

Focuses on commercial refrigeration applications, compressors, condensers, installation and start-up, service and troubleshooting, plans and specifications, and effective communications and record keeping. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255I. **F**

APR255K HVAC/R Apprenticeship Troubleshooting

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

Focuses on troubleshooting, mechanical problems, heat pump installations and start up, pneumatic controls, and control valve components and applications. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255J. **W**

APR255L HVAC/R Apprenticeship Equipment/Room Layout

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

Focuses on moving HVAC equipment, equipment room layout, outdoor equipment location, troubleshooting techniques, and A/C systems and components. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255K. **Sp**

APR258G Plumber Apprenticeship Residential Installation

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

Continues training for plumber apprentices in trade theory and practices. Includes installation of residential and commercial fixtures and appliances, use of mathematics related to gas and pipe sizing codes, related science and blueprint reading. **Prerequisite:** APR158F. **F**

APR258H Plumber Apprenticeship Commercial Installation

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

Continues related training for plumber apprentices in trade theory and practices. Includes commercial installation practices, related applied math and science, OSHA, safety, CPR, and Uniform Plumbing Code. **Prerequisite:** APR258G or consent of instructor. **W**

APR258I Plumber Apprenticeship Code

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

Covers theory and trade practices for plumber apprentices. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR258H or consent of instructor. **Sp**

APR258J Plumber Apprenticeship Industrial Installation

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

Continues training for plumber apprentices in trade theory and practices. Includes installation practices emphasizing industrial and institutional systems and service, blueprints of drainage and venting and special waste systems, mathematics of volume and pipe sizing, safety and sanitation, and applicable uniform plumbing codes. **Prerequisite:** APR258I. **F**

APR258K Plumber Apprenticeship Basic Waste Water Systems

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

Continues training for plumber apprentices in trade theory and practices. Covers water supply protection, breaker valve assembly, heating systems, science of hydraulics, pumps and system performance and maintenance, shop and isometric drawings of systems and special components, and Uniform Plumbing Code. Includes an examination review. **Prerequisite:** APR258J. **W**

APR258L Plumber Apprenticeship Code and Test Prep

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

Covers theory and trade practices for plumber apprentices. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR258K. **Sp**

APR266F Sheet Metal Apprenticeship Applied Math

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

Present related training material consistent with the minimum skill requirements of the sheet metal trade. Includes shop production and organization, estimating, field measuring and fitting, louvers, dampers, and access doors. **Prerequisite:** APR166E. **F**

APR266G Sheet Metal Apprenticeship Triangulation and Fiberglass

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes fabrication, triangulation, fiberglass and PVC ducts. **Prerequisite:** APR266F. **W**

APR266H Sheet Metal Apprenticeship Calculator Layout

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

Focuses on the use of the hand-held calculator to perform mathematical algebraic and trigonometric functions, as they apply to the sheet metal layout concepts of HVAC fittings. **Prerequisite:** APR266G. **Sp**

APR266I Sheet Metal Apprenticeship Radial Line Development

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

Presents related training materials consistent with the minimum skill requirements of the sheet metal trade. Includes radial line development and fume and exhaust system design. **Prerequisite:** APR266H. **F**

APR266J Sheet Metal Apprenticeship Duct Sizing

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

Presents related training materials consistent with the minimum skill requirements of the sheet metal trade. Includes air balance, duct design fundamentals, duct standards, associated equipment and refrigeration. **Prerequisite:** APR266I. **W**

APR266K Sheet Metal Apprenticeship Job Site Management

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

Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes job site organization, time management, goal setting, dispute and/or conflict resolution, organizational techniques, and goals. **Prerequisite:** APR266J. **Sp**

APR280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

ART

Art

See also VC—Visual Communications.

ART101 Understanding Art

4 class hr/wk, 4 cr.

Introduces approaches to viewing, understanding, and discussing the visual arts. Covers formal, stylistic, content, and meaning-based analysis. Explores the relationship between the social and artistic construction of reality. **Prerequisite:** Placement into WR115; or consent of instructor. **F, W, Sp, Su; CL**

ART115, 116, 117 Basic Design

2 class and 4 lab hr /wk, 4 cr. each

Introduces the 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 studies three-dimensional design. ART115 and 116; **F, W, Sp, Su.** ART117; **F, Sp**

ART118 Digital Design and Color

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

Applies the basic principles of design, visual perception, and organization of visual elements in solving communication design problems. Focuses on digital design and color modes. **Prerequisite:** ART115 and VC139, both with a grade of C or better; or consent of instructor. **Sp**

ART131 Introduction to Drawing 1

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

Provides instruction in objective observational drawing skills designed for the beginner. Offers lectures, demonstrations, and training in traditional problem-solving techniques, composition and media. Introduces art concepts, vocabulary and skills to critically analyze drawings. **F, W, Sp, Su**

ART132 Introduction to Drawing 2

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

Provides lectures, demonstrations and continued individualized training in objective drawing begun in ART131, and introduces subjective drawing. Emphasizes composition and introduces additional drawing media and image sources. Discusses art concepts, vocabulary, and skills to critically analyze drawings. **Prerequisite:** ART131 or consent of instructor based on portfolio review. **F, W, Sp, Su**

ART141 Introduction to Mural Painting

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

Introduces the historical background of mural making from its origins in Mexico to current community mural movements in the United States. Identifies a wide range of mural styles and trends. Considers practical information, skills and techniques. Applies this base knowledge to formulate and evaluate a personal approach to mural art, develop a mural proposal, and create a mural project. Constructs, along with the instructor, a local mural project through research, theme development, and execution with pertinent mural techniques. Recommended **Prerequisite:** ART115, ART116, and ART131, each with a grade of C or better. **W, Sp**

ART154 Pottery 1-Handbuilding

6 lab hr/wk, 3 cr.

Introduces handbuilding ceramic objects. Includes basic form and design considerations as well as pinch, coil, slab, press mold, decoration, and glazing techniques. Emphasizes craftsmanship through slide lectures, demonstrations, and studio projects. **F, W, Sp, Su**

ART155 Pottery 2-Wheel Throwing

6 lab hr/wk, 3 cr.

Introduces producing pottery using the potter's wheel. Includes forming, trimming, decorating, glazing, and firing processes, as well as visual and functional form considerations. Emphasizes craftsmanship through slide lectures, demonstrations, and studio projects. **F, W, Sp, Su**

ART156 Pottery 3- Intermediate Techniques

6 lab hr/wk, 3 cr.

Expands on basic wheelthrowing skills through a series of intermediate projects. Includes producing and testing glazes, lidded containers, teapots, combined forms, altered forms, kiln theory and design, and alternative firing techniques. **Prerequisite:** ART154 and ART155, or consent of instructor. **Sp, Offered as needed**

ART204 Introduction to Art History

4 class hr/wk, 4 cr.

Explores visual art in the Western tradition: Prehistoric to Early Byzantine period: 40,000 BCE to 726 CE. **Prerequisite:** WR115 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART205 Introduction to Art History

4 class hr/wk, 4 cr.

Explores visual art in the Western tradition: Early Medieval through Rococo: 500-1789 CE. **Prerequisite:** WR115 with a grade of C or better; or consent of instructor. **F, W, Sp**

ART206 Introduction to Art History

4 class hr/wk, 4 cr.

Explores visual art in the Western tradition from Neo-Classicism to the Twentieth Century. **Prerequisite:** WR115 with a grade of C or better; or consent of instructor. **W, Sp**

ART210 Topics in Art History

3 class hr/wk, 3 cr.

Focuses on the history of a specific art historical topic. Topics will vary and may include: historical styles/periods, genres, women artists, media. **Offered as needed**

ART221 Graphic Design 1: Icons and Symbols

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

Applies the principles and elements of design to the process of creating solutions to graphic design challenges with an emphasis on icons and symbols. **Prerequisite:** ART115, ART116, and ART131; and demonstrated ability to work with vector graphic software; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

ART222 Graphic Design 2: Logo Design

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

Builds on the concepts learned in ART221 with an emphasis on logo design and branding. **Prerequisite:** ART221 with a grade of C or better; or consent of instructor. **W**

ART223 Graphic Design 3: Package Design

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

Builds on the concepts learned in ART221 and ART222. Continues exploration of graphic design with advanced projects emphasizing package design. **Prerequisite:** ART222 with a grade of C or better; or consent of instructor. **Sp**

ART224 Type Design 1

3 class and 2 lab hr /wk, 4 cr.

Introduces the study of typography and its importance in contemporary culture and in the design of visual communications. **Prerequisite:** VC111 and VC114, both with a grade of C or better; or consent of instructor. **F**

ART225 Type Design 2

3 class and 2 lab hr /wk, 4 cr.

Continues the study of typography as a design element in visual communications. **Prerequisite:** ART224 with a grade of C or better; or consent of instructor. **Sp**

ART234 Figure Drawing 1**2 class and 4 lab hr /wk, 4 cr.**

Offers lectures, demonstrations, and individualized training in representational drawing of the human figure. Continues skill development begun in ART 131 by applying them to the challenges of drawing the human form. Emphasizes analytical problem solving techniques, drawing methods, anatomy, proportion, and composition. Discusses art concepts, vocabulary, and skills to critically analyze drawings. **Prerequisite:** ART131 or consent of instructor based on portfolio review. **F, W, Sp, Su**

ART235 Figure Drawing 2**2 class and 4 lab hr /wk, 4 cr.**

Offers lectures, demonstrations, and continued individualized training in representational figure drawing skills begun in ART131 and ART234. Emphasizes anatomy, proportion, composition, and analytical skills. Introduces additional media, subjective or expressive drawing approaches, and vocabulary that builds skills in critically analyzing drawings. **Prerequisite:** ART131 and ART234, or consent of instructor based on portfolio review. **F, W, Sp, Su**

ART237 Photo Illustration**2 class and 4 lab hr /wk, 4 cr.**

Adds digital imaging and manipulation to traditional photographic skills in the study of photo illustration for print or web design. **Prerequisite:** ART265 and VC130 or equivalent. **W**

ART238 Introduction to Illustration**2 class and 2 lab hr /wk, 3 cr.**

Introduces traditional illustration techniques. Course may be repeated for a maximum of six credits. **Prerequisite:** ART131 preferred. **Offered as needed**

ART239 Introduction to Digital Illustration**2 class and 2 lab hr /wk, 3 cr.**

Introduces the basics of digital illustration. Course may be repeated for a maximum of six credits. **Prerequisite:** ART221, or VC139, or demonstrated experience in vector graphics software and PhotoShop. **W**

ART240 Advanced Digital Illustration**2 class and 2 lab hr /wk, 3 cr.**

Offers advanced instruction in techniques and content of digital illustration. Course may be repeated for a total of six credits. **Prerequisite:** ART239, or consent of instructor. **Sp**

ART242 Mosaics**6 lab hr/wk, 3 cr.**

Introduces basic techniques and construction methods used in the creation of mosaics. Presents historical and contemporary perspectives and analyzes them in relation to personal expression. Develops original designs through a careful examination of image generation and revision to include subject matter, and design elements. Focuses on attention to detail and explores quality of craftsmanship through materials such as glazed and unglazed ceramic tiles, vitreous glass, found objects (recycle and reuse), and stained glass. Includes assessment of work through regular critiques. **Prerequisite:** ART115, ART116, ART131, or ART241. ART244 is recommended. **Su, Offered as needed**

ART244 Stained Glass**6 lab hr/wk, 3 cr.**

Introduces approaches to stained glass art using either lead came or copper foil. Offers lectures, demonstrations, and training in traditional techniques of pattern making, glass cutting, assembling, soldering, and puttying. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **Prerequisite:** ART115 and ART116 recommended, each with a grade of C or better. **F, W, Sp, Su**

ART245 Intermediate Stained Glass**6 lab hr/wk, 3 cr.**

Provides individual assistance for the intermediate level student. Students will meet and consult with the instructor and complete project(s) which are significantly original, challenging and complex. Students will learn special techniques such as sand-blasting, fusing, and slumping. **Prerequisite:** ART244 or equivalent; ART115 and ART116 recommended; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

ART246 Advanced Stained Glass**6 lab hr/wk, 3 cr.**

Continues ART245. Projects will reflect an in-depth investigation of sources, including personal influences, and exhibit technical mastery of the medium. **Prerequisite:** ART244 and ART245; or consent of instructor. ART115 and ART116 recommended. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

ART247 Glass Fusing and Slumping 1**6 lab hr/wk, 3 cr.**

Introduces technical issues in flat fusing and forming for using an electric kiln and refractory molds. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **Prerequisite:** ART115 and ART116 recommended. **F, W, Sp, Su**

ART247B Glass Fusing and Slumping-Intermediate**6 lab hr/wk, 3 cr.**

Provides intermediate skills and technical information on using an electric kiln and high-temperature molds to flat-fuse and form glass. **Prerequisite:** ART247 and at least one of the following studio art classes: ART244, 245, or 246; ART291, 292, or 293; ART154. ART115 and ART116 recommended. **F, W, Sp, Su**

ART247C Glass Fusing and Slumping-Advanced**6 lab hr/wk, 3 cr.**

Explores using glass as the primary material of expression through the use of electric kilns and molds. Incorporates techniques such as Basque relief, mold making, inclusions, pattern bars, glass raking, and color layering. **Prerequisite:** ART247B, or consent of instructor. **F, W, Sp, Su**

ART254 Pottery 4: Low-Fire Ceramics**2 class and 3 lab hr /wk, 3 cr.**

Introduces low-fire ceramic materials, including both low-tech and high-tech application and processes. **Prerequisite:** ART154, ART155, ART156, or consent of instructor. **Offered as needed**

ART256 Art as a Profession**3 class hr/wk, 3 cr.**

Provides visual artists with the professional and business skills necessary to succeed in their own art business. Brings together marketing, promotion, presentation, employment, and education related topics to establish an understanding of the business aspects involved in being a successful visual artist. **Prerequisite:** Completion of a studio art class or experience with studio art, or consent of instructor. **Sp, Su**

ART257 Photography as a Profession**4 class hr/wk, 4 cr.**

Develops the professional skills necessary to succeed in a photography business. Covers business records, marketing, promotion, employment skills, and education-related topics to establish an understanding of the career and business aspects involved in being a successful photographer. **Prerequisite:** Co-enrollment with, or successful completion of ART268. **Sp**

ART261 General Photography**2 class and 4 lab hr /wk, 4 cr.**

Introduces 35mm black and white photography. Includes the history of contemporary photography, use of camera equipment, correct exposure calibrations, film processing, darkroom techniques, printing enlargements, and presentation of prints. **Offered as needed**

ART261D General Photography: Digital

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

Introduces digital photography camera handling, editing, and printing of digital images. Covers important photographic themes and composition. **Offered as needed**

ART262 Intermediate Photography
2 class and 4 lab hr /wk, 4 cr.

Introduces technical photography including studio lighting, for portraits and product work, color, photojournalism and art direction. **Prerequisite:** ART261 or ART265. **Sp, Offered as needed**

ART263 Photography: Special Topics
2 class and 4 lab hr /wk, 4 cr.

Emphasizes the freedom to experiment with photographic techniques. May include darkroom work, infrared black and white, toning techniques, compositing images and aesthetic issues. **Prerequisite:** ART261 or ART265 or consent of instructor. **Offered as needed**

ART265 Digital Photography
2 class and 4 lab hr /wk, 4 cr.

Investigates digital photography stressing competent SLR camera handling. Emphasizes exposure control, digital management, image editing, printing and presentation. Examines important photographic themes, lighting and composition. **F, W, Offered as needed**

ART266 Studio Photography
2 class and 4 lab hr /wk, 4 cr.

Introduces studio lighting for portraits and product photography, color, and art direction. **Prerequisite:** ART265. **Sp**

ART267 Portrait Photography
2 class and 4 lab hr /wk, 4 cr.

Explores a variety of techniques and approaches to portraiture. Includes making formal, informal, environmental, and group portraits using studio lighting, location lighting and available light. Incorporates digital printing and professional practices. **Prerequisite:** ART266 or consent of instructor. **W**

ART268 Documentary Photography
4 class hr/wk, 4 cr.

Covers photographic concepts and aesthetics of documentary photography. Includes the development of a photo essay; storytelling through an edited series of images with effectively-captioned images and well crafted written essays that support and enhance documentary photo projects. **Prerequisite:** ART266 or consent of instructor. **Sp**

ART270 Printmaking: Screen Printing 1
6 lab hr/wk, 3 cr.

Introduces the methods, materials, and techniques of silkscreen printing, including the photo stencil process and pulling prints. Emphasizes design approaches drawing on historical and contemporary examples, and development of personal imagery. Uses principles of design to create and critically analyze works in progress. **Prerequisite:** ART115, ART131, or ART261; or consent of instructor. (Prerequisite course must be completed with a grade of C or better.) **F, W, Sp, Su**

ART271 Printmaking: Photo Etching
6 lab hr/wk, 3 cr.

Introduces the fundamental techniques used in making etchings as fine art prints. Includes contemporary photo processes, development of personal imagery, and technical understanding of the printing process. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **Prerequisite:** ART131, ART115, or ART261; or consent of instructor. (Prerequisite course must be completed with a grade of C or better.) **F, Sp**

ART272 Printmaking: Woodcuts and Linocuts
6 lab hr/wk, 3 cr.

Offers studio experience and instruction in techniques used in making woodcuts and linoleum block prints. Emphasizes studio practice, experimentation, and development of style as a means of personal expression. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **Prerequisite:** ART131, ART115, or ART261; or consent of instructor. (Prerequisite course must be completed with a grade of C or better.) **F, Sp**

ART273 Printmaking: Monoprints
6 lab hr/wk, 3 cr.

Offers studio experience and instruction in techniques used in making monoprints and monotypes as fine art prints. Introduces studio practice, experimentation, and development of style as a means of personal expression. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **F, Sp**

ART274 Printmaking: Screen Printing 2
6 lab hr/wk, 3 cr.

Continues skill building in techniques of silkscreen printing introduced in ART270, including photographic processes. **Prerequisite:** ART270. **F, W, Sp, Su**

ART275 Printmaking: Screen Printing 3
6 lab hr/wk, 3 cr.

Offers 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. **F, W, Sp, Su**

ART281 Painting 1

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

Introduces traditional approaches to and techniques of representational painting. Includes introduction to materials, color theory, historical perspectives, demonstrations, critiques, slide lectures, field trips, research, reading, and studio time for beginning painters who have strong fundamental drawing skills. **Prerequisite:** ART131 with a grade of C or better; or consent of instructor based upon demonstration in drawing. ART115 and ART116 recommended. **F, W, Sp; CL**

ART281B Painting 2

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

Emphasizes further skill development as paintings are executed with a greater degree of intention, gracefulness and accuracy. Focuses on discovering inventive solutions through content development and disciplined studio practice. Stresses critical analysis and revision. Explores historical and contemporary approaches in relation to personal work. Includes demonstrations, critiques, slide lectures, field trips, video, research, readings, and studio time.

Prerequisite: ART131, ART281, or consent of instructor based upon demonstration of fundamental painting and drawing skills. ART115 and ART116 recommended. **W, Sp; CL**

ART281C Painting 3

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

Execute a variety of painting techniques with a greater degree of intention, gracefulness and accuracy. Emphasizes individual expression and thematic development.

Explores the larger context of historical and contemporary painting processes, materials and genres is explored in relation to personal work and philosophy. Stresses written and oral critical analysis. For advanced students with a strong foundation in painting and drawing and an ability to work independently. **Prerequisite:** ART131, ART281, ART281B; or consent of instructor based upon demonstration of intermediate painting and foundation drawing skills. ART115 and ART116 recommended. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp; CL**

ART282 Landscape Painting

6 lab hr/wk, 3 cr.

Introduces fundamental approaches and techniques of painting, focusing on elements affiliated with landscape painting. Includes introduction to materials, color theory, illusory depth devices, and historical and contemporary approaches. Engages both beginning and intermediate painters who have strong fundamental drawing skills.

Prerequisite: ART131 or consent of instructor; ART115 and ART116 are recommended.

Offered alternate summers

ART284 Watercolor

6 lab hr/wk, 3 cr.

Introduces technical issues in watercolor as a medium and its potential for personal expression. Incorporates composition, color theory and observation of detail. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in progress. **Prerequisite:**

ART131 with a grade of C or better; or consent of instructor based upon demonstrated skill in drawing. ART115 and ART116 recommended. **Offered alternate summers**

ART285 Intermediate Watercolor

6 lab hr/wk, 3 cr.

Emphasizes skill building and technical control of the watercolor medium. **Prerequisite:** ART284 or consent of instructor. **Offered alternate summers**

ART286 Advanced Watercolor

6 lab hr/wk, 3 cr.

Emphasizes enhanced skill development and exploration of watercolor as a creative medium. **Prerequisite:** ART284 and ART285, or consent of instructor. **Offered alternate summers**

ART291 Beginning Sculpture

6 lab hr/wk, 3 cr.

Introduces the use of materials, tools, and methods of sculpture. Explores the three-dimensional form and its potential for personal expression. Emphasizes design approaches, drawing on historical and contemporary examples. Uses principles of design to create and critically analyze works in process. Recommended **Prerequisite:**

ART117 with a grade of C or better. **W, Sp**

ART292 Ceramic Sculpture

6 lab hr/wk, 3 cr.

Introduces the characteristics and potential of clay as a sculptural material. Recommended **Prerequisite:** ART117 with a grade of C or better. **W**

ART293 Wax to Bronze Sculpture

6 lab hr/wk, 3 cr.

Introduces the casting and finishing of bronze sculpture through the lost wax process using ceramic shell technologies. Recommended **Prerequisite:** ART117 with a grade of C or better. **Sp**

ASL

American Sign Language

ASL111 First Year American Sign Language, Term 1

4 class hr/wk, 4 cr.

Introduces American Sign Language (ASL), supported by expressive and receptive readiness activities, finger-spelling techniques, vocabulary, grammar, and guided communication. Covers Deaf Culture and community as well as historical aspects through reading, writing, and short signed or video-recorded conversations. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use internet resources for coursework. **Prerequisite:** Internet skills required. **F, W, Sp, Su**

ASL112 First Year American Sign Language, Term 2

4 class hr/wk, 4 cr.

Continues study in American Sign Language (ASL), supported by vocabulary, grammar, and guided conversation. Introduces various sign system and methods of communication used by deaf, deaf-blind, non-signing deaf, hard-of-hearing and late-deafened individuals. Discusses information about various perspectives of these community members. Presents Deaf Culture and community as well as historical aspects through reading, writing, and short signed or video-recorded conversations/presentations. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use internet resources for coursework. **Prerequisite:** A grade of C or better in ASL111 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skills/knowledge requirements; internet skills required. **W, Sp, Su, Offered as needed**

ASL113 First Year American Sign Language, Term 3

4 class hr/wk, 4 cr.

Continues American Sign Language (ASL), supported by vocabulary, grammar, and active communication. Presents Deaf Culture and community as well as historical aspects through reading, writing, and short signed or video-recorded presentations. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use internet resources for coursework. **Prerequisite:** A grade of C or better in ASL112 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **Sp, Su, Offered as needed**

ASL211 Second Year American Sign Language, Term 1

4 class hr/wk, 4 cr.

Continues development of expressive and receptive skills learned in American Sign Language (ASL) first year. Expands vocabulary and introduces forms of ASL literature. Continues study in complex grammatical structures. Explores issues pertaining to the Deaf Community and multiculturalism, not limited to ethnic differences but also other perspectives including Deaf with other disabilities and gay, lesbian and transgender cultural issues. Uses ASL for classroom interaction and instruction. Course has an online component that requires students to use internet resources for coursework. **Prerequisite:** A grade of C or better in ASL113 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **F, Offered as needed**

ASL212 Second Year American Sign Language, Term 2

4 class hr/wk, 4 cr.

Continues development of expressive and receptive skills learned in ASL211. Expands vocabulary and continues study in forms of ASL literature. Also continues complex grammatical structures. Explores concepts of linguistics as it relates to variations in ASL. Emphasizes current research as well as field work. Introduces basic transcription and analysis of signing from video/digital as well as interviews. Uses ASL for classroom interaction and instruction. This course has an online component that requires students to use internet resources for coursework. **Prerequisite:** A grade of C or better in ASL211 within last year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **W, Offered as needed**

ASL213 Second Year American Sign Language, Term 3

4 class hr/wk, 4 cr.

Continues development of expressive and receptive skills learned in ASL212. Expands vocabulary and continues study and performance of forms of American Sign Language (ASL) literature. Continues to analyze complex grammatical structures. Explores concepts of linguistics as it relates to variations in ASL. Emphasizes current research as well as field work. Performs more advanced transcription and analysis of signing from video/digital as well as interviews. Uses ASL for classroom interaction and instruction. This course has an online component that requires students to use internet resources for coursework. **Prerequisite:** A grade of C or better in ASL212, or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **Sp, Offered as needed**

Astronomy

See PH-Physics

ATH

Anthropology

ATH101 Human Evolution

4 class hr/wk, 4 cr.

Studies the processes of the biocultural evolution of humans with an emphasis on the evolutionary theory from several belief systems. Include Mendelian and population genetics, classification of primates (human and non-human), fossil evidence for human evolution, the study of biological diversity in contemporary human populations, and the biological and cultural definition of race. **F, W, Sp, Su; CL**

ATH102 Archaeology

4 class hr/wk, 4 cr.

Covers basic archaeological method and theory and reviews the techniques used for investigating the past. Focuses on the interpretation and assessment of archaeological data. Includes the development of technology and food production, the origins of complex societies and the resulting social inequalities, and the evolution of cultural systems. Includes some of the major contributions of archaeology and discusses the relevance of archaeology to everyday life. Selection of specific societies and sites for study may vary according to each instructor's expertise. **F, W, Sp, Su; CL**

ATH103 Introduction to Cultural Anthropology

4 class hr/wk, 4 cr.

Surveys the field of cultural anthropology and its focus on the human patterns of behaviors, thoughts, and feelings. Introduces methodology for studying human socio-cultural adaptations. Includes the topics of major cross-cultural studies with a focus on language, adaptation, economics, marriage, kinship, gender, political organization, stratification, and religion. Examines the process of culture change and the application of cultural anthropology to practical society problems. **F, W, Sp, Su; CL**

ATH180 The Nature of Language

3 class hr/wk, 3 cr.

Introduces 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**

ATH212 Aztec Civilization/La Civilizacion Azteca

3 class hr/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 hr/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**

Offered as needed

ATH215 Introduction to Early Greek and Aegean Archeology

3 class hr/wk, 3 cr.

Explores early Greek culture (10,000 BC - 1,000 BC) with an emphasis on the Bronze Age and the islands of the Aegean. Includes trade, exploitation of natural resources, material culture elaboration, and the development of maritime orientation and marine based faunal ritualization and cosmologies. Also covers the role of Crete and other Aegean islands in trade and craft/specialty food production, and the relationships with Egypt, Syria, and the Mediterranean world. **Offered as needed**

Offered as needed

ATH231 Native American Studies

4 class hr/wk, 4 cr.

Focuses on Native American cultures and their ancestors in prehistoric, historic, and contemporary contexts. Presents the history of anthropological research and surveys languages and culture areas of Native North America. Evaluates differences in tribal strategies adapting to Europeans while struggling to retain tribal sovereignty. Covers native identity, intertribal culture, and contemporary issues. **F, W, Sp, Su**

AUM

Automotive Technology

AUM151 Basic Automotive Engines

3 class and 6 lab hr /wk, 5 cr.

Covers construction, working principles, and methods of servicing a gasoline and diesel internal combustion engine. Stresses proper use of tools, torque wrenches, micrometers and equipment. Discusses theory and operation of the makeup of simple and complex machines involving levers, cams, inertia and momentum. **F**

AUM152 Automotive Machine Shop

2 class and 6 lab hr /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, AUM158, and AUM184; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

AUM157 Automotive Brake Systems

3 class and 7 lab hr /wk, 6 cr.

Covers the theory and principles of automotive brake systems. Includes service diagnosis and repair of disc and drum brakes, manual and power brakes, brake system controls, indicating devices, safety, and A.B.S. and traction control system diagnosis. **Prerequisite:** AUM151, AUM158, and AUM184; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

AUM158 Automotive Steering and Suspension

2 class and 8 lab hr /wk, 5 cr.

Presents the principles of automotive wheel, steering, and suspension systems. Includes front and rear suspension alignment, theory of suspension operation, and wheel service and balance. Applies accepted repair procedures on automotive suspension. **F**

AUM159 Automotive Chassis Systems
2 class and 7 lab hr /wk, 5 cr.

Presents the theory, operation, and service of automotive chassis systems, including steering, suspension, and brakes. W
AUM161 Manual Drive Train and Axles 1
3 class and 6 lab hr /wk, 5 cr.
Introduces the theory and service of automotive power trains including: 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. Examines friction, gear reduction, and torque multiplication through use of gear sets, inertia, and momentum, as they apply to power train components. **Prerequisite:** AUM152, AUM158 and AUM168; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)
Sp

AUM168 Automotive Electrical Systems 1

3 class and 6 lab hr /wk, 5 cr.
Introduces automotive electricity and electronics systems. Includes an overview of automotive circuits. **Prerequisite:** AUM151 and AUM158, both with a grade of C or better; or consent of instructor. W, Sp
AUM176 Automotive Electrical Systems 2
3 class and 6 lab hr /wk, 5 cr.
Continues DC electrical systems for the repair and service of automotive vehicles. Focuses on body electrical systems and troubleshooting of individual systems. **Prerequisite:** AUM152, AUM168, and AUM157; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)
Sp

AUM184 Automotive Materials and Resources
2 lab hr/wk, 1 cr.

Covers various service manuals, service information, labor calculation and electronic manual systems. Focuses on the use of computerized manual systems commonly used in the automotive repair industry. F, W, Sp

AUM185A Automotive Machining Fundamentals

2 class and 3 lab hr /wk, 3 cr.
Introduces the fundamentals of automotive machine processes and automotive fasteners, presses, pedestal grinders, arbor presses, and basic layout and tool sharpening. Includes use of appropriate charts and tables including decimal equivalent and drill and tap selection with speed and feed calculations. F

AUM186A Automotive Lathe Fundamentals

2 class and 3 lab hr /wk, 3 cr.
Introduces turning operations as related to automotive machining with emphasis on work and tool holding methods. Covers related hole-making process, facing, tapping, grooving, and parting. **Prerequisite:** AUM187A with a grade of C or better; or consent of instructor. Sp

AUM187A Automotive Milling Machine Processes

2 class and 3 lab hr /wk, 3 cr.
Covers basic milling processes, work-holding methods, cutter identification, selection and use, speeds and feeds, adapters, tool holders and application. Includes operation of milling machines as applied to typical automotive machining operations. **Prerequisite:** AUM185A or consent of instructor. W

AUM188 Automotive Machine Shop–Upper Engine

1 class and 4 lab hr /wk, 3 cr.
Introduces theory and application used in automotive machining procedures. Includes use of precision measuring tools, torque wrenches, valve and seat grinding, valve guide and seat repairs, resurfacing, valve springs and cylinder head assembly. F

AUM189 Automotive Machine Shop–Lower Engine

1 class and 4 lab hr /wk, 3 cr.
Introduces the theory and application used in automotive machining procedures. Emphasizes precision measuring tools, torque wrenches, cylinder block boring and honing, cylinder block resurfacing, mainline checks and repairs, and connecting rod reconditioning. W

AUM190 Automotive Machine Shop–Engine Assembly

1 class and 4 lab hr /wk, 3 cr.
Covers theory and application in automotive machining procedures. Includes use of precision measuring tools, torque wrenches, camshaft timing checks, clearancing, blueprint measurement, and engine assembly and sealing techniques. Sp

AUM253 Automotive Engines 2

1 class and 8 lab hr /wk, 4 cr.
Focuses on repair and service of automotive internal combustion engines. Stresses speed and accuracy of diagnosis and repair. Builds on prior training. **Prerequisite:** AUM267, AUM282, and AUM286; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) Sp

AUM262 Manual Drive Train and Axles 2

2 class and 6 lab hr /wk, 4 cr.
Continues the theory and service of automotive drive trains, concentrating on the diagnosis and repair of all components. Includes practical application of diagnosis, service, and repair on clutches, drive shafts, universal joints, front-wheel drive axles, manual transmissions, manual transaxles, rear axles, differentials, and four-wheel drive transfer cases. **Prerequisite:** AUM161 and AUM176, both with a grade of C or better; or consent of instructor. F

AUM263 Automatic Transmissions and Transaxles 1

3 class and 6 lab hr /wk, 5 cr.
Introduces the fundamentals of automatic transmission operation. Explains methods of gear change, power flows, and basic hydraulic principles used in automatic transmissions. Emphasizes the service and overhaul of automatic transmissions. **Prerequisite:** AUM161 and AUM176, both with a grade of C or better; or consent of instructor. F

AUM266 Basic Fuel Systems

3 class and 6 lab hr /wk, 5 cr.
Covers basic principles of fuel and induction systems. Includes the basics of pressure differential, the Venturi principle, and fuel systems for gasoline and diesel engines. Examines basic carburetor overhaul, service, and adjustment. Introduces fuel injection operation and testing, both gas and diesel. Explores basic emission controls. **Prerequisite:** AUM161 and AUM176, both with a grade of C or better; or consent of instructor. F

AUM267 Advanced Fuel Systems

3 class and 6 lab hr /wk, 5 cr.
Focuses on automotive fuel injection and ignition systems involving computer functions, inputs, commands, system diagnosis, causes of emissions, and testing of related systems. Covers turbocharging and supercharging. **Prerequisite:** AUM262, AUM263, AUM266, and AUM277; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) W

AUM273 Automatic Transmissions and Transaxles 2

1 class and 8 lab hr /wk, 4 cr.
Focuses on diagnosis, repair, and service of a vehicle's powertrain with emphasis on automatic transmission and automotive transaxles. Includes electronic transmission diagnostics. Emphasizes speed and accuracy in diagnosis and repair. Builds on prior training. **Prerequisite:** AUM267, AUM282, and AUM286; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) Sp

AUM277 Automotive Electrical Systems 3

3 class and 6 lab hr /wk, 5 cr.

Emphasizes testing, diagnosis, and the theory of automotive electrical and electronic systems. Includes computer controlled systems and sub-systems, networks, and diagnostic equipment. **Prerequisite:** AUM161 and AUM176, both with a grade of C or better; or consent of instructor. **F**

AUM280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

AUM281 Advanced Driveability and Emissions

3 class and 6 lab hr /wk, 5 cr.

Covers theory and diagnosis of electronically controlled gasoline and diesel internal combustion engines and related emission control systems. Emphasizes use of diagnostic equipment and repair of computer controlled vehicles. **Prerequisite:** AUM267, AUM277, AUM282, and AUM286; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

AUM282 Electronic Vehicle Controls

3 class and 5 lab hr /wk, 5 cr.

Provides advanced training in the operation and testing of automotive electronic control and alternative propulsion systems with emphasis on diagnostic approach and procedure. **Prerequisite:** AUM262, AUM263, AUM266, and AUM277; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

AUM286 Auto Heating and Air Condition

3 class and 6 lab hr /wk, 5 cr.

Presents the theory and operation of automotive heating and air-conditioning systems. Covers methods for service, repair, and troubleshooting heating and air-conditioning systems. **Prerequisite:** AUM262, AUM263, AUM266, and AUM277; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

BA

Business Administration

BA101 Introduction to Business

4 class hr/wk, 4 cr.

Introduces the inter-relationships of business, government, and society. Examines the defined and/or established roles of the business community. Looks at various aspects of business including emphasis on ethics and social responsibility. **Prerequisite:** College-level reading and writing recommended. **F, W, Sp, Su**

BA104 Business Applications Using Mathematics

4 class hr/wk, 4 cr.

Covers application of mathematics to personal finance and the world of business. Includes applications involving banking, payroll, the mathematics of buying and selling, simple interest, compound interest, annuities, stocks and bonds, business and consumer loans, taxes and insurance, depreciation, financial statement analysis, frequency graphing and calculating mean, median and mode. Uses spreadsheet computational tools and manual, hand-held calculator. **Prerequisite:** MTH060 or higher; and CIS101, CA118B1, CIS125E, or BA225; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA115 Introduction to Accounting

4 class hr/wk, 4 cr.

Covers basic accounting principles and procedures to provide familiarity with financial records and current accounting terminology. Includes processing techniques for handling information: special journals, controlling accounts, worksheets used in preparation of account statements, purchases, sales, and end-of-the-period procedures. **F, W, Sp, Su**

BA177 Payroll

4 class hr/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:** CIS101; and BA115 or BA211; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA202 Personal Effectiveness in Business

3 class hr/wk, 3 cr.

Emphasizes individual and small group exercises to improve skills in self-awareness, communication, values clarification, individual problem-solving, and learning strategies to assist the student in maintaining employment, and demonstrating a professional image and work behavior. **Prerequisite:** College-level reading and writing recommended. **F, W, Sp, Su**

BA203 Organizational Behavior

3 class hr/wk, 3 cr.

Explores interpersonal relations in an organization. Includes effective verbal and non-verbal communication styles, interviewing skills, co-worker relations considering individual and cultural differences, customer relationships, conflict management, and power and politics. **Prerequisite:** BA101 and BA202, both with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp, Su**

BA204 Diversity in the Workplace

3 class hr/wk, 3 cr.

Introduces an understanding of cultural differences and managing diversity as a competitive advantage in the work environment. Covers perspectives on race, national origin, gender, age, religion and spirituality, disabilities, and sexual orientation. **Prerequisite:** BA202 and BA203, both with a grade of C or better; or consent of instructor. College level reading and writing recommended. **Sp; CL**

BA206 Business Management Principles

4 class hr/wk, 4 cr.

Analyzes and synthesizes historical and current theories in leadership, group processes, organizational structures, personnel policies, motivation and training that allow an individual to plan, organize, control, staff and direct subordinates in an organization. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp, Su**

BA211 Financial Accounting 1

4 class hr/wk, 4 cr.

Covers the complete accounting cycle for service and merchandising firms including recording transactions, adjustments, financial statements, worksheets, closing entries, cash and accounts receivable, notes and interest, and accounting for inventories. **Prerequisite:** MTH060 and CIS101 skill levels or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA212 Financial Accounting 2

4 class hr/wk, 4 cr.

Covers accounting theory, capital assets and depreciation, current and long-term liabilities, partnerships, corporations, investments, cash flow statements and ratio analysis. **Prerequisite:** BA101; and BA211 and BA104 skill level or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA213 Managerial Accounting**4 class hr/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; and BA225 or CIS125E; and BA104 skill level or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA214 Business Communications**3 class hr/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 properly formatted letters, memoranda and reports. Includes development of resumes, job application letters and job interviews. Emphasizes written and oral assignments that require individual and group work.

Prerequisite: CA121 or equivalent skill; and BT210 or WR121; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

BA215 Cost Accounting**4 class hr/wk, 4 cr.**

Analyzes methods of detailed and specific identification of cost elements within the business enterprise. Focuses on job order, process and standard cost accounting systems, and their related theory. Emphasizes principles, techniques and managerial use of cost accounting data, and the use of budget and performance reports as they relate to cost accounting. **Prerequisite:** BA212; and CIS125E or BA225; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

BA218 Personal Finance**4 class hr/wk, 4 cr.**

Examines the principles and concepts of personal finance. Reviews personal financial planning in the areas of money management, budgeting, career planning, taxes, consumer credit, housing decisions, legal protection, insurance, investments, retirement and estate planning. **Offered as needed**

BA222 Financial Management**4 class hr/wk, 4 cr.**

Explores 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, cash and credit management. **Prerequisite:** BA212, CIS125E, and MTH070 or higher; or consent of instructor. College level reading and writing recommended. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

BA223 Principles of Marketing**4 class hr/wk, 4 cr.**

Surveys all functions of marketing from marketing research and product development to the sale of a product or service and feedback regarding consumer acceptance. Emphasizes marketing planning and strategy as dictated by the consumer through marketing research. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp**

BA224 Human Resource Management**4 class hr/wk, 4 cr.**

Studies the principles and functions of the human resource department as it specifically relates 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. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp, Su**

BA225 Excel for Accounting**4 class hr/wk, 4 cr.**

Presents the use of basic and advanced functions of electronic spreadsheets as they relate to the accounting profession and to financial applications. Includes review of Excel formulas and formatting using templates and using spreadsheet applications to compute financial outcomes. Relates spreadsheet applications to financial accounting, managerial accounting, budgeting, and audit activities. **Prerequisite:** Placement into MTH060 or higher; CIS101 and BA211, both with a grade of C or better; or consent of instructor. **Offered as needed**

BA226 Business Law 1**4 class hr/wk, 4 cr.**

Introduces the nature and function of the law in society. Covers common law and basic legal requirements, and constitutional, tort, criminal, employment, and contract law. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp, Su**

BA227 Business Law 2**3 class hr/wk, 3 cr.**

Covers legal aspects of Uniform Commercial Code (UCC), property, business entities, agency and partnership law. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **Offered as needed**

BA228 Computer Accounting Applications**4 class hr/wk, 4 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, financial statements, budgeting, and charting. **Prerequisite:** BA213 or CA220; and CIS125E or BA225, or equivalent microcomputer experience; or consent of instructor (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

BA230 Financial Statement Analysis**4 class hr/wk, 4 cr.**

Provides a fundamental understanding of how to interpret accounting data presented in financial statements. Demonstrates popular tools and techniques in analyzing and interpreting financial statements with an emphasis on the needs of users of financial statements. Applies basic concepts and conventions to the construction of financial statements. Emphasizes the interpretation of financial data by means of comparative statements, and trend percentages. Includes detailed analysis of working capital and extensive use of various financial ratios. **Prerequisite:** BA213; and CIS125E or BA225; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

BA234 Principles of Procurement**4 class hr/wk, 4 cr.**

Provides the fundamentals of purchasing. Covers the purchasing function, purchasing policies, procedures and manuals, legal aspects of purchasing, public relations and purchasing ethics, supply quality and sources, storekeeping, and personnel. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **Offered as needed**

BA235 Principles of Public Procurement**4 class hr/wk, 4 cr.**

Covers principles of public procurement for the State of Oregon including, but not limited to, methods, laws, rules, policies, procedures, executive orders, and best practices as they relate to basic purchasing and cross-cutting procurement themes (definitions, ethics, regulations, risk, sustainability). **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp**

BA236 Public Procurement and Contract Administration**4 class hr/wk, 4 cr.**

Introduces administration and management of contracts developed and established through the governmental procurement process. Covers administration of contract activities, ethics in contract administration, inspection and acceptance of goods and services, delays in contract process, contract disputes and appeals, and termination of contracts. **Prerequisite:** BA101 with a grade of C or better; and college level reading and writing; or consent of instructor. **Offered as needed**

BA238 Sales and Persuasion**3 class hr/wk, 3 cr.**

Emphasizes behavioral sciences, sales psychology and techniques, and communication. Attention is given to sales of ideas and attitudes internal to the firm, as well as product or service to the customer. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp**

BA240 Governmental/Non-Profit Accounting 1**4 class hr/wk, 4 cr.**

Considers budgets, accounting for general funds, special revenue funds, revenue accounting, expenditure accounting, capital projects funds, debt service funds, special assessment funds, enterprise funds, capital assets, and summary of funds and groups. Includes comprehensive study of accounting for state and local governmental and non-profit entities. **Prerequisite:** BA212 with a grade of C or better; or consent of instructor. **W**

BA242 Investments**3 class hr/wk, 3 cr.**

Explains individual investment opportunities as part of an investor's portfolio. Covers how investors may consolidate and coordinate previous experiences with basic information and data in order to survive in the marketplace. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **Offered as needed**

BA249 Principles of Retailing**3 class hr/wk, 3 cr.**

Introduces retailing and provides an understanding of the types of businesses, strategies, operation, formats and environments through which retailing is carried out. Covers planning, research, consumers' behavior, store design, and strategies for merchandising, management, promotion, and pricing. Stresses the global dimensions of retailing as well as the relationship between retailing and society. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **Su**

BA251 Office Management**3 class hr/wk, 3 cr.**

Presents the broad scope of responsibilities of the administrative office manager. Includes planning, organizing and controlling of business services, systems, and procedures. **F**

BA254 Fraud, Auditing, and Forensic Accounting**4 class hr/wk, 4 cr.**

Focuses on identifying investigation techniques in forensic accounting, auditing, and fraud. **Prerequisite:** BA213 and BA226, both with a grade of C or better; or consent of instructor. **Offered as needed**

BA256 Income Tax 1**4 class hr/wk, 4 cr.**

Presents the first of two introductory 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. **F, W, Su**

BA257 Income Tax 2**4 class hr/wk, 4 cr.**

Offers the second of two introductory 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:** BA256 or consent of instructor. **F, Sp, Su**

BA259 Internal Auditing**4 class hr/wk, 4 cr.**

Covers the fundamental audit concepts that internal auditors need to know and understand. Includes the Professional Practices Framework, performance standards, ethics, enterprise-wide governance principles, risk management, COSO framework, business processes and risks, internal control, information technology risks and controls, fraud risks and controls, managing the internal audit function, gathering and documenting audit evidence, communicating results to management, and following up on audit recommendations. **Prerequisite:** BA212; and CIS125E or BA225; and MTH070 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

BA265 Transition to Intermediate Accounting**4 class hr/wk, 4 cr.**

Continues Financial Accounting and Managerial Accounting principles. Includes a review of the mechanics of accounting, accounting information systems, financial statement preparation, and analysis. **Prerequisite:** BA213; and CIS125E or BA225; or consent of Instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

BA266 Intermediate Financial Accounting 1**4 class hr/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, and monetary assets. **Prerequisite:** BA213 with a grade of C or better; or consent of instructor. **F**

BA267 Intermediate Financial Accounting 2**4 class hr/wk, 4 cr.**

Studies plant assets, depreciation, depletion, intangible assets, long-term liabilities, issuance and re-acquisition 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:** Grade of C or better in BA266 or consent of instructor. **W**

BA268 Intermediate Financial Accounting 3**4 class hr/wk, 4 cr.**

Offers a comprehensive study of revenue recognition, accounting changes, error analysis, income taxes, pension plans, leases and cash flow statements. **Prerequisite:** Grade of C or better in BA267 or consent of instructor. **Sp**

BA275 Quantitative Business Methods
4 class hr/wk, 4 cr.

Presents management decision processes utilizing statistical methods. Includes use and application of probability-concepts, sampling procedures, statistical estimation, and regression. **Prerequisite:** MTH111 and CIS125E. **Su**

BA277 Business Ethics
3 class hr/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. **Prerequisite:** BA101 with a grade of C or better; or consent of instructor. College level reading and writing recommended. **F, W, Sp, Su**

BA280B-L Cooperative Work Experience

See **CWE—Cooperative Work Experience.**

BI

Biology

BI060 Basic Science for Dental Assistants

2 class and 2 lab hr /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. **W, Sp, Offered as needed**

BI101 General Biology

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

Investigates the diversity of life forms on Earth, the basic principles of ecology and the consequences of ecosystem alteration by human beings (emphasizing issues relevant to living in the Pacific Northwest). Introductory biology course designed for students not majoring in biology or a biology-related field. Includes two mandatory field trips. **F, Sp, Offered summer as needed**

BI102 General Biology

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

Investigates cell structure, cell division, Mendelian genetics, and principles of evolution. Introduces modern techniques in biotechnology and discusses their ethical implications. Introductory biology course designed for students not majoring in biology or biology-related fields. **F, W, Sp, Offered summer as needed**

BI103 General Biology

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

Investigates plant and animal structure and function. Emphasizes homeostasis, nutrition, and elements of the reproductive, internal transport, gas exchange, and defense systems in both plants and animals. Introductory biology course designed for students not majoring in biology or a biology-related field. Includes a mandatory field trip. **Sp, Offered as needed**

BI131 Environmental Science 1

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

Introduces basic principles of ecology and environmental science and examines environmental problems and issues concerning human population growth. **F**

BI132 Environmental Science 2

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

Examines environmental problems and issues related to resource use, including agriculture, soils, wildlife, forests, fisheries and water. Loss of biodiversity and global climate change are emphasized. **Prerequisite:** BI131 or BI101, either with a grade of C or better; or consent of instructor. **W**

BI133 Environmental Science 3

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

Examines environmental problems and issues related to environmental contamination such as air and water pollution, solid waste disposal, and pesticide use. Explores relationships between environmental problems and other aspects of society. **Prerequisite:** BI132 with a grade of C or better; or consent of instructor. **Sp**

BI143 Marine Biology

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

Investigates a 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 adaptations of life forms to Oregon's marine environments. **Sp**

BI153 Fundamentals of Plant Biology

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

Covers the basic structure, life cycles, genetics, and functions of plants. Meets a science with lab requirement for non-science majors. Serves as background for students in the Horticulture and Viticulture programs. **F, Offered as needed**

BI171 Introduction to Human Anatomy and Physiology 1

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

Introduces the normal structure and function of the human body from the chemical level to the systems level, focusing on homeostasis and system integration. Includes lecture, activities, laboratories, and student projects. **F, W, Offered as needed**

BI172 Introduction to Human Anatomy and Physiology 2

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

Introduces the normal structure and function of the human body from the chemical level to the systems level, focusing on homeostasis and system integration. Includes lecture, activities, laboratories, and student projects. **Prerequisite:** BI171. **Offered as needed**

BI200 Principles of Ecology—Field Biology

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

Emphasizes the broad concepts of ecology in a field setting using natural ecosystems as a model. Introduces concepts in the classroom and then examines them in detail using student-collected field data. Course may be repeated for a maximum of eight lecture and laboratory credits. **Prerequisite:** BI101, BI131, or equivalent, or consent of instructor. **Su**

BI211 Principles of Biology 1

4 class and 3 lab hr /wk, 5 cr.

Surveys of biodiversity including the major groups of organisms, their classification, and evolutionary origins and relationships. Provides first of a three-term sequence for students majoring in sciences and allied health professions (i.e. botany, zoology, molecular biology, marine biology, pre-veterinary, pre-medical, pre-dental, pharmacy, and related fields). **Prerequisite:** CH121 or CH221, either with a grade of C or better, may be taken as prerequisite or co-requisite. **F, Offered as needed**

BI212 Principles of Biology 2

4 class and 3 lab hr /wk, 5 cr.

Focuses on cell structure and metabolism, the cell cycle and comparative plant and animal anatomy and physiology. Offers second term of a three-term sequence for students majoring in sciences and allied health professions (i.e. botany, zoology, molecular biology, marine biology, pre-veterinary, pre-medical, pre-dental, pharmacy, and related fields). **Prerequisite:** BI211 with a grade of C or better; or consent of instructor. **W, Offered as needed**

BI213 Principles of Biology 3

4 class and 3 lab hr /wk, 5 cr.

Focuses on classical and molecular genetics, DNA structure and function, biotechnology, evolution, and ecology. Offers third of a three-term sequence for students majoring in sciences and allied health professions (i.e. botany, zoology, molecular biology, marine biology, pre-veterinary, pre-medical, pre-dental, pharmacy, and related fields). **Prerequisite:** BI212 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

BI230 Introductory Microbiology**3 class and 3 lab hr /wk, 4 cr.**

Surveys the history, anatomy and physiology of microorganisms emphasizing their impact on society. Examines microbe anatomy, metabolism, growth, genetics, taxonomy, selected diseases affecting humans and plants, immunity, and microbial control. Covers food microbiology, industrial microbiology, agricultural microbiology and environmental microbiology with applications to grape growing and winemaking. Uses standard microbiological laboratory techniques. **W, Offered as needed**

BI231 Human Anatomy and Physiology
3 class and 3 lab hr /wk, 4 cr.

Presents an in-depth examination of the structure and function of the human body in the first of a three-term sequence. Includes a review of chemical principles, the study of cells, tissues and the integumentary, skeletal and nervous systems. **Prerequisite:** One year of accelerated college chemistry with a grade of C or better within the last seven years; CH110 or CH111; or successful completion of Chemistry Proficiency Exam; or completion of CH104 and concurrent enrollment in CH105; or completion of CH121 and concurrent enrollment in CH122; or consent of instructor. **F, W, Sp, offered Su as needed**

BI232 Human Anatomy and Physiology
3 class and 3 lab hr /wk, 4 cr.

Covers an in-depth examination of the structure and function of the human body in the second of a three-term sequence. Includes the study of the muscular, circulatory, lymphatic, and respiratory systems. **Prerequisite:** BI231 with a grade of C or better within the last seven years; and concurrent enrollment in CH106 or CH123 if taking a chemistry sequence; or consent of instructor. **F, W, Sp, Offered summer as needed**

BI233 Human Anatomy and Physiology
3 class and 3 lab hr /wk, 4 cr.

Covers 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 includes an examination of body fluids, electrolytes, pH balance and medical genetics. **Prerequisite:** BI232 with grade of C or better within the last seven years, or consent of instructor. **F, W, Sp, offered summer as needed**

BI234 Microbiology**3 class and 3 lab hr /wk, 4 cr.**

Presents a survey of bacteria and other microorganisms, emphasizing their impact upon human health. Includes discussion of infection, immunity, common pathogens, and mechanisms of control. **Prerequisite:** BI231 with a grade of C or better within last seven years or consent of instructor. **F, W, Sp, offered Su as needed**

BI251 Principles of Wildlife Conservation**3 class hr/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****BLD151 Building Codes 1****3 class hr/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 hr/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 hr/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**

BLD155 Building Department Administration**3 class hr/wk, 3 cr.**

Discusses purpose and procedures of building department administration. Examines laws and principles that affect building department personnel and code compliance. **Sp**

BLD159A Materials of Construction**3 class hr/wk, 3 cr.**

Covers materials and processes regulated by the International Building Code. **F**

BLD160 Construction Print Reading
2 class hr/wk, 2 cr.

Provides instruction in reading civil, architectural, structural, mechanical, plumbing and electrical construction drawings used in residential and commercial construction. Introduces terminology, abbreviations, symbols, construction notes, component schedules, and materials common to the different construction trades through the use of sample plans. Includes a refresher in fractional math, instruction on reading of architect's and engineer's scales, an overview of dimensioning practices, and an explanation of plan views, elevations, cross-sections, and sectional details. **F**

BLD161 Structural Inspection-Wood
3 class hr/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. **W**

BLD162 Structural Inspection-Masonry
3 class hr/wk, 3 cr.

Covers the specific code requirements for all types of masonry construction, both structural and non-structural. Includes an introduction to fireplace construction. **F**

BLD181A Mechanical Codes 1
2 class and 3 lab hr /wk, 3 cr.

Introduces the Oregon Mechanical Specialty Code (OMSC) by examining scoping provisions and administrative requirements. Covers necessary mechanical terminology and definitions, the laws of thermodynamics, the combustion process, and heat transfer. Examines combustion and dilution air requirements for fuel burning appliances and equipment. Includes the requirements for the design, construction, installation, and inspection of heating, ventilation, and air conditioning equipment; heating, ventilation, and air conditioning ducts; fuel gas piping systems extending from the gas meter to the appliance; and ventilation systems that provide outside air for building occupants. **W**

BLD182A Mechanical Codes 2
2 class and 3 lab hr /wk, 3 cr.

Examines the Oregon Mechanical Specialty Code (OMSC), including requirements for: chimneys and vents serving fuel burning appliances and equipment; special solid fuel and fuel gas burning appliances and equipment; kitchen hoods, grease ducts, hazardous exhaust ducts, and product conveying ducts; refrigerants, refrigeration systems, and refrigeration mechanical rooms; boilers, hot water heaters, and pressure vessels; hydronic piping and solar heating systems; and fuel oil piping and storage tanks. **Prerequisite:** BLD181A. **Sp**

BLD193A-F Building Inspection Lab
4 lab hr/wk, 2 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 hr/wk, 3 cr.

Covers the installation, function, location and purpose of sprinkler systems. **Sp**

BLD263 Structural Inspection–Concrete

3 class hr/wk, 3 cr.

Introduces concrete as a construction material and its identity as a type of construction as defined by the International 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. **Sp**

BLD266 Structural Plan Review
2 class and 3 lab hr /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 hr /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 hr/wk, 3 cr.

Covers the 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 hr/wk, 3 cr.

Studies 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**

BLD270 Engineering for the Building Inspector 2

3 class hr/wk, 3 cr.

Studies dynamic wind and seismic loads on structures and their reduction to simplified equivalent static forces used in the design of structures. Covers how to determine the required lateral load path elements: diaphragms, shear walls and foundations used to resist lateral forces. Emphasizes code requirements of Chapter 16 Section 1609 for wind and Sections 1613 through 1623 of the Oregon Structural Specialty Code (2003 IBC). Uses the Western Woods Use Book related to lateral design. Also studies the design, fabrication and erection of structural steel for buildings and structures. Emphasizes code requirements of Oregon Structural Specialty code Chapter 22 and the American Institute of Steel Construction Steel Manual. **Prerequisite:** BLD269. **W**

BLD271 Plumbing Codes 1

3 class hr/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 hr/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**

BLD280B-L Cooperative Work Experience

See **CWE–Cooperative Work Experience**.

BLD291 One- and Two-Family Electrical Code

3 class hr/wk, 3 cr.

Covers general wiring design, methods and equipment, as related to one- and two-family dwelling applications. **Sp**

BLD292A International Residential Code–Structural

3 class hr/wk, 3 cr.

Covers the structural portion of the International Residential Specialty Code as it relates to residential construction and other applicable codes. **F**

BLD292B International Residential Code–Mechanical

3 class hr/wk, 3 cr.

Covers the mechanical portion of the International Residential Specialty Code as it relates to residential construction and applicable codes. **W**

BT

Business Technology

BT104 Business English 1

3 class hr/wk, 3 cr.

Emphasizes basic English skills including spelling, parts of speech, sentence patterns, terminal punctuation, and dictionary use.

Applies these skills to writing and speaking in clear, concise sentences. **F, W, Sp, Su**

BT105 Business English 2

3 class hr/wk, 3 cr.

Emphasizes effective business writing by focusing on proper grammar, punctuation, and sentence structure. Covers the writing of business-related paragraphs. **Prerequisite:** BT104 with a grade of C or better; or consent of instructor based on proficiency exam. **F, W, Sp, Su**

BT112 Proofreading/Editing
3 class hr/wk, 3 cr.

Presents effective proofreading techniques emphasizing spelling, word division, capitalization, abbreviations, numbers, grammar, punctuation, and formatting. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. **Prerequisite:** BT105 with a grade of C or better; or consent of instructor. **F, W**

BT116 Office Procedures
3 class hr/wk, 3 cr.

Introduces administrative support activities. Includes discussion of human relation issues, telephone usage, development of effective listening skills, mailing and shipping services, preparation of financial records, plans for meetings and conferences, travel arrangements, scheduling appointments, meeting with the public, supervision and leadership, and employment opportunities. **F, W, Sp, Su**

BT123 Minute-Taking, Level 1

1 class hr/wk, 1 cr.

Provides instruction for taking minutes at formal and semi-formal meetings. Includes preparation prior to a meeting, tasks involved during the meeting, and duties once the meeting is finished. **Prerequisite:** BT105 with a grade of C or better; or consent of instructor. **Offered as needed**

BT128 Introduction to Records Management

2 class hr/wk, 2 cr.

Presents principles and procedures for efficient organization and control of business records. Covers the management of creation, maintenance, storage, and disposition of records. Includes practice in alphabetic, numeric, and geographic filing systems of correspondence and other papers. **F, Sp**

BT130 Customer Service

3 class hr/wk, 3 cr.

Covers various aspects of customer service including verbal communication, nonverbal communication, listening, using technology (telephone, voice mail, email, fax, etc.), written messages, handling difficult encounters, understanding diversity, managing stress and time, and encouraging customer loyalty.

F, Sp

BT131 Electronic Calculators

2 class hr/wk, 2 cr.

Covers the use of electronic printing calculators to solve simple business and mathematical problems. Includes calculating percentages, simple interest, discounts, payroll, and consumer installment buying. Stresses speed and accuracy in the touch operation of the calculator. **Prerequisite:** MTH060 with a grade of C or better; or consent of instructor. **F, W**

BT131A Electronic Calculators A

1 class hr/wk, 1 cr.

Introduces use of electronic calculators to solve problems involving addition, subtraction, multiplication, division, and constants. Includes speed and accuracy in touch operation of the calculator. **F, W, Sp**

BT131B Electronic Calculators B

1 class hr/wk, 1 cr.

Continues BT131A. Applies the functions of an electronic calculator to solve business problems. Includes calculating percentages, simple interest, trade discounts, payroll, and consumer installment buying. Stresses speed and accuracy in touch operation of the calculator. **Prerequisite:** MTH060 or higher and BT131A, both with a grade of C or better; or consent of instructor. **F, W**

BT186 Personal and Professional Development

3 class hr/wk, 3 cr.

Emphasizes the personal and professional strengths sought by employers in hiring and promoting employees. Promotes individual self-assessment as a tool to compare those traits with the student's own personal and professional strengths and weaknesses. Offers opportunities to develop step-by-step approaches toward enhancing professional marketability. **F, W**

BT210 Professional Communication Skills

4 class hr/wk, 4 cr.

Introduces principles of written, oral, and non-verbal communication. Includes composition of business documents (letters, memoranda, agendas, minutes); use of reference manuals; participation in small groups and business meetings (group dynamics, team building, short oral reports); and preparation of written reports with documentation. **Prerequisite:** BT105 with a grade of C or better; or consent of instructor based on proficiency exam. **F, W, Sp**

BT271 Administrative Capstone Projects

4 class hr/wk, 4 cr.

Focuses on dynamic business simulations that provide experience in working as team members in a professional environment. Includes practice in using oral and written communications, analyzing information, problem solving, decision-making, prioritizing, and using time management skills.

Prerequisite: CIS101, CA118A, CA118B1, CA118C1, CA201D, CA202D, BT116, and BA214. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

BT280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

CA

Computer Applications

CA117 Microsoft Publisher

3 class hr/wk, 3 cr.

Introduces Microsoft Publisher publication software. Includes formatting and enhancing text, working with art, using design gallery and drawing tools, as well as using the catalog feature for creating publications. Includes using styles; flowing text into multiple columns; creating drop caps and reversed text; using BorderArt, WordArt, text wrap and mail merge. Covers features for improving publications design, creating multiple-page publications, and creating a web site. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. **F, W, Sp**

CA117A Microsoft Publisher 1

1 class hr/wk, 1 cr.

Provides part one of a hands-on introduction to Microsoft Publisher publication software. Covers topics including formatting and enhancing text, working with art, Design Gallery and drawing tools, and using the Catalog feature for creating publications. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. **Offered as needed**

CA117B Microsoft Publisher 2

1 class hr/wk, 1 cr.

Presents part two of a hands-on introduction to Microsoft Publisher publication software. Includes using styles, flowing text into multiple columns, and creating drop caps and reversed text. Covers features for improving publications and creating multiple-page publications. **Prerequisite:** CA117A with a grade of C or better, or equivalent course as determined by instructor; computer literacy (prior experience with computer and mouse device); and touch keyboarding ability of 25 words per minute. **Offered as needed**

CA117C Microsoft Publisher 3

1 class hr/wk, 1 cr.

Offers part three of a hands-on introduction to Microsoft Publisher publication software. Includes using special features such as BorderArt, WordArt, text wrap around objects, mail merge and preparation for commercial printing. Covers features for working efficiently and creating a Web site. **Prerequisite:** CA117B with a grade of C or better, or equivalent course as determined by instructor; computer literacy (prior experience with computer and mouse device); and touch keyboarding ability of 25 words per minute.

Offered as needed

CA118A Microsoft Windows Basics

1 class hr/wk, 1 cr.

Introduces MS Windows operating systems software currently used in business and industry. Includes exploring and managing disk organization and using the accessories.

Prerequisite: Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **F, W, Sp, Su**

CA118B1 Excel Basics 1

1 class hr/wk, 1 cr.

Introduces building and editing worksheets, formatting and printing worksheets, working with formulas and functions, and charting in MS Excel. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability; or consent of instructor. **F, W, Sp, Su**

CA118B2 Excel Basics 2

1 class hr/wk, 1 cr.

Reinforces basic Excel functions. Introduces sorting, filtering, and analyzing list data; enhancing worksheets and charts; and sharing MS Excel files. **Prerequisite:** CA118B1 with a grade of C or better; or consent of instructor. **F, W, Sp**

CA118B3 Excel Basics 3

1 class hr/wk, 1 cr.

Focuses on developing independent decision-making skills when creating worksheets and charts. Introduces what-if analysis, macros, PivotTables and PivotCharts, linking, embedding, and exploring MS Excel options. **Prerequisite:** CA118B2 with a grade of C or better; or consent of instructor. **W, Sp**

CA118C1 Access Basics 1

1 class hr/wk, 1 cr.

Introduces database basics for forms design, data entry, queries, tables, and reports. **Prerequisite:** Computer literacy (prior experience with computer and mouse device); or consent of instructor. **F, W, Sp**

CA118C2 Access Basics 2**1 class hr/wk, 1 cr.**

Reinforces basic database skills. Introduces multiple table and action queries; Pivot-Tables and PivotCharts; forms and subforms; and importing, exporting, and publishing data. **Prerequisite:** CA118C1 with a grade of C or better; or consent of instructor.

F, W, Sp**CA118D Internet for Office Environment****1 class hr/wk, 1 cr.**

Introduces the Internet and demonstrates how this resource may be used effectively in a modern office. Emphasizes information currently needed by office professionals.

Prerequisite: CA118A or CIS101, either with a grade of C or better; or consent of instructor. **F, W, Su**

CA118E Outlook Basics**1 class hr/wk, 1 cr.**

Introduces personal information management software currently used in business and industry. Covers electronic messaging (e-mail management), use of the address book, and calendar and task management using MS Outlook. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **F, W**

CA118F1 PowerPoint Basics 1**1 class hr/wk, 1 cr.**

Introduces MS PowerPoint presentation software with an emphasis on designing and formatting business-related presentations.

Prerequisite: Computer literacy (prior experience with computer and mouse device); touch keyboarding ability; or consent of instructor. **Offered as needed**

CA119 Office Desktop Publishing 1**4 class hr/wk, 4 cr.**

Introduces publication planning, typography, publication design principles, and hands-on desktop publishing preparation of office publications, including the features of text threading, layers, frames, kerning, and tracking. **Prerequisite:** Touch keyboarding ability of 25 words per minute, and CIS101; or consent of instructor. **F**

CA121 Keyboarding**3 class hr/wk, 3 cr.**

Presents basic touch keyboarding skills on a standard microcomputer keyboard. Emphasizes speed and accuracy along with the basic vocabulary of entering and retrieving information. **F, W, Sp, Su**

CA121A Keyboarding A**1 class hr/wk, 1 cr.**

Covers basic touch keyboarding of the alphabetic keys for the standard microcomputer keyboard. **F, W, Sp**

CA121B Keyboarding B**1 class hr/wk, 1 cr.**

Reviews alphabetic keyboarding and emphasizes the development of speed and accuracy in touch keyboarding. Introduces number and symbol keys. **Prerequisite:** CA121A with a grade of C or better; or touch keyboarding ability of 15 words per minute for two minutes with three or fewer errors. **Offered as needed**

CA121C Keyboarding C**1 class hr/wk, 1 cr.**

Emphasizes drills to increase speed and accuracy in touch keyboarding. Includes accurate proofreading and calculating scores for 3-minute timings. **Prerequisite:** CA121A and CA121B, both with a grade of C or better; or touch keyboarding ability of 20 words per minute for two minutes with three or fewer errors. **Offered as needed**

CA122 Keyboard Skillbuilding**3 class hr/wk, 3 cr.**

Improves keyboarding skill, including keyboard proficiency, speed, and accuracy. Serves as preparation for production keyboarding as well as general skill development. Covers basic document formatting.

Prerequisite: Touch keyboarding ability of 25 words per minute (30 words per minute recommended). May be repeated for a maximum of six (6) credits. **F, W, Sp, Su**

CA122A, B, C Keyboard Skillbuilding A, B, C**1 class hr/wk, 1 cr. each**

Improves keyboarding skill, including keyboard proficiency, speed, and accuracy. Serves as preparation for production keyboarding as well as general skill development. **Prerequisite:** CA122A: CA121 with a grade of C or better; or consent of instructor. CA122B: CA122A with a grade of C or better; or consent of instructor. CA122C: CA122B with a grade of C or better; or consent of instructor. Each course may be repeated for a maximum of two (2) credits.

F, W, Sp, Su**CA201D Microsoft Word Processing 1****3 class hr/wk, 3 cr.**

Presents basic word processing training in the operation of Microsoft Word software. Includes character, paragraph, and page Word features, as well as correct formatting of business letters, memos, and reports.

Prerequisite: Touch keyboard ability of 30 words per minute. **F, W, Sp, Su**

CA201D1-D3 Microsoft Word Processing 1, Parts 1-3**2 lab hr/wk, 1 cr. each**

Offers basic to intermediate word processing and document formatting training in the operation of Microsoft Word. **Prerequisite:** CA201D1: Touch keyboarding ability of 30 words per minute. CA201D2: Grade of C or better in CA201D1. CA201D3: Grade of C or better in CA201D2. **Offered as needed**

CA202D Microsoft Word Processing 2**3 class hr/wk, 3 cr.**

Offers intermediate word processing training using Microsoft Word software for persons with prior basic skills and knowledge of word processing. **Prerequisite:** Grade of C or better in CA201D or equivalent and touch keyboarding ability of 35 wpm.

F, W, Sp**CA202D1-D3 Microsoft Word Processing 2, Parts 1-3****2 lab hr/wk, 1 cr. each**

Offers intermediate word processing training using Microsoft Word software for persons with prior basic skills and knowledge of word processing. **Prerequisite:** CA202D1: CA201D or equivalent as determined by instructor, with a grade of C or better; and touch keyboarding ability of 35 wpm. CA202D2: CA202D1 or equivalent as determined by instructor, with a grade of C or better; and touch keyboarding ability of 35 words per minute. CA202D3: CA202D2 or equivalent as determined by instructor, with grade of C or better; and touch keyboarding ability of 35 words per minute. **Offered as needed**

CA205 PageMaker 1**3 class hr/wk, 3 cr.**

Offers a hands-on microcomputer desktop publishing course providing beginning level training in the use of Adobe PageMaker desktop publishing software. Includes setting up and printing publications, importing and formatting text and graphics, using styles, using graphics tools, using spot color and tints, and using layers and frames. **Prerequisite:** Computer literacy (prior experience with a computer and mouse device) and touch keyboarding ability of 25 words per minute. **Offered as needed**

CA208 Workplace Presentation with PowerPoint**3 class hr/wk, 3 cr.**

Introduces the preparation of computer presentations for the workplace using current presentation software. Includes software techniques, design and typography basics, and production techniques for screen shows. **Prerequisite:** CIS101 with a grade of C or better; or equivalent as determined by the instructor; or consent of instructor. **F, W**

CA213 Integrating Office Procedures**3 class hr/wk, 3 cr.**

Brings together the knowledge, skills, and abilities required of one-year Business Technology students, and serves as a review for students continuing for a degree. Uses a business simulation to reinforce and expand computer and other office skills.

Prerequisite: BT116, BT210 (or concurrent enrollment), CA118A, CA118B1, CA118C1, CA201D, and CIS101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CAM219 Office Desktop Publishing 2

2 class hr/wk, 2 cr.

Focuses on publication planning, typography, publication design principles and hands-on desktop publishing preparation of office publications. Includes the features of color, graphics, tables, transparency, books, and exporting to PDF files using Adobe Indesign. **Prerequisite:** CIS101 and CA119, both with a grade of C or better; and touch keyboarding ability of 25 words per minute; or consent of instructor. **Offered as needed**

CAM220 QuickBooks Computer Bookkeeping

3 class hr/wk, 3 cr.

Introduces computerized accounting principles using QuickBooks, including setup, managing revenue and expenses, payroll, bank reconciliation, financial statements, inventory, and file maintenance. **Prerequisite:** BA115 or BA211, either with a grade of C or better; or consent of instructor. **F, W**

CAM225 Advanced Document Production

3 class hr/wk, 3 cr.

Covers development of correct formats for business reports, letters, memos, tabbed columns, and forms. Uses a variety of input methods, such as CD ROM dictation and printed rough drafts. Develops basic skill in the transcription of recorded documents. Stresses application of language arts skills. Develops the skill to produce documents accurately within specified timed guidelines and touch type at a minimum of 40 words per minute on 3-minute timings (with specified error limits). **Prerequisite:** BT112 and CA201D, both with a grade of C or better; and touch keyboarding ability of 35 words per minute (no penalty for errors: 3-minute timings); or consent of instructor. **W**

CAM**Computer-Aided Manufacturing****CAM050 Orientation to Manufacturing Processes**

1 class and 2 lab hr /wk, 2 cr.

Provides basic knowledge of various manufacturing processes and materials. Covers processes involving hand tools, machine tools, measuring, inspection, and blueprints. Includes manufacturing procedures. Provides knowledge of industry standard roles in a manufacturing setting. **Offered as needed**

CAM061 Practical Applications 1

3 lab hr/wk, 1 cr.

Provides practice in the CAD/CAM program to refine previously learned skills. Includes projects or exercises as determined by the student and instructor. **Prerequisite:** Consent of instructor. **F, W, Sp**

CAM062 Practical Applications 2

6 lab hr/wk, 2 cr.

Provides practice in the CAD/CAM program to refine previously learned skills. Includes projects or exercises as determined by student and instructor. **Prerequisite:** Consent of instructor. **F, W, Sp**

CAM063 Practical Applications 3

9 lab hr/wk, 3 cr.

Provides practice in the CAD-CAM program to refine previously learned skills. Includes projects or exercises as determined by student and instructor. **Prerequisite:** Consent of instructor. **F, W, Sp**

CAM100 Blueprint Reading and Sketching

2 class hr/wk, 2 cr.

Provides instruction and skill development in engineering print reading, sketching, basic drawing techniques, and geometric constructions. **F**

CAM105 Precision Measurement

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

Covers the selection and application of linear English and metric measuring and inspection tools and equipment used in manufacturing. **F**

CAM110A CNC/Manual Fundamentals

2 class and 6 lab hr /wk, 4 cr.

Introduces the fundamentals of machining processes and measuring instruments. Covers the use of basic hand tools, drill presses, power saws, pedestal grinders, arbor presses, basic layout and layout tools and measuring tools. Includes proper use of measuring tools, the 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 CNC and working in teams. **F**

CAM111 Industrial Safety Seminar

1 class hr/wk, 1 cr.

Details the joint responsibility of the company and employee in complying with federal and state safety regulations pertaining to business and industry. **F**

CAM115 Geometric Dimensioning/Tolerancing

2 class hr/wk, 2 cr.

Covers geometric dimensioning and tolerancing principles based on ANSI/ASME standards. Computation of tolerance values required insuring proper fit and function. Emphasizes measurement and inspection required to match design specifications. **Prerequisite:** DRF130 and print reading experience or consent of instructor. **W**

CAM116 Geometric Dimensioning/Tolerancing for CNC-Lab

3 lab hr/wk, 1 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. **Prerequisite:** CAM115 or concurrent enrollment in CAM115 or consent of instructor. **W**

CAM120 CNC/Manual Milling

2 class and 6 lab hr /wk, 4 cr.

Covers basic milling processes, work-holding methods, cutter identification and selection and use, speeds and feeds, adapters, tool holders and application. Includes operation of CNC Vertical Machining Center and vertical and horizontal manual milling machines, applying related operational theory. **Prerequisite:** CAM110A or consent of instructor. **W**

CAM121A CNC/Manual Lathe

2 class and 6 lab hr /wk, 4 cr.

Introduces turning operations as related to CNC machining with emphasis on work holding methods and tool holding/selection methods. Covers related hole-making process, facing, tapping, grooving, and parting. Includes operation of CNC turning center and manual lathes, applying related operational theory. **Prerequisite:** CAM120 or consent of instructor. **Sp**

CAM130 CNC Machine Setup/Operation

2 class and 6 lab hr /wk, 4 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. **F**

CAM140 Metallurgy for Manufacturing

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

Studies basic metallurgy as it relates to manufacturing processes. Covers the identification of ferrous metals and non-ferrous metals and other materials used in industry. Includes mechanical and physical properties, powder metallurgy, heat treatment, alloying, crystalline structures, effects of machining, casting processes, testing processes. **W**

CAM150 Cutting Tools and Materials

1 class and 6 lab hr /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:** CAM121A or concurrent enrollment or consent of instructor. **Sp**

CAM160 Programming CNC Mills**2 class and 6 lab hr /wk, 4 cr.**

Introduces Computer Numerical Control (CNC) programming for milling applications and operations related to manufacturing.

Prerequisite: Consent of instructor. **W****CAM190 Programming CNC Lathes****2 class and 6 lab hr /wk, 4 cr.**

Introduces Computer Numerical Control (CNC) programming for lathe applications and operations related to manufacturing.

Prerequisite: CAM130 or consent of instructor. **Sp****CAM210A Production/Assembly Control Methods****2 class hr/wk, 2 cr.**

Emphasizes production and assembly methods in manufacturing of parts. Includes advanced instruction in vertical milling and basic instruction in horizontal milling. Covers setup, operation, tool selection and application, calculating proper feed, speeds, and depth of cuts in the production of parts. Also includes applications with CNC machinery. **Prerequisite:** CAM120 and CAM121A or consent of instructor. **F**

CAM210B Production/Assembly Control Methods—Lab**6 lab hr/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 with CAM210A or consent of instructor. **F****CAM220A Advanced Lathe Processes****2 class hr/wk, 2 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:** CAM121A or consent of instructor. **W**

CAM220B Advanced Lathe Processes—Lab**6 lab hr/wk, 2 cr.**

Provides practice for application of advanced lathe theory and operations through assigned projects. Includes application of lathe settings, boring, single-point, threading, knurling, calculations, controls, taper attachments, follower rests, steady rests, and advanced tooling, safety, and work-holding applications. **Prerequisite:** CAM121A or consent of instructor. **W**

CAM230 CAM Applications/Mills**2 class and 3 lab hr /wk, 3 cr.**

Introduces the concepts and application of Computer Aided Manufacturing (CAM) software programs for creating CNC milling machine part programs. **Prerequisite:** CAM130, CAM160 or CAM190 or consent of instructor. **F**

CAM260 CAM Applications/Lathes**2 class and 3 lab hr /wk, 3 cr.**

Introduces the concepts and applications of Computer Aided Manufacturing (CAM) software programs for creating CNC lathe part programs. **Prerequisite:** CAM130, CAM160 or CAM190 or consent of instructor. **W**

CAM280B-L Cooperative Work Experience**See CWE—Cooperative Work Experience.****CAM290A CAD/CAM Integrations****2 class and 18 lab hr /wk, 8 cr.**

Emphasizes production and assembly methods in manufacturing of parts utilizing manual and CNC milling/turning machines. Includes setup, including 4th axis rotary tables, operation, tool selection and application, calculating proper feed, speeds, and depth of cuts in the production of parts. Also includes 3D and 4th axis generated parts and transfer of Computer Aided Design (CAD) generated 2D drawings solids and parametric models to a Computer Aided Manufacturing (CAM) system for manufacturing purposes. **Prerequisite:** CAM110, CAM120, CAM121A, CAM130, CAM160, CAM230, CAM260 or consent of instructor. **Sp**

CG**Counseling and Guidance****CG090 Peer Assistance Training****3 class hr/wk, 3 cr.**

Provides training in implementing communication skills, leadership qualities, referral techniques, and assistance in locating college and community-based resources and services as peer assistant. Students serve as resource personnel to refer other students with personal, social or academic concerns.

Su**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**

CG101 Planning College Finances**1 class hr/wk, 1 cr.**

Explores issues involved in creating a personal plan for financing higher education. Includes types of financial aid, scholarship searching, student loans, financial planning, and financial decision making strategies. **W**

CG102A College Prep: International 1A**1 class hr/wk, 1 cr.**

Introduces international students to information, resources, and strategies to be successful in the U.S. educational environment. Designed for beginning and intermediate non-native English speakers attending the Language and Culture Institute. **F, W, Sp, Su**

CG102B College Prep International 1B

1 class hr/wk, 1 cr.
Focuses on information, resources and strategies international students need to successfully transition from language study to college study. Designed for advanced non-native English speakers attending the Language and Culture Institute. **Prerequisite:** CG102A with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CG103 College Prep: International 2**2 class hr/wk, 2 cr.**

Familiarizes international students with information, resources, and strategies to be successful in the U.S. educational environment. Designed for full-time, first-term college-level students. **F, W, Sp, Su**

CG104 Your College Experience**3 class hr/wk, 3 cr.**

Explores campus resources, links students to academic and social support systems. Identifies college academic expectations, evaluates personal readiness for college challenges, creates personal education plans, and connects students with peers, mentors and key staff/faculty for college success. **Prerequisite:** High school students registered with the Office of High School Programs.

CG110 Career and Life Planning**2 class hr/wk, 2 cr.**

Introduces students to strategies and procedures for effective career decision making. Provides assessment of individual personality style/traits, interests, skills/abilities, expectations and values. Introduces methods and resources for conducting occupational research. **F, W, Sp**

CG114 Career and Life Development**3 class hr/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: College-level reading and writing skills; some computer and World Wide Web/Internet experience is helpful. **F, W, Sp, Su**

CG120 Focus on Careers**3 class hr/wk, 3 cr.**

Focuses on the process for choosing an appropriate career direction by developing a personal profile, experiencing first-hand various career areas, and creating an effective educational/career plan. **F, W, Sp**

CG121A Student Mentor TRIO/CAMP
1 class and 3 lab hr /wk, 2 cr.

Develops necessary skills to be an effective mentor. Prepares mentors to serve as role models to encourage and influence the personal, educational and professional development of first generation college students in TRiO or CAMP. Course may be repeated for a maximum of 6 credits. **Prerequisite:** Must pass a criminal background check if working with middle or high school students. **F, W, Sp**

CG121B Peer Mentoring
1 class and 3 lab hr /wk, 2 cr.

Develops necessary skills to be an effective mentor. Prepares mentors to serve as role models to encourage and influence the personal, educational and professional development of their peers. Course may be repeated for a maximum of 6 credits. **Prerequisite:** Must pass a criminal background check if working with middle or high school students. **F, W, Sp**

CG123 Community Service Leadership
2 class hr/wk, 2 cr.

Introduces basic leadership skills necessary for working with community service projects. Enhances leadership abilities through theory and practical experience. Inspires students to make a difference. **F, W, Sp**

CG124 Student Representation 1
1 class hr/wk, 1 cr.

Prepares student leaders to serve the mission of the Associated Students of Chemeketa (ASC) program in a responsible, ethical and professional manner. Introduces effective meeting tools, customer service skills, leadership and teamwork concepts. **Prerequisite:** Must be a member of the Associated Students of Chemeketa (ASC Executive Board, ASC Student Council, or ASC Storm Front volunteer team) prior to enrollment. **F**

CG125 Student Representation 2
1 class hr/wk, 1 cr.

Prepares second year lead ASC students to serve the mission of the program in a responsible, ethical, and professional manner while managing the goals of the whole membership. Introduces advanced skills and tools related to ASC tasks; training, evaluation, advocacy and recognition. **Prerequisite:** CG124 with a grade of C or better; and be a member of the incoming Associated Students of Chemeketa (ASC) Executive Board; or consent of instructor. **W**

CG126 Student Representation 3
1 class hr/wk, 1 cr.

Prepares lead ASC students to serve the mission of the program in a responsible, ethical and professional manner while managing the goals of the whole membership. Applies more advanced skills and tools related to ASC tasks, project evaluation, project management, customer service, leadership, conflict resolution and problem solving. **Prerequisite:** CG125 with a grade of C or better; and be a member of the Associated Students of Chemeketa (ASC Executive Board, ASC Student Council or ASC Storm Front volunteer team) prior to enrollment; or consent of instructor. **Sp**

CG127A Intercultural Leadership A
2 class hr/wk, 2 cr.

Assists students to understand and respect people of other cultures and be understood and respected by them. **Prerequisite:** Consent of instructor. **F, W, Sp**

CG128 Leadership Development
2 class hr/wk, 2 cr.

Explores the definition of leadership and provides knowledge of basic leadership skills. Develops and enhances leadership abilities through practical skill building in teambuilding, goal-setting, role modeling, public speaking, time management, ethics, diversity, and customer service. Inspires cultivation of a personal leadership vision. **Prerequisite:** Consent of instructor. **W, Sp**

CG129 Student Life Leadership
1 class hr/wk, 1 cr.

Introduces students to techniques, strategies and information fundamental to success in a college/work environment. Explores leadership qualities, meeting facilitation skills, planning and organizational skills and college and office policies and procedures. **Prerequisite:** Must be hired in a Student Retention and College Life Leadership position. **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. **F, W, Sp**

CG130B Career Exploration and Planning
2 class hr/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. **F, W, Sp**

CG130C Career Exploration and Planning
3 class hr/wk, 3 cr.

Uses an individualized study approach to provide information, instruments and resources 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. **F, W, Sp**

CG140 Student Services Leadership 1
1 class hr/wk, 1 cr.

Prepares student leaders to represent the college in a responsible, ethical, and professional manner. Introduces customer service and teamwork concepts. **Prerequisite:** Consent of instructor. **F**

CG141 Student Services Leadership 2
1 class hr/wk, 1 cr.

Continues to build professional customer service skills. Introduces personal/professional development tools such as public speaking, conflict styles, and time and stress management. **Prerequisite:** CG140 with a grade of C or better; or consent of instructor. **W**

CG225 4-Year College Transition
2 class hr/wk, 2 cr.

Identifies criteria to use in selecting a college and major, and the connection between the transfer student's current college and four-year colleges. Provides strategies and information to assist in the transition of the four-year college systems. **W, Sp**

CH

Chemistry

CH104 Chemistry for Allied Health
3 class, 2 lab and 1 recitation hr /wk, 5 cr.

Focuses on general chemistry with emphasis on the applications of chemical principles to the life sciences. Designed for Nursing, Dental Hygiene, EMT, and other Allied Health students who plan to pursue careers in the health science professions. Topics include structure and properties of matter; energy; atomic structure and bondings; gas laws; chemical reactions. First term of a three-term sequence dealing with the molecular basis for life. **Prerequisite:** MTH095. **F, W, Sp**

CH105 Chemistry for Allied Health
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
Covers 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 solutions and colloids; reaction rates and equilibrium; acids and bases and their regulation in the body; saturated and unsaturated hydrocarbons; alcohols, ethers, aldehydes, ketones, carboxylic acids and esters, amines and amides. Second term of a three-term sequence. **Prerequisite:** CH104. **W, Sp**

CH106 Chemistry for Allied Health
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
Covers 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. Third term of a three-term sequence. **Prerequisite:** CH105. **F, Sp**

CH110 Foundations of General, Organic, and Biochemistry
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
Presents a one-term survey course of basic general, organic, and biochemistry designed to introduce the chemistry needed for understanding the functions of living organisms. **Prerequisite:** MTH095. **F, W, Sp, Su**

CH115 Consumer Chemistry
3 class and 3 lab hr /wk, 4 cr.
Introduces the first term of a three-term course sequence designed specifically for the non-science student. Offers a general education approach with major emphasis on what science is and on how chemistry is connected to other disciplines and to students' lives, preparing them to make educated decisions on issues of science and technology. Covers: science vs. technology, scientific method, atomic structure and theory, nuclear chemistry, chemical bonding, nomenclature, and chemical reactions. **F**

CH116 Consumer Chemistry
3 class and 3 lab hr /wk, 4 cr.
Offers the second term of a three-course sequence designed specifically for the non-science student. Covers: acids and bases, oxidation and reduction; chemistry of the earth, organic chemistry, polymers, air and its pollution. **Prerequisite:** CH115 with a grade of C or better; or consent of instructor. **W**

CH117 Consumer Chemistry
3 class and 3 lab hr /wk, 4 cr.
Presents the third term of a three-course sequence designed specifically for the non-science student. Covers: water and pollution, energy now and in the future, carbohydrates, fats, proteins: the biochemistry of vitamins, brewing, baking, cheese production, food additives, household chemicals, cosmetics, chemotherapy, drugs, and chemical toxicology. **Prerequisite:** CH116 with a grade of C or better; or consent of instructor. **Sp**

CH121 College Chemistry
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
Introduces 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. First of a three-term sequence. **Prerequisite:** Completion of, or concurrent enrollment in, MTH095. **F, W**

CH122 College Chemistry
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
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. Second of a three-term sequence. **Prerequisite:** CH121. **W, Sp**

CH123 College Chemistry
3 class, 2 lab and 1 recitation hr /wk, 5 cr.
Continues organic chemistry including aliphatic, aromatics, function groups and their reactions, structure and chemistry of carbohydrates, lipids, proteins, and nucleic acids. Third of a three-term sequence. **Prerequisite:** CH122. **F, Sp**

CH172 Chemical Methods for Analysis of Musts and Wines
2 class and 2 lab hr /wk, 3 cr.
Introduces vineyard and winery laboratory practices. Covers basic chemical principles, laboratory techniques and analytical procedures for musts and wines. **Prerequisite:** CH123 or equivalent or concurrent enrollment in CH123. **Offered as needed**

CH201 Chemistry for Engineers
3 class and 3 lab hr /wk, 4 cr.
The first course in a two-term sequence designed for engineering majors who intend to transfer to Oregon State University's engineering program. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, bonding models, solutions, redox, gas laws, and chemical thermodynamics: heat, work and energy. **Prerequisite:** MTH095. **F**

CH202 Chemistry for Engineers
3 class and 3 lab hr /wk, 4 cr.
Provides the second course of a two-term sequence. Covers Lewis structures, VESPR theory, shapes and polarity of molecules, intermolecular forces, crystal structure, reaction rates, rate laws, reaction mechanisms, acids and bases, chemical equilibrium, spontaneous changes, free energy, voltaic and electrolytic cells, coordination compounds, organic structure, and polymer chemistry. **Prerequisite:** CH201. **W**

CH211 Chemistry for Engineers Prep 1
1 class hr/wk, 1 cr.

Provides guided study in topics and problem solving skills beyond that provided in CH201. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, gas laws, and chemical thermodynamics: heat, work and energy. **Prerequisite:** MTH095. Corequisite: CH201. **F**

CH212 Chemistry for Engineers Prep 2
1 class hr/wk, 1 cr.
Provides guided study in topics and problem solving skills beyond that provided in CH202. Covers Lewis structures, VESPR theory, shapes and polarity of molecules, intermolecular forces, crystal structure, reaction rates, rate laws, reaction mechanisms, acids and bases, chemical equilibrium, spontaneous changes, free energy, voltaic and electrolytic cells, coordination compounds, organic structure, and polymer chemistry. **Prerequisite:** CH201. **W**

CH221 General Chemistry
3 class, 3 lab and 1 recitation hr /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. **F**

CH222 General Chemistry
3 class, 3 lab and 1 recitation hr /wk, 5 cr.
Covers periodic properties; molecular bonding, hybridization, and resonance; solutions and solids; intermolecular forces; rates of reactions; and organic polymers. Second of a three-term sequence designed for students majoring in scientific, engineering, and medical fields. **Prerequisite:** CH221. **W**

CH223 General Chemistry**3 class, 3 lab and 1 recitation hr /wk, 5 cr.**

Covers the rates and mechanisms of chemical reactions; fundamentals of chemical equilibrium; acid-base equilibria; ionic equilibria in aqueous systems; free energy concepts; voltaic/electrolytic cells; and metallurgical processes. Third of a three-term sequence designed for students majoring in scientific, engineering and medical fields.

Prerequisite: CH222. **Sp****CH241 Organic Chemistry****4 class hr/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 or CH223. **F**

CH241B Organic Chemistry Lab**3 lab hr/wk, 1 cr.**

Accompanies CH241 Organic Chemistry as a laboratory 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 or CH223. **F**

CH242 Organic Chemistry**4 class hr/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 hr/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. **W**

CH243 Organic Chemistry**4 class hr/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 hr/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. **Sp**

CIS**Computer Information Systems****CIS060 Techniques of User Training****2 class hr/wk, 2 cr.**

Introduces teaching methods, materials and instructional design as related to training computer users. **Prerequisite:** Second-year standing in the Computer Systems and Information Technology program. **Sp**

CIS101 Introduction to Microcomputer Applications**3 class hr/wk, 3 cr.**

Introduces the basic microcomputer hardware/software system. Covers the concepts of system software and application software including word processing, spreadsheet, database, presentation and introduction to Internet. **Prerequisite:** Touch keyboarding ability and placement into RD090 or higher recommended; or consent of instructor. **F, W, Sp, Su**

CIS102A Cyber Security and Safety**4 class hr/wk, 4 cr.**

Provides basic knowledge of the security, political, and social issues, and human factors concerning the use of current computer technologies. Covers how people are affected by computer security breaches and technology misuse. Discusses electronic voting, Radio Frequency Identification (RFID) tags, location-based tracking technologies, and the Digital Millennium Copyright Act (DMCA). Explores computer security exploits such as buffer overflow, Denial of Service, spoofing, viruses, Trojan Horses, phishing and pharming scams, and intrusion detection. Includes how to protect yourself from malicious computer activities.

Prerequisite: CIS101 or CIS120, or equivalent knowledge as determined by instructor.**W, Su****CIS120 Digital Literacy****4 class hr/wk, 4 cr.**

Introduces 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. Includes concepts reinforced in a laboratory environment. **Prerequisite:** MTH070; RD115 or equivalent level of skill as demonstrated by satisfactory score on placement test. **F, W, Sp**

CIS120A Computer Information Sciences Pathway**1 class hr/wk, 1 cr.**

Exposes students to many different career opportunities in computer information sciences and computer technology, and assists with planning an academic pathway at Chemeketa Community College. **F, W**

CIS121 Introduction to Programming Concepts**4 class hr/wk, 4 cr.**

Introduces fundamental logic in designing specific algorithms for processing information typified by management information systems and the logical thought process used when programming. Covers structured programming and object oriented programming concepts that include problem definition, generating a description of its step-by-step solution (the algorithm), writing the program, and finally documenting the program. **Prerequisite:** CIS120 with a grade of C or better or concurrent enrollment; or consent of instructor. **F, W**

CIS125A Micro Database Software– Access**3 class hr/wk, 3 cr.**

Focuses on microcomputer database software using Microsoft Access. Includes navigation 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:** CIS101 or CIS120 or consent of instructor. **F, W, Sp, Su**

CIS125E Excel-Workbooks**4 class hr/wk, 4 cr.**

Presents electronic spreadsheets in a multi-worksheet environment using Excel. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W, Sp, Su**

CIS125G Introduction to Computer Game Development**4 class hr/wk, 4 cr.**

Surveys the field of computer game development including a study of the history and business of computer gaming, computer game categories and platforms, and computer game technologies. Covers an overview of the game development process, and introduces game graphics. Provides complete game development lifecycle using a high-level game development framework to design and develop a computer game.

Prerequisite: CIS120 or CIS101 recommended, either with a grade of C or better; or consent of instructor. **W, Sp**

CIS125H xHTML Basics**4 class hr/wk, 4 cr.**

Introduces software and application development environments used on the Internet and typical enterprise intranets. Covers HTML fundamentals, development tools for HTML, and introduces object-oriented programming using JavaScript and XML.

Prerequisite: CIS120 with a grade of C or better; or consent of instructor. **Offered as needed**

CIS133J Fundamentals of Java Programming 1**4 class hr/wk, 4 cr.**

Introduces Java programming language. Provides a conceptual understanding of object-oriented programming using Java. Covers the structure of the language, the manipulation of data and arrays, how to handle input and output, and how to create classes, objects, and applications. **Prerequisite:** MTH060; CIS101 or CIS120; or consent of instructor. **F**

CIS133JS JavaScript Web Programming 1**4 class hr/wk, 4 cr.**

Covers the fundamentals of JavaScript as a web programming language, including basic programming concepts as they apply to using and writing JavaScript. Focuses on learning to create interactivity using JavaScript with text and graphics. Provides the foundation for continuing with JavaScript in the Intermediate JavaScript course, and features current web-standards compliant techniques for using JavaScript. **Prerequisite:** CIS122, CIS195, or CIS178I; and any first term programming course including CIS133J, CS133U, or CS161; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

CIS133SC Fundamentals of Scripting Languages**4 class hr/wk, 4 cr.**

Provides the knowledge and skills necessary to write and maintain scripts which automate aspects of system administration for computers running the Microsoft Windows operating system. Covers scripting languages, hosts, and libraries, and the interfaces built into the Windows operating system. **Prerequisite:** CIS121 or consent of instructor. **F**

CIS133VB Visual Basic-Event Driven Programming**4 class hr/wk, 4 cr.**

Continues use of the Visual Basic programming environment. Emphasizes application of event driven and structured problem solving and programming techniques to develop software. Introduces object-oriented programming, Web applications, and database access. Includes the design, coding, testing, and debugging of several problems. **Prerequisite:** CIS121 with a grade of C or better; or equivalent VB programming experience as determined by the instructor. **W, Sp**

CIS140B Microcomputer Operating Systems**3 class hr/wk, 3 cr.**

Studies operating systems currently used on larger microcomputers and small mini-computers. Includes experience in using these operating systems to access files and communicate with other microcomputers.

Prerequisite: CIS101 or CIS120, either with a grade of C or better; or consent of instructor. **W, Su**

CIS140U 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:** CIS101 or CIS120 or consent of instructor. **F, Sp**

CIS145 Microcomputer Hardware
3 class and 2 lab hr /wk, 4 cr.

Studies the hardware concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and hardware and incorporates the requirements for A+ certification.

Prerequisite: CIS140B or NET123, either with a grade of C or better; or consent of instructor. **W**

CIS178I Introduction to the Internet/World-Wide Web**3 class hr/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. Covers developing and publishing a simple web page on the World Wide Web. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W, Sp, Su**

CIS178W Fundamentals of Web Design**4 class hr/wk, 4 cr.**

Covers fundamentals of web design using Adobe Systems software. Focuses on the overall production processes surrounding web site design. Emphasizes design elements involving layout, navigation and interactivity. Includes hands-on web design exercises using Adobe Dreamweaver, Adobe Fireworks, and Adobe Flash. **Prerequisite:** CIS101 or CIS120, or consent of the instructor. **F, W**

CIS179 Introduction to Client-Server Networks**4 class hr/wk, 4 cr.**

Introduces computer networks from an end-user perspective while providing a thorough study of clients in an enterprise environment. Includes hands-on experience installing, administering, and managing desktop software and resources including both local and domain accounts in the client-server network. Prepares students to obtain the Microsoft Certified Technical Specialist (MCTS) Certification. **Prerequisite:** CIS140B. **Sp**

CIS186 Computer Forensics**4 class hr/wk, 4 cr.**

Provides the basics of computer forensics as it applies to personal computers and workstations, including how to obtain and analyze digital information for use as evidence in civil, criminal, or administrative cases. **Prerequisite:** CIS102A, CIS120, CIS140B, CIS179, or consent of instructor. **Offered as needed**

CIS195 Web Site Development
4 class hr/wk, 4 cr.

Covers web site planning, organization, and implementation. Explores web development applications. Discusses XHTML, XML, style sheets, and basic scripting. Addresses accessibility, browsers compatibility, and globalization issues. **Prerequisite:** CIS178I with a grade of C or better; or consent of instructor. **F, Sp, Su**

CIS233J Fundamentals of Java Programming 2
4 class hr/wk, 4 cr.

Continues the Fundamentals of Java Programming 1 course. Provides a conceptual understanding of encapsulation, polymorphism, and inheritance related to the object-oriented programming paradigm and Java. Covers the use of java.lag, java.util, java.applet, java.awt, and java.io packages to create program code. Includes documenting program code using the Javadoc interface and creating a Graphical User Interface (GUI) application using a visual Interface Development Environment (IDE). **Prerequisite:** CIS133J or consent of instructor. **W**

CIS234J Fundamentals of Java Programming 3
4 class hr/wk, 4 cr.

Continues the Fundamentals of Java Programming 2 course and serves as a capstone project course. Provides an overview of the Abstract Windowing Toolkit (AWT) from the Java platform to create programs with graphical user interface (GUI) components (buttons, checkboxes, text fields, etc.). Presents the mechanics for handling events and exceptions generated by GUI components. Covers a conceptual overview of connecting to a database such as SQL Server, Oracle, etc., and manipulating data from the same databases using the Java database connectivity (JDBC) application programmer interface (API). **Prerequisite:** CIS233J or consent of instructor. **Sp**

CIS244 Systems Analysis 1
4 class hr/wk, 4 cr.

Covers basic administrative procedures. Includes the principles of organizing, planning, and administering a procedure program; methods of carrying out individual systems and procedures studies; procedure analysis and improvement techniques; the role of systems and procedures in business management; systems charting; work simplification and measurement. Brings together project elements and milestones using industry best practices to create specifications for an information systems project. **Sp**

CIS276A Introduction to Oracle: SQL
4 class hr/wk, 4 cr.

Offers an extensive introduction to data server technology. Examines the concepts of both relational and object relational databases and the Structured Query Language (SQL) programming language. Covers creating and maintaining database objects and storing, retrieving, and manipulating data. Also covers retrieving data by using advanced techniques such as ROLLUP, CUBE, set operators, and hierarchical retrieval. Includes writing SQL and SQL*Plus script files using the iSQL*Plus tool to generate report-like output. **Prerequisite:** CS275 with a grade of C or better or concurrent enrollment; or consent of instructor. **F**

CIS276B Oracle: Programming with PL/SQL
4 class hr/wk, 4 cr.

Introduces Procedural Language/Structured Query Language (PL/SQL) and the benefits of this Oracle programming language. Covers creating PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Also covers creating procedures, functions, packages, and database triggers. Uses iSQL*Plus to develop program units. Includes managing PL/SQL program units and database triggers, managing dependencies, manipulating large objects, and using some of the Oracle-supplied packages. **Prerequisite:** CIS121 or equivalent; and CIS276A; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

CIS276C Oracle: Building Reports
4 class hr/wk, 4 cr.

Focuses on database and instance tuning of the Oracle database. Uses the available Oracle tools such as Oracle Enterprise Management (with the Diagnostics and Tuning Packs) and STATSPACK. Covers how to recognize, troubleshoot, and resolve common performance-related problems in administering an Oracle database. **Prerequisite:** CIS276B with a grade of C or better; or consent of instructor. **Offered as needed**

CIS276D Oracle Academy 1-SQL
4 class hr/wk, 4 cr.

Focuses on Database Design and Programming with SQL. It covers the history of databases. Includes analyzing complex business scenarios and creating entity relation data models and conceptual data models' representations of those scenarios. Discusses unique identifiers and transitive dependencies, and normalizing tables. Introduces Structured Query Language (SQL). Also covers the rules and guidelines needed to construct valid SQL statements. Introduces Oracle Application Express, Oracle Data Modeler, and Oracle SQL Developer software programs. **F**

CIS276E Oracle Academy 2-PL/SQL
4 class hr/wk, 4 cr.

Covers Database Programming with PL/SQL (Procedural Language/Structured Query Language). Introduces the PL/SQL block structure and coding anonymous blocks in Oracle Application Express. Explains the difference between SQL and the PL/SQL block structure. Introduces writing PL/SQL control structures, data types, cursors, functions, procedures, and exception handling. **Prerequisite:** CIS276D with a grade of C or better; or consent of instructor. **W, Offered as needed**

CIS277A Oracle Database Administration Fundamentals 1
4 class hr/wk, 4 cr.

Focuses on database and instance tuning of the Oracle database. Uses the available Oracle tools such as Oracle Enterprise Management (with the Diagnostics and Tuning Packs) and STATSPACK. Covers how to recognize, troubleshoot, and resolve common performance-related problems in administering an Oracle database. **Prerequisite:** CIS276A with a grade of C or better; or consent of instructor. **Offered as needed**

CIS277B Oracle Database Administration Fundamentals 2
4 class hr/wk, 4 cr.

Covers transporting data between databases and the utilities used to perform these activities. Introduces networking concepts and configuration parameters, as well as solving some common network problems. Also addresses backup and recovery techniques, and examines various backup, failure, restore and recovery scenarios. Examines backup methodologies based on business requirements in a mission critical enterprise. Covers multiple strategies and Oracle Recovery Manager to perform backups, and restore and recovery operations. **Prerequisite:** CIS277A with a grade of C or better; or consent of instructor. **Sp**

CIS278 Data Communications
4 class hr/wk, 4 cr.

Covers fundamental concepts in data communication including definition of terms, communicating concepts, comparison of voice and data communication (analog versus digital signals), medium access, elementary data link protocols, topologies, servers, and operating system standards implemented in local area networks (LAN). Uses hands-on software activity related to protocols, switching, routing, and peer-to-peer networking using a VM environment. **Prerequisite:** CIS120 and CIS122, or consent of instructor. **W**

CIS279 Network Management
3 class and 4 lab hr /wk, 5 cr.

Focuses on the logical design, construction, operation, maintenance, and management of a network using Directory Services. **Prerequisite:** CIS145, CIS278. **W**

CIS280B-L Cooperative Work Experience
See **CWE—Cooperative Work Experience**.

CIS288 Advanced Client-Server Networks
4 class hr/wk, 4 cr.

Provides hands-on experience installing, configuring, customizing, administering, and maintaining a server and outlines its various roles in an enterprise environment. Includes installation and administration of DHCP, DNS, remote access, virtualization, domain management, and group policy design. Prepares students to obtain both the Microsoft Certified Technical Specialist (MCTS) and Microsoft Certified Information Technology Professional (MCITP) Certifications. **Prerequisite:** CIS179 with a grade of C or better; or consent of instructor. **F**

CIS289 Advanced Network Application Support
4 class hr/wk, 4 cr.

Provides experience supporting and troubleshooting software and hardware on a virtualized local area network. Covers the various server roles of email server services, remote access, and domain security. Prepares students to obtain the Microsoft Certified Information Technology Professional (MCITP) Certification. **Prerequisite:** CIS288, CIS279, and consent of instructor. **W**

CIS295 Web Application Development
4 class hr/wk, 4 cr.

Covers the development of web applications using various scripting languages. Explains the process of web application development. Stresses proper coding practices and documentation and implementation of databases for dynamic web content. **Prerequisite:** CIS178I or CIS195 or VC237 or consent of instructor. **W**

CJ

Criminal Justice

CJ100 Survey of the Criminal Justice System

3 class hr/wk, 3 cr.

Reviews 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. **F, W, Sp, Su**

CJ101 Criminology

3 class hr/wk, 3 cr.

Covers the development and conceptualization of crime including historical perspective, social and legal definitions, and classifications. Includes an overview of criminology, research, data gathering, and analysis.

Introduces major theoretical perspectives on the nature of crime, criminals, and victimization. Identifies current trends and patterns of crime typologies as well as societal and institutional responses. **F, W, Sp, Su**

CJ102 Survey of the Juvenile Justice System

3 class hr/wk, 3 cr.

Reviews the juvenile justice system, including juvenile court processes and procedures from criminal violation to final disposition. Identifies juvenile justice administrative functions and reviews the principles of federal, state, and local statutes as they apply to and affect the juvenile offender. **F, Sp**

CJ103 Program Application and Employment Standards

1 class hr/wk, 1 cr.

Introduces information specific to Oregon employment requirements and DPSST (Department of Public Safety Standards and Training) certification standards. Includes employment disqualifiers as well as desired attributes to assist in selecting the criminal justice career field best suited to specific qualifications. Requires students to complete the Criminal Justice Program Application Packet for criminal history screening purposes. **F, W, Sp, Su**

CJ110 Introduction to Law Enforcement

3 class hr/wk, 3 cr.

Introduces the history and philosophy of law enforcement and the administration of justice. Provides a preview of a professional career in law enforcement and how an agency functions in relation to public relations and professional and political ethics. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp**

CJ112 Field Operations and Patrol Procedures

3 class hr/wk, 3 cr.

Introduces the nature and purpose of patrol activities. Examines routine and emergency procedures and types of patrol. Focuses on force continuum, officer survival, arrest procedures, field interviews and ethics. Explores methods of safely responding to various calls and individuals. Includes scenarios on occupational exposure to blood borne pathogens. Covers equipment, technology and vehicle operation. Identifies gangs, drug use indicators, threat groups, and responses to civil disturbances. Emphasizes report documentation, courtroom testimony and police tactical communications. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ123 Spanish for Law Enforcement Personnel

3 class hr/wk, 3 cr.

Offers a practical, learner-friendly Spanish language course for law enforcement students and personnel. Emphasizes officer safety, increased community safety, enhanced job performance, and protection from legal liability. Requires no prior knowledge of Spanish. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. CJ110 or CJ112 recommended unless already have prior practical experience as a cadet, reserve, or certified law enforcement officer. **W, Sp**

CJ130 Introduction to Corrections Process

3 class hr/wk, 3 cr.

Introduces the corrections process, including historical development through contemporary issues. Reviews the history, current practices, and future considerations of corrections. Identifies the subcomponents of corrections; variations in correctional institutions, levels of custody, administrative practices, correctional staff roles and responsibilities, institutional policies, procedures, and programs. Covers changing inmate demographics, special needs inmates, safety and security concerns, and current issues. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CJ132 Introduction to Parole and Probation

3 class hr/wk, 3 cr.

Introduces the corrections process, including historical development through contemporary issues. Identifies variations in correctional institutions, levels of custody, administration practices, correctional staff roles and responsibilities, institutional policies, procedures, and programs. Covers changing inmate demographics, special needs inmates, safety/security concerns, and current issues. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp, Su**

CJ134 Contraband and Search

1 class hr/wk, 1 cr.

Focuses on the proper forms and processes for conducting searches of persons such as staff, volunteers, contractors, and visitors; places such as living, common access, and work areas; and vehicles. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, Sp**

CJ136 Transportation, Escorting, and Restraints**1 class hr/wk, 1 cr.**

Covers practical techniques for the transportation, restraint, and escorting of inmates within a facility or in the general public. Reviews management concepts for the classification and risk criteria factors for inmates that determine custody level. Includes the importance of the safety, security, and orderly operation of facilities, and the safety and welfare of staff and the general public.

Prerequisite: CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, Sp**

CJ138 Security Threat Groups**1 class hr/wk, 1 cr.**

Explores the criminal subcultures of security threat groups (STGs) and gangs. Includes the management concepts for individuals at risk of involvement in STGs or gangs, the identifying characteristics of involvement, intervention strategies, and the importance of interagency networking and information sharing. Outlines concepts of covert communications used by STGs and gangs in communicating within facilities, jail, and on the streets. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ142A Managing the Mentally Ill Offender**1 class hr/wk, 1 cr.**

Focuses on understanding and supervising youthful and adult offenders in confinement by developing an awareness of the dynamics, basic behaviors, and interpersonal interactions commonly found among offenders exhibiting these serious mental disorders: anxiety, dissociative, mood, personality, psychotic (schizophrenia), and mental retardation. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. PSY201, PSY202, or PSY203 recommended. (All prerequisite courses must be completed with a grade of C or better.) **W**

CJ144 Suicide Prevention and Intervention Skills**2 class hr/wk, 2 cr.**

Presents a suicide prevention and intervention practice-dominated course designed to help individuals, criminal justice, juvenile and social service caregivers recognize and review risk, and to intervene to prevent the immediate risk of suicide. **F, Sp**

CJ145 Managing Long Term Offenders**1 class hr/wk, 1 cr.**

Addresses management strategies for long-term offenders. Covers inmate perception about serving longer sentences, their views of establishing relationships, and accountability challenges. Includes management of death row inmates, the elderly inmate population with unique special needs, and the security risk posed by lifers attempting to escape. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

CJ146 Officer Survival Mindset**3 class hr/wk, 3 cr.**

Provides the student with a historical review of issues and scenarios related to officer survival and provides insight from lessons learned. Introduces the mistakes in decision-making, personal distancing, or threat assessment of a suspect and/or offender. Provides a brief review of cases where officers were killed in the line of duty. Also describes the survival mindset, confrontations, new intervention pathways, and the courageous spirit. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. CJ110, CJ112, or CJ130 recommended. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CJ147 Criminal Personality and Errors in Thinking**1 class hr/wk, 1 cr.**

Introduces personality disorders as defined by the Diagnostic and Statistical Manual (DSM). Addresses errors in thinking which are uniquely present in criminal behavior. Reviews the foundational work of Yochelson and Samenow on the criminal mind. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CJ153 Ethical Dilemmas and Decision Making in Criminal Justice**3 class hr/wk, 3 cr.**

Provides students with an introduction to ethical duties and decision making dilemmas facing criminal justice professionals. Provides the basic foundations of ethical reasoning and the standards for determining sound ethical decision making. Increases the learners application of ethical reasoning in the face of agency corruption, use of force, gender and race discrimination, due process and duty towards others. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CJ170 Juvenile Justice Ethics and Boundaries**3 class hr/wk, 3 cr.**

Provides students with an introduction to ethical and boundary issues that confront workers in the juvenile justice system. Increases the capacity for the identification and analyses of issues and the development of positions relative to the issues. Focuses on more difficult ethical and boundary issues prevalent in juvenile justice today.

Prerequisite: CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp, Su**

CJ175 Juvenile Law**3 class hr/wk, 3 cr.**

Provides a historical overview of the legal rights of juveniles, including landmark Supreme Court cases which applied constitutional protections to juveniles. Covers the requirements and responsibilities of professionals in the juvenile justice system. Introduces the Oregon Juvenile Code and statutory guidelines for operating the Oregon Youth Authority. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ200 Family Violence and Deviancy**3 class hr/wk, 3 cr.**

Discusses the role of criminal justice practitioners in maintaining community relations, networking, and multi-disciplinary approaches to crimes of family violence. Examines the role expectations of involved agencies and covers red flag behaviors and detection of family-related crimes and their patterns of escalation. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ203 Crisis Intervention Seminar**3 class hr/wk, 3 cr.**

Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening and mediation. 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. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp**

CJ206 Crime and Delinquency**3 class hr/wk, 3 cr.**

Introduces the historical development of childhood and the legal concepts of delinquency. Studies crime and delinquency rates and typologies focusing on data variations impacted by age, sex, race/ethnicity, socioeconomic and educational status, urbanization, and other key factors as independent variables. Introduces major theoretical perspectives and their application in the study of juvenile delinquency. Covers key concepts affecting juvenile victimization.

Prerequisite: CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp**

CJ207 Diversity Issues in Criminal Justice**3 class hr/wk, 3 cr.**

Introduces the civil rights of citizens related to religion, ethnicity, culture, race, gender, age, disability and sexual preference. Explores the legal and societal responsibilities of criminal justice professionals to the protection of those rights in the course of public safety duties. Involves creative, critical, and solution-oriented thinking throughout the course. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp; CL**

CJ209 Introduction to Victimology**3 class hr/wk, 3 cr.**

Traces the criminal justice system's historic and current response to crime victims. Provides a comprehensive overview of the offender-victim relationship, while addressing victim support policies and programs. Presents a realistic approach to understanding the process of victimization and the broad range of coping mechanisms that victims employ to deal with their particular experiences. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CJ210 Introduction to Criminal Investigations 1: Crimes vs Persons**3 class hr/wk, 3 cr.**

Covers historical development of criminalistics. Introduces current basic techniques and components involved in major persons-related crime scene investigations. Includes skills necessary to process the scene. Identifies specialized procedures and technology used to identify, profile, locate and apprehend offenders. Covers interviewing/interrogation techniques. Stresses importance of field notes and case documentation. Emphasizes escalation-cycling patterns of serious offenders. Includes factual case studies. Focuses on qualities of a successful investigator. Examines development of reliable confidential informants. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor **F, W, Sp, Su**

CJ211 Property Crimes: Behavior and Evidence**3 class hr/wk, 3 cr.**

Introduces basic techniques and components involved in major property-related crime scene investigations. Includes skills necessary to process scene. Identifies specialized procedures/technology used to identify, locate, and recover stolen property. Covers methods to identify and apprehend individuals. Emphasizes correlation between property crimes and drug use. Includes preparation of court testimony, and current trends in cyber, terrorism, identity, and narcotic investigations. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ212 Police Report Writing**3 class hr/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. **Prerequisite:** CJ103 completion with a criminal history clearance; and CJ110 or CJ112; or current professional in the field; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

CJ215 Criminal Justice Administration**3 class hr/wk, 3 cr.**

Surveys the administrative practices of criminal justice agencies with special emphasis on law enforcement. Covers administration in the public services area including organizational theory and management, personnel management, and policy and procedures formulation. **Prerequisite:** CJ103 completion with a criminal history clearance; and CJ110 or CJ112; or current professional in the field; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CJ217 Interview and Interrogation in Criminal Justice**3 class hr/wk, 3 cr.**

Focuses on becoming a knowledgeable interviewer and interrogator. Introduces REID Interview and FBI PERSPECTIVE techniques. Includes brief review of constitutional constraints and professional ethics specific to interviewing and/or interrogation of suspects, witnesses, complainants, and victims. Covers interview and interrogation objectives, preparation, approaches, and technical aids. Presents the importance of listening and documentation. Includes practical scenarios/role playing. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ220 Introduction to Substantive Law and Oregon Criminal Code**3 class hr/wk, 3 cr.**

Introduces the origin and structure of common-law crimes, case decisions, and the development of statutory crimes. Reviews the amendments of the constitution which protect citizens during criminal inquiries, introduces the elements of a crime and the types of affirmative defenses presented at a criminal proceeding. Provides distinctions between criminal and civil law. Addresses criminal court procedures, criminal law case reading, federal and state law, and selected Oregon criminal code sections. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, Sp**

CJ222 Profiling Serial Killers**3 class hr/wk, 3 cr.**

Analyzes a specific offender type, the serial killer. Includes historical perspective, motives, and killer phases. Emphasizes the methodology of profiling, crime scene analysis, and modus operandi as developed by the FBI Investigative Support Unit to assist law enforcement. Covers victimologies, VI-CAP, and Oregon H.I.T.S. systems. Uses individual case studies. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp, Su**

CJ224 Missing and Abducted Children
1 class hr/wk, 1 cr.

Provides specialized training regarding child abductions and missing children. Includes victimology, motives, custodial versus non-custodial, kidnap murder, cult murder, grooming techniques, crime scene indicators, and forensic evidence. Introduces notification and training systems, including National Center for Missing and Exploited Children (NCMEC), Amber Alert Plan, FBI's Child Abduction and Serial Murder Investigative Resource Center (CASMIRC), Violent Criminal Apprehension Program (VICAP), K-9 usage, and A Child is Missing (ACIM) Plan. Emphasizes the first four hours investigative tasks. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

W, Sp

CJ225 Stalking, Predatory Behaviors, and Personal Safety
2 class hr/wk, 2 cr.

Provides information regarding stalking and related behaviors. Covers types of stalkers, current anti-stalking statutes, and personal and professional security measures. Emphasizes the necessity of documenting and reporting this crime. Describes prohibited behavior, threat levels, and the effects of stalking on victims. Discusses current trends in cyberstalking, including the use of electronic communication devices such as the Internet, e-mail, cell phones, fax machines, and pagers. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W**

CJ226 Introduction to Constitutional Law

3 class hr/wk, 3 cr.

Analyzes 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. An intensive study which includes criminal procedures processes. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp, Su**

CJ229 Domestic Terrorism

3 class hr/wk, 3 cr.

Presents the history of terrorism (international and domestic), the causes and methods of terrorism, with an emphasis on contemporary domestic terrorism groups. Covers the basic steps in countering terrorists threats, concepts in terrorism, causes, and methods. Assists law enforcement officers, public administrators, security officers, and the general public in recognizing potential terrorist threats. Emphasis on domestic (national) terrorism. **Prerequisite:** CJ100 and WR121; and CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CJ230 Introduction to Juvenile Corrections

3 class hr/wk, 3 cr.

Introduces 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. Includes an overview of the ongoing debate concerning rehabilitation vs. punishment philosophies in the juvenile justice system, especially as it relates to safety/security issues and public concerns. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ232 Introduction to Corrections Casework

3 class hr/wk, 3 cr.

Presents an overview of casework in corrections settings. Includes introduction to behavior modification theories and methods, contemporary counseling methods, assessment processes, and the development of officer-client relations. Emphasizes observation skills, perception issues, information gathering, interpersonal communication skills, and interviewing strategies and techniques as part of corrections casework. **F, Sp**

CJ235 Youth, Drugs, and Corrections

3 class hr/wk, 3 cr.

Studies current trends, programs and philosophies regarding addiction, treatment options, and assessment processes, and related behavioral issues for youthful offenders specifically in correctional settings and in post-conviction supervision. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ236 Public Safety Leadership and Ethics 1: Philosophy of Leadership

4 class hr/wk, 4 cr.

Introduces philosophies and ethics for public safety leadership. Focuses on core values, ethics, and decision-making. Explores developing a personal leadership philosophy. Includes defining the difference between leadership and management and completing self-assessments in an effort to gain insight into personal leadership styles and characteristics. **Offered as needed**

CJ237 Public Safety Leadership and Ethics 2: Leading Others

4 class hr/wk, 4 cr.

Explores the various roles of leadership as they relate to being a team builder, delegator, conflict resolution facilitator, coach, and mentor. Focuses on gaining an understanding of communication processes, empowerment, and leading in a diverse environment. Explores various theories of leadership including situational. **Offered as needed**

CJ238 Public Safety Leadership and Ethics 3: Organizational Leadership

4 class hr/wk, 4 cr.

Explores the leadership process and the leader-follower relationship within an organizational setting. Covers the influence of organizational culture, values, and societal issues on leadership effectiveness. Introduces the concepts of learning organizations, organizational health, defenses, and change. Examines how a leader moves an organization from vision to action. **Offered as needed**

CJ239 Public Safety Leadership and Ethics 4: Ethics and the Challenge of Leadership

4 class hr/wk, 4 cr.

Correlates the personal core values and characteristics to ethical decisions and behaviors. Explores ethical and principle-centered leadership, including ethical systems, dilemmas, and decision making. Examines the challenges and develops strategies for leading in public safety organizations serving diverse and dynamic communities. **Offered as needed**

CJ240 Intake, Assessment, and Interviewing

3 class hr/wk, 3 cr.

Introduces the concepts of intake, the purpose and types of assessment tools utilized for determining public risk, institutional risk and personal treatment needs for the development of an effective treatment plan. Covers conducting interviews at every stage of the process; applying techniques for informational interviewing. Includes the benefits, costs, and process of changing behavior. Explores the techniques for assuring consistency, accountability, and effectiveness for intake operations. **Prerequisite:** CJ100 or CJ102, either with a grade of C or better; or consent of instructor. **F, W**

CJ241 Group Skills for Correctional Clients

3 class hr/wk, 3 cr.

Introduces group dynamics, group organization and facilitation skills for correctional professionals working with clients. Includes an introduction to the various models of group interaction, the principle characteristics and advantages of using group skills with correctional clients. Provides basic concepts for conducting a group and the stages and differential group dynamics. Also presents the basic skills necessary for client selection and development; effective leadership and group management; and techniques for the identification of criminal tactics that disrupt the group process. **Prerequisite:** CJ100 or CJ102, either with a grade of C or better; or consent of instructor. **W, Sp, Su**

CJ253 Introduction to Penology

3 class hr/wk, 3 cr.

Introduces the theories and practices of punishment. Includes processes devised and practiced for the repression and prevention of crime. Covers a historical overview of society's choices of punishment, the evolutionary process of punishment reform in the United States, and the continual dilemma of balancing the punishment of offenders and the expectation of rehabilitation. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W**

CJ255 How to Prepare for Oral Boards and Multi-Assessment

2 class hr/wk, 2 cr.

Presents specialized training opportunities for students, municipal and county reserves, and cadets who anticipate applying for full-time employment in the criminal justice field. Reviews basic Department of Public Safety Standards and Training (DPSST) certification requirements. Identifies preparatory steps to be successful in passing oral board interviews and initial phases of a multi-assessment process. Covers stress, voice control, behaviors, appearance, attitude, and dress. Students are photographed, videotaped, and participate in a competitive oral board scored by professionals in the field of law enforcement, corrections, and parole and probation. **Prerequisite:** CJ103 with a criminal history clearance; and CJ110 or CJ112; or current professional in the field; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CJ280B-L Cooperative Work Experience

See **CWE—Cooperative Work Experience.**

CLA

Chicano/Latino Studies

CLA201 Introduction Chicano/Latino Studies 1: Historical Overview **4 class hr/wk, 4 cr.**

Introduces Latino history in the United States beginning with Spanish colonization and continuing with the Mexican-American War. Covers Mexicans' role in American labor, economics, the Bracero Program and the Chicano Movement. **F, Su**

CLA202 Introduction to Chicano/Latino Studies 2: Political and Economic Overview **4 class hr/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 from a Chicano/Latino perspective. **W**

CLA203 Introduction to Chicano/Latino Studies 3: Cultural Overview **4 class hr/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. **Sp**

COM

Communication Skills

See also **HD—Human Development, RD—Reading, SSP—Study Skills, WR—Writing.**

COM051 Communication Skills 1

3 class hr/wk, 3 cr.

Improves writing skills. Focuses on writing intended to replicate projects in occupational and technical fields. **F, W, Sp, Su**

COM052 Communication Skills 2

3 class hr/wk, 3 cr.

Focuses on improving reading, writing, speaking, and listening skills using a variety of oral and written formats. **Prerequisite:** COM051 or equivalent as determined by instructor. **Offered as needed**

COM053 Technical Report Writing

3 class hr/wk, 3 cr.

Serves as the report writing class for students following a vocational (non-transfer) track of study. Features the writing of a variety of reports, emphasizing clarity, coherence, conciseness, and accuracy, with a specific audience addressed. Includes memos, laboratory reports, narration reports, description and definition reports, process reports, and research projects. **Prerequisite:** COM051 or equivalent as determined by instructor. **Sp**

CPL

Credit for Prior Learning

CPL121 Introduction to Credit for Prior Learning

1 class hr/wk, 1 cr.

Explores the option of receiving credit for prior learning. Focuses on relating previous learning and experience to specific programs and courses at the college. Covers writing a concise goal statement, preparing a detailed work history, and preparing to consult with instructor/evaluators in programs offering credits based on prior learning. **Prerequisite:** WR115 or WR121 recommended. **F, W, Sp**

CPL122 Credit for Prior Learning: Portfolio Development

2 class hr/wk, 2 cr.

Focuses on developing a credit for prior learning portfolio. Emphasizes relating previous learning and experiences to the outcomes and content contained in course outlines. Integrates information from consultations with instructor/evaluators into detailed essays and documentation in support of claims to prior learning. Includes submission of final portfolio for review. **Prerequisite:** CPL121. WR115 or WR121 highly recommended. **F, W, Sp**

CS

Computer Science

CS133U C++ Language

4 class hr/wk, 4 cr.

Introduces the C++ programming language. Covers the structure of the language, manipulation of data, and arrays. Includes how to manage input and output functions.

Prerequisite: CIS121 with a grade of C or better; or consent of instructor. **Sp**

CS160 Introduction to Computer Science

4 class hr/wk, 4 cr.

Explores the disciplines and professions of Computer Science and Software Engineering. Overviews computer hardware and software architecture, the study of algorithms, software design and development, data representation and organization, problem-solving strategies, ethics in the digital world, and the history of computing and its influences on society. Explores career options and begins the process of planning a program of study. Exposes students to both low-level and high-level programming languages. **Prerequisite:** CIS101 or CIS120; MTH111 or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Sp**

CS161 Computer Science 1

4 class hr/wk, 4 cr.

Presents the first course in a three-term sequence that introduces foundational concepts and practices in Computer Science and Software Engineering. Includes problem solving, algorithm design, data types, program and control structures, program documentation, coding style, engineering tools, language paradigms, and introduces complexity and computability. Explores programming as a fundamental tool of computer science, emphasizing professional engineering practices in software design, development, and testing. **Prerequisite:** MTH111; and CS160 or MTH231; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W**

CS162 Computer Science 2

4 class hr/wk, 4 cr.

Presents the second course in a three-term sequence that introduces foundational concepts and practices in computer science and software engineering. Includes coverage of inheritance, GUI programming, error handling, file I/O, recursive algorithms, algorithm complexity, and an introduction to abstract data types. Emphasizes experiences with professional engineering practices. **Prerequisite:** CS161; and MTH231 or concurrent enrollment; or consent of instructor. (All prerequisites with a grade of C or better.) **W, Sp**

CS260 Computer Science 3: Data Structures

4 class hr/wk, 4 cr.

Presents a further analysis of topics in CS162 with additional concepts in recursion, binary trees and object-oriented programming. **Prerequisite:** Grade of C or better in CS162 or equivalent as determined by the instructor. **Sp**

CS271 Principles of Computer Organization

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

Introduces 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 Assembly language programming and the Assembly process, RISC machines and parallel architectures. **Prerequisite:** MTH105. **W**

CS275 Database Management

4 class hr/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, and basic architecture and administration of Oracle, SQL Server and MySQL databases. 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:** CIS101 or CIS120, or consent of the instructor. **F**

Cultural Studies

See CLA–Chicano/Latino Studies, SSC–Social Science.

CVL

Civil Technology

CVL130 Work Zone Safety and First Aid

1 class hr/wk, 1 cr.

Covers signage and cone setup standards related to basic traffic control for short-term work zones. Presents introductory flagging procedures with additional coursework in basic first aid and CPR. **Prerequisite:** Consent of instructor. **F**

CVL143 Introduction to Civil Survey

2 class and 3 lab hr /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 and working as a member of a team. **Prerequisite:** Concurrent enrollment in MTH070 or MTH081 or higher; or consent of instructor. **F**

CVL144 Intermediate Civil Survey

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

Continues Introduction to Civil Survey (CVL143). Covers plane survey office and field practices. Includes measurement techniques associated with differential leveling and field measurements with advanced electronic survey equipment. Includes basic office calculations relating to surveying, including coordinate geometry, differential levels and simple curves. Covers field survey procedures for staking horizontal curves, data collection and differential levels. Introduces a basic understanding of metes and bounds descriptions. Emphasizes professional-technical development and team workskills. **Prerequisite:** CVL143; and concurrent enrollment in MTH082 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

CVL161A Plane Surveying 1–Lecture

2 class hr/wk, 2 cr.

Covers plane survey theory and practice. Includes measurement techniques associated with taping, leveling, and field measurements with advanced electronic survey equipment. Emphasizes professional-technical development and teamwork skills. Introduces a basic understanding of metes and bounds descriptions. **Prerequisite:** CVL143 and concurrent enrollment in MTH082 or higher and concurrent enrollment in CVL161B, or consent of instructor. **W**

CVL161B Plane Surveying 1–Lab

6 lab hr/wk, 2 cr.

Covers field practices and application of equipment utilized in professional land surveying. Emphasizes tactile learning with strong team orientation. **Prerequisite:** CVL143 and concurrent enrollment in CVL161A, or consent of instructor. **W**

CVL162A Plane Surveying 2–Lecture

2 class hr/wk, 2 cr.

Studies distance and direction measurement, employing total stations with external data collectors, traversing and associated office computations, areas and volumes, circular curves, vertical curves and outlines of public land surveys. **Prerequisite:** CVL144 with a grade of C or better; and concurrent enrollment in CVL162B; or consent of instructor. **Sp**

CVL162B Plane Surveying 2–Lab

6 lab hr/wk, 2 cr.

Incorporates field survey with a focus on data gathering for computerized mapping. Introduces American Land Title Association specification standards and the use of GPS equipment. **Prerequisite:** DRF131 and CVL144, both with a grade of C or better; and concurrent enrollment in CVL162A; or consent of instructor. **Sp**

CVL211 Fluid Mechanics

4 class hr/wk, 4 cr.

Focuses on fluid properties, fluid statics, fluid motion, conservation of mass, momentum, and energy for incompressible fluids, dimensional analysis, for civil engineering applications. **Prerequisite:** MTH112 or MTH082, either with a grade of C or better; or consent of instructor. **Offered as needed**

CVL230 Applied Statics

3 class hr/wk, 3 cr.

Analyzes the forces induced in structures and machines by various types of loading. **Prerequisite:** MTH082 or MTH112, and PH081, or consent of instructor. **Offered as needed**

CVL231 Applied Strength of Materials

4 class hr/wk, 4 cr.

Analyzes internal stresses, deflections and deformations of structural members when subjected to external forces. Covers how to design structures based on structural analysis. **Prerequisite:** CVL230 or consent of instructor. **Offered as needed**

CVL232 Applied Statics and Strength of Materials

4 class hr/wk, 4 cr.

Covers classification and analysis of internal and external forces induced in structures by various types of loading. Introduces structural factors such as centroids, moment of inertia, stress and deflection. Covers the design of structures based on structural analysis using equilibrium, stress, and deflection concepts. **Prerequisite:** MTH082 or MTH112, and PH121, or consent of instructor. **Offered as needed**

CVL240A Construction Surveying–Lecture

2 class hr/wk, 2 cr.

Covers office-based calculations for construction surveying of a typical residential street, including curbs, storm and waste water sewers, and building site layouts. Applies state plan coordinate system to construction surveying and building site layouts. Introduces Global Positioning Systems (GPS) theory and writing legal descriptions for utility easements and street right-of-way.

Prerequisite: CVL162A and CVL162B and concurrent enrollment in CVL240B, or consent of instructor. **Offered as needed**

CVL240B Construction Surveying–Lab

6 lab hr/wk, 2 cr.

Covers construction surveying for a typical residential street, including curbs, storm and waste water sewers, and building site layouts. Introduces Global Positioning Systems (GPS) field measurement practices and equipment care and use requirements.

Prerequisite: CVL162A and CVL162B and concurrent enrollment in CVL240A, or consent of instructor. **Offered as needed**

CVL241 Boundary Survey Law

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

Explores statute law, common law, and legal principles relating to land boundaries. **Prerequisite:** CVL162; concurrent enrollment in WR121, or consent of instructor. **Offered as needed**

CVL242 Boundary Descriptions

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

Covers real property descriptions and land record systems. Emphasizes interpreting and writing land descriptions, research in land records, and multipurpose cadastre. **Prerequisite:** CVL161 and CVL241 both with a grade of C or better, and WR121. **Offered as needed**

CVL260 Survey Project Planning

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

Covers advanced research of deed and survey data. Emphasizes preparation of a map of record. Emphasizes preparation of equipment and labor requirement plans needed for field survey project planning. **Prerequisite:** CVL163A, CVL162B and DRF245 or consent of instructor. **Offered as needed**

CVL261 Environmental and Sanitary Technology

2 class and 6 lab hr /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:** DRF245 and MTH082 or consent of instructor. **Offered as needed**

CVL263A Topographic Surveying–Lecture

2 class hr/wk, 2 cr.

Covers importing survey point files of topographic points previously surveyed using electronic survey equipment into AutoCAD engineering/surveying software, to produce a base map (topographic map) depicting the area surveyed. **Prerequisite:** CVL162A and CVL162B; and concurrent enrollment in CVL263B; and DRF245; or consent of instructor. **Offered as needed**

CVL263B Topographic Surveying–Lab

6 lab hr/wk, 2 cr.

Reviews field practices and applies survey techniques to field survey data collection. Covers advanced responsibilities of a team leader in a field crew situation with additional equipment care and use requirements. Includes topographic surveying using electronic surveying equipment, including setting up horizontal and vertical control networks. **Prerequisite:** CVL162A and CVL162B; and concurrent enrollment in CVL263A; and DRF245; or consent of instructor. **Offered as needed**

CVL280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience.

CWE

Cooperative Work Experience

Cooperative Work Experience 280B-L 2-12 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 PE–Physical Education

DEN

Dental Assisting

DEN150 Dental Sciences

3 class hr/wk, 3 cr.

Focuses on a study of the sciences associated with the practice of dentistry. Includes oral microbiology, plaque formation, plaque-related diseases, oral pathology, sterilization and disinfection principles, OSHA bloodborne pathogen and hazard communication standards, anesthesia, and pharmacology. **Prerequisite:** Enrollment in the Dental Assisting program; or consent of instructor. **F**

DEN151 Introductory Concepts in Dental Assisting

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

Provides a basic study of the dental assistant's role with emphasis on terminology, instruments and equipment, professional regimen, chairside techniques and patient communication. Emphasizes the qualifications necessary for success in the dental assistant field. **Prerequisite:** Enrollment in the Dental Assisting program; or consent of instructor. **F**

DEN153 Dental Materials 1

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

Introduces 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. **F**

DEN156 Dental Anatomy

4 class hr/wk, 4 cr.

Introduces dental anatomy. Particular attention is directed toward the oral cavity and its associated structures and anatomical terminology. Includes identification, form and function of the adult dentition, and deciduous dentition. Also includes dental charting for conditions of the oral cavity.

Prerequisite: Enrollment in the Dental Assisting program; or consent of instructor. **F**

DEN160 Dental Specialties

2 class hr/wk, 2 cr.

Studies the various fields of specialized dentistry recognized by the American Dental Association. Introduces applied psychology through role playing as related to the clinical application in the specialties. **Prerequisite:** Second-term standing in the Dental Assisting program. **W**

DEN161 Dental Assisting Practicum 1

1 class and 7 lab hr /wk, 3 cr.

Provides 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. **W**

DEN162 Intermediate Clinical Skills

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

Presents the theory and practice of intermediate clinical responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration and practical application of the following: alginate impressions, bite registration, oral hygiene instruction, dietary analysis, and rubber dam placement and removal. **Prerequisite:** Second-term standing in the Dental Assisting program. **W**

DEN163 Dental Materials 2**2 class and 3 lab hr /wk, 3 cr.**

Introduces the principles of laboratory procedures related to fixed and removable prosthetics. The utilization 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. **W**

DEN164 Dental Radiology 1**2 class and 3 lab hr /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; 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 and exposed films are processed and evaluated. **Prerequisite:** Second-term standing in the Dental Assisting program. **W**

DEN165 Dental Office Emergency Management**2 class hr/wk, 2 cr.**

Emphasizes prevention and treatment of the most common medical emergencies in the dental office. Covers the preparation of the office and staff to deal with these emergencies, including gathering patient information, such as a health history and vital signs. Discusses the use of emergency equipment and supplies. Emphasizes use of dental anesthesia and pharmacology and their role in medical emergency situations. **Prerequisite:** Enrollment in the Dental Assisting Program or consent of the instructor. **F**

DEN170 Dental Office Management**2 class hr/wk, 2 cr.**

Introduces management of the dental office, including business office procedures and techniques, written and electronic communications, computer use, dental insurance, inventory control, accounts receivable, recall systems, and staff and patient management. Prepares students for successful employment by incorporating resume writing, completion of a job application, and interview techniques. **Prerequisite:** CIS101 with a grade of C or better; and second-term standing in the Dental Assisting Program. **W**

DEN171 Dental Assisting Practicum 2**1 class and 24 lab hr /wk, 9 cr.**

Consists of observation and practice in a dental office setting. Develops communication rapport with the dental team and patients; perform specified basic, intermediate, and expanded function chairside procedures; completes reception and business office tasks; applies skills in laboratory procedures; and exposes and processes patient x-rays as directed by the dentist. Prepares students for the Dental Assisting National Board (DANB) Certification Examination. **Prerequisite:** Third-term standing in the Dental Assisting program. **Sp**

DEN172 Expanded Functions**2 class and 3 lab hr /wk, 3 cr.**

Presents the theory and practice of legal Expanded Functions for dental assistants. Includes discussion, demonstration, and practical application of the following: intra-extra oral exam, coronal polish; topical fluoride; amalgam and composite polish; provisional coverage; suture removal; cement removal; and pit and fissure sealant placement. **Prerequisite:** Third-term standing in the Dental Assisting program. **Sp**

DEN174 Dental Radiology 2**1 class and 3 lab hr /wk, 2 cr.**

Continues DEN164. Allows students to take additional adult and pediatric (pedodontic) manikin films using low-dose technique. Students develop skills in patient management and perfect radiographic techniques by completing two full mouth patient x-ray series. Includes information in taking pediatric 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; process and evaluate all exposed films, and are eligible to take the State x-ray examination upon successful completion of DEN164 and DEN174. **Prerequisite:** Third-term standing in the Dental Assisting program. **Sp**

DRF**Drafting Technology****See also CAM—Computer-Aided Manufacturing****DRF051 Technical Graphics****1 class and 6 lab hr /wk, 3 cr.**

Covers fundamentals of graphics communication. Includes multiview and pictorial representation, dimensioning and section and auxiliary views. **Prerequisite:** DRF130 or consent of instructor. **Offered as needed**

DRF054 Drafting 1**1 class and 3 lab hr /wk, 2 cr.**

Introduces 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. **Offered as needed**

DRF095A,B,C Special Projects in Drafting and Design**3-9 lab hrs/wk, 1-3 cr.**

Allows student and instructor to identify a 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 students as an elective. Potential areas of consideration include community development projects, CAD 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:** Consent of instructor. **F, W, Sp, Su**

DRF101 Basic CAD for Electronics**1 class and 3 lab hr /wk, 2 cr.**

Covers the use of AutoCAD, schematic drawings, chassis design, block diagrams, and PC board layout drawings, in addition to basic CAD operations in the field of electronic drafting. **F**

DRF110 Applied Engineering Computations**2 class hr/wk, 2 cr.**

Covers computation and presentation of technical data to solve typical problems found in mechanical, civil, design and related areas. **Prerequisite:** MTH070 or consent of instructor. **F, W**

DRF112 Sketching**3 lab hr/wk, 1 cr.**

Covers basic technical sketching and field measurement skills and techniques as used in drafting process and practical pictorial communication. **F**

DRF114 Drafting Orientation**1 class and 3 lab hr /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. **F**

DRF130 CAD 1**2 class and 3 lab hr /wk, 3 cr.**

Incorporates hands-on experience with CAD (computer-aided drafting) software. Introduces standard graphics commands for two-dimensional drawings. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **F, W, Sp, Su**

DRF131 CAD 2**2 class and 3 lab hr /wk, 3 cr.**

Incorporates hands-on experience with CAD. Covers more complex graphics commands for two-dimensional drawings. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **Prerequisite:** DRF130 or consent of instructor. **F, W, Sp, Su**

DRF132 CAD 3**2 class and 3 lab hr /wk, 3 cr.**

Incorporates hands-on experience with CAD. Covers advanced graphics commands for two-dimensional drawings. Introduces elementary customization techniques. Covers three-dimensional models created from surfaces and solids. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **Prerequisite:** DRF131 or consent of instructor. **F, W, Sp, Su**

DRF140 3D Modeling with Inventor**2 class and 3 lab hr /wk, 3 cr.**

Uses Autodesk Inventor as an introduction to 3D modeling. Covers fundamentals of graphics communication. Includes multi-view drawings, dimensioning, section views, auxiliary views and descriptive geometry concepts. **Prerequisite:** DRF131 with a grade of C or better; or consent of instructor. **Sp**

DRF150 Architectural Drafting 1**1 class and 6 lab hr /wk, 3 cr.**

Covers basic architectural drafting techniques and methods. Includes dimensioning, layout, symbols and conventional construction methods used in residential buildings. Uses AutoCAD to draft a partial set of construction drawings. **Prerequisite:** DRF131 or consent of instructor. **F, W, Sp**

DRF155 Mapping and Platting**1 class and 6 lab hr /wk, 3 cr.**

Covers map components, legal descriptions, plot plans and contours. Introduces Civil 3D software, including Geographic Information Systems (GIS) and Global Positioning Systems (GPS). **Prerequisite:** DRF131 or consent of instructor. **F**

DRF160 Spreadsheet and Database Applications**2 class and 3 lab hr /wk, 3 cr.**

Covers engineering and technical applications of purchased software packages, focusing on Excel. Includes the use of spreadsheets to store and manipulate data, design structural members, and aid in statistical analysis and parametric design.

Prerequisite: MTH081 or MTH111, either with a grade of C or better; or consent of instructor. **Sp**

DRF165 CAD System Administration**2 class and 3 lab hr /wk, 3 cr.**

Covers customizing parameters for maximizing AutoCAD. Includes researching and installing custom programs for optimizing drawing performance. Also covers creating custom menu systems for specific applications. **Prerequisite:** DRF132 with a grade of C or better; or consent of instructor. **Sp**

DRF170 AutoCAD Certification Preparation**1 class and 2 lab hr /wk, 2 cr.**

Presents preparation course for AutoCAD Certification Exam administered by Autodesk. **Prerequisite:** DRF131 with a grade of C or better; or consent of instructor. **Sp**

DRF210 Parametric Design with SolidWorks**1 class and 6 lab hr /wk, 3 cr.**

Covers graphic communication used throughout technical and engineering fields. Applies spatial analysis and engineering design concepts using parametric modeling software. **Prerequisite:** DRF130 with a grade of C or better; or consent of instructor. **F, W**

DRF220 GIS 1**1 class and 3 lab hr /wk, 2 cr.**

Uses geographic information systems (GIS) software to view geographic relationships. Studies GIS basic concepts and covers physical, climatic, and social attributes of various regions of the world. **W**

DRF221 GIS 2**1 class and 6 lab hr /wk, 3 cr.**

Uses GIS and CAD software in GIS applications and projects. Studies advanced GIS concepts and covers basic CAD mapping commands and operations. **Prerequisite:** DRF131 and DRF220 or consent of instructor. **Sp**

DRF230 Introduction to MicroStation PC**2 class and 3 lab hr /wk, 3 cr.**

Introduces the MicroStation PC drafting software. Covers basic drawing, editing and display commands. Contrasts operations with AutoCAD. **Prerequisite:** DRF131 or consent of instructor. **F**

DRF231 Advanced MicroStation**1 class and 6 lab hr /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. Introduces 3D modeling tools. **Prerequisite:** DRF230 or consent of instructor. **Sp**

DRF240 Architectural Drafting 2**1 class and 6 lab hr /wk, 3 cr.**

Covers advanced architectural drafting techniques and methods. Incorporates a full set of working drawings, shear wall designs, advanced construction details, building process, current building codes used in residential buildings. Uses AutoCAD to draft a full set of construction drawings. **Prerequisite:** DRF150 or consent of instructor. **W**

DRF241 Structural Drafting**1 class and 6 lab hr /wk, 3 cr.**

Introduces light commercial construction practices. Covers production of working drawings using AutoCAD software. Also covers drafting practices applied with the building materials of steel and concrete.

Prerequisite: DRF131 or consent of instructor. **Sp**

DRF242 3-D Presentations**1 class and 6 lab hr /wk, 3 cr.**

Covers production of objects and scenes as 3D computer images, incorporating various materials and lights. **Prerequisite:** DRF132 or consent of instructor. **Offered as needed**

DRF243 Architectural Design**1 class and 6 lab hr /wk, 3 cr.**

Covers elements and principles of aesthetic design. Applies 3D design and model to assigned project. Develops light commercial/residential project with emphasis on specific design criteria. **Prerequisite:** DRF240 or consent of instructor. **Sp**

DRF245 Civil Drafting and Design**1 class and 9 lab hr /wk, 4 cr.**

Covers advanced elements of Civil 3D software. Develops residential subdivision and typical utility design documentation. **Prerequisite:** DRF132 and DRF155, both with a grade of C or better; or consent of instructor. **W**

DRF246 Project Development**1 class and 6 lab hr /wk, 3 cr.**

Covers advanced elements of residential subdivision design and layout with associated utility work based on a theoretical set of municipal standards and specifications. Incorporates preparation of all design documentation in review-ready condition.

Prerequisite: DR245 with a grade of C or better; or consent of instructor. **Sp**

DRF251 Power Transmission Design
3 class hr/wk, 3 cr.

Focuses on the design of power transmission systems. Incorporates hydraulics, pneumatics, electric motors, chains, belts, bearings and speed reducers. Covers analysis of system requirements, sizing of machine elements, and selection of components from industrial catalogs. **Prerequisite:** MTH082 or consent of instructor. **Offered as needed**

DRF255 Technical Illustration**1 class and 6 lab hr /wk, 3 cr.**

Presents pictorial presentation methods for 3D models using a variety of software. Focuses on creating exploded view drawings, blended raster and vector images, and computer renderings. Covers plotting to web and paper format. **Prerequisite:** DRF132 or consent of instructor. **Offered as needed**

DRF256 AutoLISP Programming**2 class and 3 lab hr /wk, 3 cr.**

Introduces AutoLISP functions. Focuses on development of programs to increase AutoCAD productivity. **Prerequisite:** DRF131. **Offered as needed**

DRF260 Tool Design**1 class and 6 lab hr /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. **Sp**

DRF262 Machine Design**1 class and 6 lab hr /wk, 3 cr.**

Presents 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 with a grade of C or better; or consent of instructor. **W**

DRF271 Commercial Drafting with Revit 1**1 class and 9 lab hr /wk, 4 cr.**

Introduces creation of architectural plans, elevations, and sections of a light commercial project using Revit software. Covers an introduction to commercial architectural techniques and materials, as well as Revit software. First course in a three-term commercial drafting sequence using Revit software. **Prerequisite:** DRF131 or consent of instructor. **F**

DRF272 Commercial Drafting with Revit 2**1 class and 9 lab hr /wk, 4 cr.**

Presents creation of site plan, and add ceilings, structural, and HVAC systems to the architectural model created in DRF271. Covers an introduction to building systems, and coordination required between disciplines, as well as Revit software. Second course in a three-term commercial drafting sequence using Revit software. **Prerequisite:** DRF271 or consent of instructor. **W**

DRF273 Commercial Drafting with Revit 3**1 class and 9 lab hr /wk, 4 cr.**

Covers creation of project documentation including schedules, interior elevations, symbol legend, table of contents and cover sheet data. Develops a conceptual tenant improvement plan for one portion of the project based upon client specifications and requirements. Includes rendering a completed project and creating an animation. Third course in a three-term commercial drafting sequence using Revit software. **Prerequisite:** DRF272 or consent of instructor. **Sp**

DRF280B-L Cooperative Work Experience**See CWE-Cooperative Work Experience.****EC****Economics****EC200 Introduction to Economics****4 class hr/wk, 4 cr.**

Introduces the economic concepts and analysis in the process of studying important issues in modern society such as: unemployment, inflation, pollution, poverty, income distribution, health care, and development. **Prerequisite:** MTH070. **F, W, Sp**

EC201 Introduction to Microeconomics**4 class hr/wk, 4 cr.**

Introduces microeconomic theories of how a capitalist society operates. Covers the concepts of surplus product, commodity production, price elasticity, revenue, production and cost, profit, competitive and imperfectly competitive markets, market power, antitrust, externalities, (de)regulation of business, income distribution, poverty, and labor (factor) markets. **Prerequisite:** MTH095 and EC202. **F, W, Sp, Su**

EC202 Introduction to Macroeconomics**4 class hr/wk, 4 cr.**

Introduces macroeconomic theories of how a capitalist society operates. Covers the concepts of aggregate supply and demand, fiscal and monetary policies, international trade, money and banking, the Federal Reserve, business cycles, poverty, unemployment and inflation. **Prerequisite:** MTH095. **F, W, Sp, Su**

EC203 Applications to Economic Issues**4 class hr/wk, 4 cr.**

Emphasizes such global issues as economic growth, environmental protection, rent, interest and profit, international trade and finance, and international development. **F, W, Sp**

ECE**Early Childhood Education****See also ED-Education, HDF-Human Development and Family Studies.****ECE068A,B,C Observing Preschool Experiences****1 class hr/wk, 1 cr. each**

Observes 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**

ECE150 Introduction and Observation in Early Childhood Education**3 class hr/wk, 3 cr.**

Focuses on the history of early childhood education and the value and use of objective observations as a teaching tool. Includes weekly lecture-discussion and weekly observations. **F**

ECE151 Observing and Guiding Behavior**3 class hr/wk, 3 cr.**

Continues observing experiences. Emphasizes the role of the teacher and techniques of individual and group guidance and management. **W**

ECE152 Creative Activities**2 class and 2 lab hr /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. Discusses presentation and methods of evaluation. Includes art activities, use of natural materials, cooking experiences, puppet-making and the development of new art. **W**

ECE153 Music and Movement for Young Children**3 class hr/wk, 3 cr.**

Emphasizes music as a pleasurable medium of expression while learning why and how to provide music and movement activities for the young child. Presents 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. **Sp**

ECE154 Children's Literature and Literacy

3 class hr/wk, 3 cr.

Offers an overview of what is available in quality children's literature, along with a rationale for the purposes of such literature, ways to implement its use and ways to evaluate its appropriateness in a given school situation. Includes the evaluation and reading of children's books and holding groups with children. Explores in depth how children develop literacy. **Sp**

ECE155 Child Nutrition

2 class hr/wk, 2 cr.

Introduces human nutrition and health with emphasis on the nutritional needs and food experiences of the young child. Includes practical application in the day care setting, planning snacks and meals for preschool children. **W**

ECE161 Infant/Toddler Practicum

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

Provides experience working with infants and toddlers in a laboratory setting and in assisting with supervision of the various daily activities. **Prerequisite:** HDF249 or consent of instructor. **F, W, Sp**

ECE162 Early Childhood Educator Orientation

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

Emphasizes the roles and responsibilities of the early childhood educator. Offers 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. **F, W, Sp**

ECE163 Preschool Practicum

1 class and 9 lab hr /wk, 4 cr.

Provides experience working with young children in a laboratory preschool setting. Assists with supervision of the various activities in a preschool program. Includes some planning, executing and evaluating of curriculum materials appropriate for the young child. **Prerequisite:** Grade of C or better in HDF225, HDF247, HDF249, ECE151, ECE162, and consent of two ECE faculty. **F, W, Sp**

ECE251 Environments for Young Children

3 class hr/wk, 3 cr.

Focuses on 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 hr /wk, 6 cr.

Offers supervised teaching of young children in a laboratory setting. **Prerequisite:** Grade of C or better in ECE163, second-year standing in the Early Childhood Education program, and consent of instructor. **F, W, Sp**

ECE262 Student Teaching 2: Early Childhood Education

2 class and 12 lab hr /wk, 6 cr.

Offers supervised teaching of young children in a laboratory preschool and in a community setting. **Prerequisite:** Grade of C or better in ECE261 and consent of instructor. **F, W, Sp**

ECE280B-L Cooperative Work Experience

See CWE-Cooperative Work Experience.

ECE295 Administration of Early Childhood Programs

3 class hr/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

See also SLP-Speech-Language Pathology Assistant.

ED100 Introduction to Education

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

Examines teaching as a profession. Provides opportunities for direct experience with, and analysis of, educational settings. Explores current issues in education and characteristics of effective schools. **F, W, Sp, Su**

ED130 Comprehensive Classroom Management

3 class hr/wk, 3 cr.

Provides current theory and methodology for managing small and large groups of students so that students choose to be productively involved in instructional activities. Covers the four major factors or skill areas of effective classroom management: 1) understanding students personal/psychological and learning needs, 2) establishing positive adult-student and student-student relationships, 3) implementing instructional methods that facilitate optimal learning, and 4) using organizational and group management methods that maximize positive student behavior and learning. **Prerequisite:** ED100 or consent of instructor. **W, Sp**

ED169 Overview of Students with Special Needs

3 class hr/wk, 3 cr.

Introduces the disabling conditions of students with special needs and their implications in school settings. Defines and identifies intervention strategies for disabilities covered under federal law. **Prerequisite:** ED100 or consent of instructor. **W, Sp, Su**

ED200 Foundations of Education

3 class hr/wk, 3 cr.

Provides an overview of the American educational system, including historical, legal and philosophical foundations. Explores the governance of local schools and districts and considers the roles and ethical obligations of professional educators. **Prerequisite:** ED100 or consent of instructor.

Offered as needed

ED229 Learning and Development

3 class hr/wk, 3 cr.

Addresses current theory regarding human development, intelligences, motivation and the learning process. Applies strategies and techniques derived from these theories.

Prerequisite: ED100 or consent of instructor. **F, W, Sp, Su**

ED258 Multicultural Education

3 class hr/wk, 3 cr.

Covers the philosophy, activities and techniques appropriate to a culturally sensitive classroom. Students will develop an understanding of the impact of culture on individual perception and learning and on group dynamics. ED100 or consent of instructor. **F, W, Su; CL**

ED267 Working with Students with Autism Disorders

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

Covers Autism Spectrum Disorders (ASD) characteristics including learning style, communication, social interaction, sensory processing, behavior, visual/concrete supports, teaching strategies, and teamwork. Brings together theory and discussion; demonstration; practice and feedback; and coaching in the classroom. **Offered as needed**

EGR

Engineering

See also GE-General Engineering.

EGR201 Electrical Fundamentals 1

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

Studies basic electrical circuit theory, including voltage, current and power relationships, and circuit parameters of resistance, inductance, and capacitance. Covers basic DC and natural responses of circuits. Also includes operational amplifier theory and an introduction to AC analysis. **Prerequisite:** MTH252 with grade of C or better; or consent of instructor. **F**

EGR202 Electrical Fundamentals 2

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

Covers sinusoidal steady-state analysis, the basic operation of three-phase circuits and analysis of electric circuits containing mutually-coupled coils. Also covers transformer function in circuits and the characteristics of resonant circuits. **Prerequisite:** MTH252 and EGR201, or consent of instructor. **W**

EGR203 Electrical Control Fundamentals

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

Covers Fourier series and LaPlace Transforms and their use in electrical control theory. Includes the Bode diagram, Boolean algebra, and basic logic gates. **Prerequisite:** MTH252, MTH256, and EGR202, or consent of instructor. **Sp**

EGR211 Statics

3 class and 2 lab hr /wk, 4 cr.

Analyzes the forces induced in structures and machines by various types of loading.

Prerequisite: MTH252 with grade of C or better; or consent of instructor. **F**

EGR212 Dynamics

3 class and 2 lab hr /wk, 4 cr.

Studies kinematics, Newton's laws of motion, work-energy relations, and impulse-momentum relationships applied to engineering systems. **Prerequisite:** EGR211, MTH252 and PH211 or consent of instructor. **W**

EGR213 Strength of Materials

3 class and 2 lab hr /wk, 4 cr.

Covers properties of structural materials and analysis of stress and deformation in axially loaded members, circular shafts, beams, and statically indeterminate systems. **Prerequisite:** EGR211 and MTH252 or consent of instructor. **Sp**

EGR214 Introduction to Statistics for Engineers

3 class hr/wk, 3 cr.

Covers probability, common probability distributions, sampling distributions, estimation, hypothesis testing, control charts, regression analysis, and experiment design.

Prerequisite: MTH252. **Sp**

EGR248 Graphics and 3-D Modeling

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

Covers graphic communication, multi-view and pictorial representation, conceptual design, spatial analysis, and engineering design representation through use of advanced level computer tools. **Prerequisite:** DRF130 or consent of instructor. **F, W**

ELT

Electronics Technologies

See also MT–Industrial, NET–Network Technology, and RNW–Renewable Energy Management

ELT100 Electronics Fundamentals for Non-Majors

3 class and 2 lab hr /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. Promotes and supports sustainable and green technologies. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor. **F, Offered as needed**

ELT111 Electronics Orientation

2 lab hr /wk, 1 cr.

Introduces the field of electronics and its opportunities. Covers career opportunities and requirements, basic vocabulary, soldering, static awareness, tool identification, safety, hardware, and chemicals used in electronics. Promotes and supports sustainable and green technologies. **F, Offered as needed**

ELT121 Programming Concepts 1

3 class and 2 lab hr /wk, 4 cr.

Offers the first course in the Programming Concepts sequence. Introduces computer programming, computer hardware interfacing, and computer operating systems using C/C++ language. Promotes and supports sustainable and green technologies. **Prerequisite:** MTH081 with a grade of C or better; or consent of instructor. **F, Offered as needed**

ELT131 Electronic Concepts 1

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

Covers atomic and direct current (DC) electrical theory applicable to the field of electronics. Introduces voltage, current, resistance, and power concepts in analysis, construction, and testing of resistive DC circuits. Includes series, parallel, and series-parallel resistive circuit analysis techniques and theorems. Promotes and supports sustainable and green technologies. **Prerequisite:** MTH070; and concurrent enrollment in MTH111 or MTH081; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Offered as needed**

ELT132 Electronic Concepts 2

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

Covers atomic and alternating current (AC) electrical theory applicable to resistors, capacitors, and inductors. Stresses reactive circuit theorems used for circuit analysis.

Prerequisite: ELT131 or consent of instructor and concurrent enrollment in a Trigonometry class. **W, Offered as needed**

ELT133 Electronic Concepts 3

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

Covers electric circuit theory and analysis applicable to passive RLC reactive circuits. Includes transformers, polyphase AC, resonance, passive filters, and other RLC series/parallel circuit applications. Applies fundamental AC/DC concepts developed in ELT131 and ELT132. Promotes and supports sustainable and green technologies.

Prerequisite: ELT132 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ELT141 Transistor Fundamentals

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

Introduces semiconductor physics and the fundamental principles of diodes and bipolar transistors. **Prerequisite:** Concurrent enrollment in ELT132. **W, Offered as needed**

ELT142 Semiconductor/Optoelectronic Devices

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

Covers the fundamentals of basic diode rectifier, multiplier, and transistor voltage regulators and current limiting circuits. Introduces the operating principles of solid-state devices such as unijunction transistors, special purpose diodes, photovoltaic cells, thyristors, and optoelectronic devices. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT141 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ELT143 Pulse Circuit Fundamentals

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

Introduces the theory, analysis and operation of discrete pulse waveform circuits. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT141 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ELT151 Digital Fundamentals

3 class and 2 lab hr /wk, 4 cr.

Introduces digital logic theories: number systems and conversions, Boolean algebra, simplification theorems, combinational logic, and arithmetic. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT131 with a grade of C or better; or consent of instructor. **W, Offered as needed**

ELT161 Linear IC Fundamentals

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

Introduces linear integrated circuit amplifiers. Emphasizes device parameters and basic circuit operating characteristics. Includes linear integrated circuit amplifying devices for comparison and evaluation through laboratory experiments. Promotes and supports sustainable and green technologies.

Prerequisite: ELT132 and ELT141, both with a grade of C or better; or consent of instructor. Corequisite: ELT133 and ELT142. **Sp, Offered as needed**

ELT222 Programming Concepts 2**3 class and 2 lab hr /wk, 4 cr.**

Provides the second course in the Programming Concepts sequence. Covers interfacing and application of C/C++ concepts to common hardware devices in electronics. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT111, ELT121, ELT132, and ELT151; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

ELT244 Electronic Circuit Analysis**3 class and 3 lab hr /wk, 4 cr.**

Covers basic electronic devices and circuit designs. Emphasizes verifying and analyzing the designs, using the "R" parameters. Includes small-signal amplifiers, bi-polar circuits, FET circuits, oscillators, and power amplifiers. Includes some circuits analyzed using simulation software, while other circuits are constructed and analyzed, using laboratory test equipment. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT141 and ELT133, both with a grade of C or better; or consent of instructor. **F, Offered as needed**

ELT252 Digital Circuit Applications**2 class and 3 lab hr /wk, 3 cr.**

Covers theory and emphasizes hands-on laboratory application of sequential digital logic circuits, which build upon the fundamentals of combinational digital logic developed in ELT151. Includes flip-flops, counters, registers, encoders and decoders, and bus logic. Introduces memory devices, analog-to-digital and digital-to-analog converters (ADCs/DACs), and programmable logic devices. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT151 with a grade of C or better; or consent of instructor. **F, Offered as needed**

ELT253 Microprocessor Systems**3 class and 3 lab hr /wk, 4 cr.**

Explores 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. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT244 and ELT252, both with a grade of C or better; or consent of instructor. **W, Offered as needed**

ELT254 Computer Hardware**3 class and 3 lab hr /wk, 4 cr.**

Covers the hardware concepts fundamental to all computers and computer peripherals. Explains the interface between software and hardware. Also covers troubleshooting techniques. Promotes and supports sustainable practices and incorporates green technologies. **Prerequisite:** CIS140B or NET123, either with a grade of C or better; or consent of instructor. **W, Offered as needed**

ELT255 Advanced Data**Communication****3 class and 3 lab hr /wk, 4 cr.**

Addresses 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. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT253 and CIS278; and DOS and a high level programming language; or consent of instructor. **Sp**

ELT256 Advanced Computer**Architecture****3 class and 3 lab hr /wk, 4 cr.**

Emphasizes system installation and troubleshooting of both hardware and software in lab sessions. Intended for students with a solid foundation in digital logic, microprocessors and programming. Explains advanced computer system theory. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT253 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ELT262 Linear IC Applications**2 class and 3 lab hr /wk, 3 cr.**

Covers design and industrial applications using the integrated circuit amplifier and special function IC devices to study basic circuits. Includes laboratory evaluation of selected basic circuit designs. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT244 and ELT161, both with a grade of C or better; or consent of instructor. **W, Offered as needed**

ELT280B-L Cooperative Work**Experience****See CWE—Cooperative Work Experience.****ELT281 Antennas and Transmission Lines****2 class hr/wk, 2 cr.**

Covers the practical and theoretical aspects of basic transmission lines and antennas. Includes characteristics and properties of open-wire, coaxial, and special purpose transmission lines, plus those of vertical and horizontal antennas, and the coupling of source, transmission lines, and antennas. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT244 and ELT252, both with a grade of C or better; or consent of instructor. **W, Offered as needed**

ELT282 Telecommunications**2 class and 3 lab hr /wk, 3 cr.**

Covers communications theory and systems. Develops practical skills and reinforces theoretical concepts through laboratory experiments and field trips. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT281 with a grade of C or better or concurrent enrollment; or consent of instructor. **W, Offered as needed**

ELT283 Logical Troubleshooting**3 class and 3 lab hr /wk, 4 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. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT244 and ELT16, both with a grade of C or better; or equivalent as determined by instructor. **Sp, Offered as needed**

ELT291 Control, Robotics, and Power Systems**3 class and 3 lab hr /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). Relates control systems to robotics and power generation systems. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** ELT142 and ELT262, both with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ELT293 Flexible Manufacturing Systems and Processes

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

Studies the 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. Covers SCADA equipment and use in an industrial environment. Begins MES and ERP overview and related software use. Develops the problem solving abilities utilizing SPC and quality control charts. Information promotes and supports sustainable and green technologies. **Prerequisite:** MTH082; and PH121 or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

EMT

Emergency Medical Technology

EMT151 Emergency Medical Technician Basic, Part 1

4 class and 3 lab hr /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 a two-part course in a series of courses making up a national and state EMS training program. Failure of this course will require retaking the full sequence of EMT-Basic courses. **Prerequisite:** Placement into WR049 or higher, RD090 or higher, and MTH020 or higher. Must currently be certified in CPR for BLS Health Care Providers as issued in accordance with current national standard curriculum. Must meet standards as set by the Oregon State EMS Office for certification which includes health, driving, immunization and criminal record check. **F**

EMT152B Emergency Medical Technician Basic, Part 2

4 class and 3 lab hr /wk, 5 cr.

Continues instruction at the level of Emergency Medical Technician Basic, 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 Medical Board. Serves as the second in a series of courses making up a national and state EMS training program. Failure of this course will require retaking the full sequence of EMT-Basic courses.

Prerequisite: EMT151 with a grade of C or better. Must meet standards as set by the Oregon State EMS Office for certification which includes health, immunizations, and criminal record check. **Offered as needed**

EMT167A Emergency Medical Technician Intermediate, Part 1

4 class and 3 lab hr /wk, 5 cr.

Covers EMT-Intermediate emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (EKG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision-making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and EKG monitoring, defibrillation, pharmacology and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an urgent care clinic. Students successfully completing this course will be recommended to the Oregon State EMS Office for the certification process. Failure of this course will require retaking the full EMT-Intermediate sequence.

Prerequisite: Placement into WR049 or higher, RD090 or higher, and MTH020 or higher. Entry at these levels ensures that students will have an increased chance of passing the course, as well as certification exams. Current Oregon EMT-Basic certification, letter of endorsement from medical advisor, verification of EMT-Basic skills, and 80% or better on pre-test. **Offered as needed**

EMT167B Emergency Medical Technician Intermediate, Part 2

4 class and 3 lab hr /wk, 5 cr.

Covers EMT-Intermediate emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (EKG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision-making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and ECG monitoring, defibrillation, pharmacology and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an urgent care clinic. Students successfully completing this course will be recommended to the Oregon State EMS Office for the certification process. Failure of this course will require retaking the full EMT-Intermediate sequence.

Prerequisite: EMT167A with a grade of C or better. **Offered as needed**

EMT169 Emergency Medical Technician Rescue

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

Presents technical information on various rescue situations. Covers tools and equipment, ropes and knots, trench rescue, shoring, warehouse searches, outdoor searches, rescue in situations involving elevation differences, package patients, water and ice rescues, and vehicle extrication. **Offered as needed**

EMT175 Introduction to Emergency Medical Services

3 class hr/wk, 3 cr.

Covers the role and responsibilities of the paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, and stress management.

Offered as needed

EMT176 Emergency Response Patient Transportation

1 class and 2 lab hr /wk, 2 cr.

Covers ambulance operations, laws, maintenance and safety, emergency response driving, and route planning. **Offered as needed**

EMT177 Emergency Response Communication and Documentation

2 class hr/wk, 2 cr.

Covers principles of therapeutic communication via verbal, written, and electronic modes in the provision of EMS; documentation of the elements of patient assessment, care, and transport; communication systems; radio types; reports; codes; and correct techniques. **Sp**

EMT280B-L Cooperative Work Experience

See **CWE—Cooperative Work Experience**.

EMT296 Emergency Medical Technician Paramedic, Part 1 **12 class and 6 lab hr /wk, 14 cr.**

Offers first term of a three-term course, which includes EMT296, EMT297, EMT298, and EMT280H. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; and respiratory, cardiovascular, neurological, behavioral, and acute abdominal emergencies. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. Failure of this course will require retaking the full sequence of Paramedic courses (EMT296, EMT297, EMT298, and EMT280H). **Prerequisite:** Fourth term standing in the Emergency Medical Technology program. **F, Sp**

EMT297 Emergency Medical Technician Paramedic, Part 2 **10 class and 12 lab hr /wk, 14 cr.**

Offers second part of a three-term course, which includes EMT296, EMT297, EMT298 and EMT280H. Focuses on anaphylactic, toxicological, environmental, geriatric, pediatric, neonatal, and endocrine emergencies; infectious diseases; capnography; special patient populations; hematology; psychiatric care; crime scene presentation; genitourinary care; and trauma care. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. Failure of this course will require retaking the full sequence of Paramedic courses (EMT296, EMT297, EMT298 and EMT280H). **Prerequisite:** EMT296 with a grade of C or better. **W, Su**

EMT298 Emergency Medical Technician Paramedic, Part 3 **1 class and 9 lab hr /wk, 4 cr.**

Offers third part of a three-term course, which includes EMT296, EMT297, EMT298, and EMT280H. Focuses on review of Advanced Cardiac Life Support (ACLS), 12-Lead ECG interpretation, documentation, legal issues, practical skills and research and evidence-based medicine. Applies didactic knowledge to clinical patient care in the hospital setting. Failure of this course requires retaking the full sequence of Paramedic courses (EMT296, EMT297, EMT298, and EMT280H). **Prerequisite:** EMT297 with a grade of C or better. **F, Sp**

ENG

English

ENG104 Introduction to Fiction **4 class hr/wk, 4 cr.**

Features critical analysis and appreciation of fiction through the reading of narratives originally written in English as well as works in translation. Employs a selection of genre, stylistic, or thematic approaches to content to introduce the short story, the novel, novella, and basic literary terminology and concepts. Also introduces literary criticism and the conventions of writing literary analysis. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ENG105 Introduction to Dramatic Literature **4 class hr/wk, 4 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. Introduces literary criticism and the conventions of writing literary analysis. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ENG106 Introduction to Poetry **4 class hr/wk, 4 cr.**

Teaches students to enjoy, understand, analyze, and interpret Poetry. Introduces the breadth of poetry across periods, forms, and styles, both originally written in English and in translation. Introduces literary criticism and the conventions of writing literary analysis. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ENG107 Introduction to World Literature: The Ancient World Through the Middle Ages **4 class hr/wk, 4 cr.**

Introduces discussion and analysis of histories, stories, poems, and plays of the Western and non-Western world between 2000 B.C.E. and 1450 C.E. Explores the connection between literature and power and literature and social and cultural change. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **F; CL**

ENG108 Introduction to World Literature: The Renaissance Through the Romantic Revolt 1450-1850 **4 class hr/wk, 4 cr.**

Introduces discussion and analysis of literary works of the Western and non-Western world between 1450 and 1850. Explores the connection between literature and power and literature and social and cultural change. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **W; CL**

ENG109 Introduction to World Literature: 1850 to the Present **4 class hr/wk, 4 cr.**

Introduces discussion and analysis of works of the Nineteenth, Twentieth, and Twenty-First Centuries from around the world. Explores the connection between literature and politics and literature and social change. **Prerequisite:** Placement into WR115 and RD090; or WR090 with a grade of C or better; or consent of instructor. **W, Sp; CL**

ENG201 Introduction to Shakespeare **4 class hr/wk, 4 cr.**

Surveys selected early (1587-1600) Shakespearean works, emphasizing dramatic structure, characterization, imagery and theme. Uses critical essays to explore these plays and poems to provide background on the nature of the different genres of Shakespeare's works including at least one example from each of these genres: comedies, tragedies, histories, and sonnets, and covering a minimum of six plays. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **F**

ENG202 Introduction to Shakespeare **4 class hr/wk, 4 cr.**

Surveys selected Shakespearean tragedies, comedies, histories, and selected poetry written in the later part of his career (1600-1616) emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to explore these plays and poems and to provide background on the nature of the different genres of Shakespeare's works. Includes readings from at least one example of each of these genres: comedy, tragedy, history, and sonnets, and covers a minimum of six plays. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **W**

ENG204 Survey of Early English Literature

4 class hr/wk, 4 cr.

Surveys selected representative English literature from its beginnings in the Anglo-Saxon period through the Restoration (to c. 1785). Situates literature as the product of specific historical contexts. Requires careful reading. Fosters thoughtful interpretation, analysis, and appreciation of literature. Emphasizes genre, structure, characterization, imagery and theme. Uses critical essays to explore assigned texts. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **W**

ENG205 Survey of Later English Literature

4 class hr/wk, 4 cr.

Surveys selected, representative readings of English literature from the late 18th century through the twentieth century, including works from nations colonized by Britain. Situates literature as the product of specific historical contexts. Requires careful reading. Fosters thoughtful interpretation, analysis, and appreciation of literature. Emphasizes genre, structure, characterization, imagery, and theme. Uses critical essays to explore assigned texts. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Sp**

ENG221 Topics in British Literature

4 class hr/wk, 4 cr.

Examines a special topic in British Literature in depth. Includes content organized around one of the following: an author, a movement, a genre, a period, a theme, or some other coherent focal point. Course may be repeated for a maximum of 12 credits.

Offered as needed

ENG222 Images of Women in Literature

3 class hr/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. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed**

ENG232 Topics in American Literature

4 class hr/wk, 4 cr.

Examines a special topic in American Literature in depth by exploring the gendered, cultural, ideological, and political dimensions of literature written in the land now called United States. Emphasizes the complex role literature plays in forming and being formed by historical, cultural, political, ideological, and social contexts. Includes content organized around one of the following: an author, a movement, a genre, a period, a theme, or some other coherent focal point that highlights the dynamic and complex forces that help form this country's identity. Course may be repeated for a maximum of 12 credits. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed; CL**

ENG250 Introduction to Mythology and Folklore

4 class hr/wk, 4 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, such as the Near East, the Orient, the Pacific, Africa, Australia, the Celtic World or Northern Europe. Also examines folklore in contemporary life. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed**

ENG253 Survey of American Literature

4 class hr/wk, 4 cr.

Introduces the literature of the land now called the United States from before European contact through 1865. Surveys literary traditions and several genres from a variety of cultures, including Native American, African American, and European American. Emphasizes discussion of literary works as products of history as well as culture and explores the dynamics of the cultural encounters they reveal as well as the complexity of the many voices and perspectives that make up early American literature. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **F; CL**

ENG254 Survey of American Literature

4 class hr/wk, 4 cr.

Introduces students to the literature of the United States from 1865-present. Surveys literary traditions, genres, and representative writers from a variety of experiences, including Hispanic American, Native American, African American, Asian American and European American. Emphasizes literary works as products of history and culture, exploring the important developments in American culture through literature. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **W; CL**

ENG256 African-American Literature

4 class hr/wk, 4 cr.

Surveys the literature of the African-American people considering the complexity of cultural, social, regional, and historical influences and exchanges that have contributed to the formation of African-American literary traditions. Recognizes literary works as socially constructed and attends to the variety of voices and perspectives that make up African-American literature. Examines the literary synthesis of cultures as well as experiences, including but not limited to African, Caribbean and European origins; slavery; Diaspora; reconstruction; Harlem Renaissance; and the Civil Rights movement, as well as to the tensions such syntheses create. Explores the connection between literature and politics, and literature and social change. Genres studied include a representative sampling from several of the following: poetry, short story, novel, drama, autobiography, letters, journals, biography, speech, essay, and lyrics. A chronological, thematic, or stylistic approach may be taken. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed; CL**

ENG257 Native American Literature

4 class hr/wk, 4 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. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Sp; CL**

ENG258 Latin American Literature

4 class hr/wk, 4 cr.

Features reading and analysis of works by Latin American writers, from a wide range of countries, races, and classes, giving attention to literary styles, historical background, and the unique voices and perspectives of these authors. A chronological, regional, or thematic approach may be taken. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **W, Su; CL**

ENG260 Introduction to Women Writers

4 class hr/wk, 4 cr.

Focuses on the achievements and perspectives of women writers through critical analysis of their literary works and strategies. Introduces critical theories for analyzing and discussing literature written by women. Uses a chronological, thematic or stylistic approach. Includes a representative sampling from several of the following: poetry, short story, novel, drama, autobiography, letters, journals, biography, speech, essay, and lyrics. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed**

ENG261 Introduction to Science Fiction

4 class hr/wk, 4 cr.

Analyzes science fiction through the reading and discussion of representative works that explore the history and typology of this literary genre. May take a chronological, thematic, or stylistic approach. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed**

ENG269 Environmental Literature

4 class hr/wk, 4 cr.

Introduces students to environmental literature, which addresses the relationship between human beings and the natural world, as well as the place of human beings in the natural world. Includes a focus on not only human interaction with pristine wilderness, but also with cityscapes and toxic environments. Uses chronological, regional, or thematic approaches to current issues in the field. Introduces ecocriticism as an interpretive tool that includes attention to issues of environmental justice. Explores the link between environmental problems and economic and social justices. Uses critical reading, field trips, discussion, reflective writing, and critical writing in order to explore how our understanding of the natural environment has been socially constructed and how these constructions both benefit and burden particular groups. Explores the relationship between literature and social action. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **F; CL**

ENG275 The Bible as Literature

4 class hr/wk, 4 cr.

Explores the Bible as a literary text by examining literary forms, cultural context, history, authorship, and canonicity. Examines the way themes, stories, and idioms of the Bible influence contemporary western literature and culture. Uses the techniques and language of literary criticism as a key to understanding the text. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Sp**

ENL

English as a Non-Native Language

ENL031G ESL Intermediate Grammar 1

3 class hr/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for low intermediate to intermediate non-native speakers of English. **Prerequisite:** Successful completion of B2 Reading/Writing and B2 Listening/Speaking and a score of 34 or higher on the CELSA or placement by an ESOL specialist after assessment or consent of instructor. **Offered as needed**

ENL031L Intermediate Listening 1

3 class hr/wk, 3 cr.

Develops listening skills and strategies for everyday situations, the workplace, and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of XELL0722L or placement by ESOL program specialists. **F, W, Sp**

ENL031P Basic English Pronunciation 1

3 class hr/wk, 3 cr.

Introduces basic principles of American English pronunciation. Focuses on developing a pronunciation plan, using a dictionary to pronounce words, pronouncing English vowels and consonants, syllables, word endings, and word stress. Designed for non-native English speakers at the low intermediate level. **Prerequisite:** Successful completion of ENL022S, ENL022L, ENL022R and ENL022W, placement by ESOL program specialist, or consent of the instructor. **F, W**

ENL031R Intermediate Reading 1

3 class hr/wk, 3 cr.

Develops reading skills for everyday situations, the workplace, and the academic environment. Reviews and broadens the use of grammar, vocabulary, and strategies for reading. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of XELL0722R or placement by ESOL program specialists. **F, W, Sp**

ENL031S Intermediate Speaking 1

3 class hr/wk, 3 cr.

Develops speaking skills for everyday situations, the workplace, and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of XELL0722S or placement by ESOL program specialists. **F, W, Sp**

ENL031W Intermediate Writing 1

3 class hr/wk, 3 cr.

Introduces the writing of short paragraphs using chronological order, transition words, correct spelling, and punctuation. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of XELL0722W or placement by ESOL program specialists. **F, W, Sp**

ENL032G ESL Intermediate Grammar 2

3 class hr/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for intermediate non-native speakers of English. **Prerequisite:** Successful completion of ENL031G, and a score of 42 or higher on the CELSA or placement by an ESOL specialist. **Offered as needed**

ENL032L Intermediate Listening 2

3 class hr/wk, 3 cr.

Continues to develop listening skills and strategies for everyday situations, the workplace, and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of ENL031L or placement by ESOL program specialists. **F, W, Sp**

ENL032P Basic English Pronunciation 2
3 class hr/wk, 3 cr.

Introduces basic principles of U.S. American English pronunciation. Focuses on using a pronouncing key, pronouncing English vowels and consonants, rhythm in sentences, intonation in discourse and comprehending connected or rapid speech. Designed for non-native English speakers at the low-intermediate level. **Prerequisite:** Successful completion of ENL031P or consent of the instructor. **Offered as needed**

ENL032R Intermediate Reading 2
3 class hr/wk, 3 cr.

Continues to develop reading skills for everyday situations, the workplace, and the academic environment. Reviews and broadens the use of grammar, vocabulary, and strategies for reading. Designed for intermediate non-native speakers of English.

Prerequisite: Completion of assessment and orientation procedures. Successful completion of ENL031R or placement by ESOL program specialists. **F, W, Sp**

ENL032S Intermediate Speaking 2
3 class hr/wk, 3 cr.

Continues to develop speaking skills and strategies for everyday situations, the workplace, and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures; successful completion of ENL031S or placement by ESOL program specialists.

ENL032W Intermediate Writing 2
3 class hr/wk, 3 cr.

Continues to focus on writing simple narrative and descriptive paragraphs about daily activities and personal experiences. Designed for intermediate non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures; successful completion of ENL031W or placement by ESOL program specialists. **F, W, Sp**

ENL033T Technology for ESL
3 class hr/wk, 3 cr.

Introduces basic computer operations to intermediate and advanced non-native speakers of English. Covers using a computer operating system, word processing basics, and basic Internet skills and concepts.

Prerequisite: Completion of assessment and orientation procedures or placement by an ESOL program specialist. **Offered as needed**

ENL040A Introduction to Academic Listening and Speaking
3 class hr/wk, 3 cr.

Focuses on listening and speaking skills needed in social and academic settings. Introduces note-taking, formal presentations, and conversation management. Designed for non-native English speakers at the intermediate level. **Prerequisite:** Completion of assessment and orientation procedures; successful completion of ENL032L and ENL032S or placement by ESOL program specialist. **Offered as needed**

ENL041G Introduction to College Grammar 1
3 class hr/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for high intermediate to low advanced non-native speakers of English. **Prerequisite:** Successful completion of C2 Reading/Writing and C2 Listening/Speaking, or successful completion of Intermediate Grammar 2, a CELSA score of 47 or higher, or consent of instructor, or placement by an ESOL specialist. **Offered as needed**

ENL041L Introduction to Academic Listening 1
3 class hr/wk, 3 cr.

Focuses on simple work and community related listening and introduces simple academic listening. Designed for non-native English speakers at the intermediate level. **Prerequisite:** Completion of assessment and orientation procedures; successful completion of XELL0732L or placement by ESOL program specialists. **Offered as needed**

ENL041P Introduction to English Pronunciation 1
3 class hr/wk, 3 cr.

Develops principles of U.S. American English pronunciation. Focuses on creating a pronunciation plan, using a dictionary, pronouncing English vowels and consonants, sound and spelling patterns, syllables and word endings, and stress patterns in words. Designed for non-native English speakers at the high-intermediate level. **Prerequisite:** Successful completion of ENL032S, ENL032L, ENL032R and ENL032W or corresponding non-credit courses, placement by ESOL program specialist or consent of the instructor. **F**

ENL041R Introduction to College Reading 1
3 class hr/wk, 3 cr.

Provides continued development of reading for the transition from life skills reading to academic reading. Broadens the use of grammar, vocabulary, and more complex strategies for reading. Designed for intermediate, non-native speakers of English.

Prerequisite: Completion of assessment and orientation procedures. Successful completion of XELL0732R or placement by ESOL program specialists. **Offered as needed**

ENL041S Introduction to Academic Speaking 1
3 class hr/wk, 3 cr.

Focuses on work and community related speaking skills and introduces simple academic speaking. Designed for non-native English speakers at the intermediate level.

Prerequisite: Completion of assessment and orientation procedures. Successful completion of XELL0732S or placement by ESOL program specialists. **Offered as needed**

ENL041W Introduction to College Writing 1
3 class hr/wk, 3 cr.

Provides an introduction to academic writing in English. Focuses on the continued development of paragraph writing and editing. Designed for intermediate, non-native speakers of English. **Prerequisite:** Completion of orientation and assessment procedures. Successful completion of XELL0732W or placement by ESOL program specialists. **Offered as needed**

ENL042G Introduction to College Grammar
3 class hr/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for high intermediate to low advanced non-native speakers of English. **Prerequisite:** Completion of assessment procedures. A score of 50 or above on the CELSA, successful completion of Intermediate Grammar 1, consent of instructor, or placement by an ESOL specialist. **Offered as needed**

ENL042P Introduction to English Pronunciation 2

3 class hr/wk, 3 cr.

Introduces additional principles of U. S. American English pronunciation. Reviews vowels, consonants, syllabication and word stress. Focuses on rhythm in sentences, intonation patterns in phrases and sentences, thought groups, pausing, phrasing, and comprehending rapid, connected speech. Designed for non-native English speakers at the high-intermediate level. **Prerequisite:** Successful completion of ENL041P or XELL0741P or consent of the instructor.

Offered as needed

ENL042R Introduction to College Reading 2

3 class hr/wk, 3 cr.

Provides development of reading for the transition from life skills reading to academic reading. Broadens the use of grammar, vocabulary and more complex strategies for reading. Designed for intermediate, non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures. Successful completion of ENL041R or placement by ESOL program specialists. **Offered as needed**

ENL042W Introduction to College Writing 2

3 class hr/wk, 3 cr.

Builds on basic academic writing skills, emphasizing paragraph development and editing in tasks requiring several linked paragraphs. Introduces basic academic essays. Designed for high-intermediate, non-native speakers of English. **Prerequisite:** Completion of orientation and assessment procedures. Successful completion of ENL041W or placement by ESOL program specialists. **Offered as needed**

ENL046I TOEFL Test Preparation Workshop

1 class hr/wk, 1 cr.

Provides an overview of the internet-based Test of English as a Foreign Language (TOEFL-iBT). Includes taking a practice test and developing an individual academic plan. Focuses on high-intermediate non-native speakers of English. **Offered as needed**

ENL056I TOEFL Test Preparation: Listening

1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the listening portion of the internet-based Test of English as a Foreign Language (TOEFL-iBT). Focuses on low advanced non-native speakers of English. **Offered as needed**

ENL057I TOEFL Test Preparation: Speaking

1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the speaking portion of the internet-based Test of English as a Foreign Language (TOEFL-iBT). Focuses on low advanced non-native speakers of English.

Offered as needed

ENL058I TOEFL Test Preparation: Reading

1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the reading portion of the internet-based Test of English as a Foreign Language (TOEFL-iBT). Focuses on low advanced non-native speakers of English.

Offered as needed

ENL059I TOEFL Test Preparation: Writing

1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the writing portion of the internet-based Test of English as a Foreign Language (TOEFL-iBT). Focuses on low advanced non-native speakers of English.

Offered as needed

ENL150A Academic Listening and Speaking

3 class hr/wk, 3 cr.

Develops listening and speaking skills needed in academic and social settings. Focuses on strategies, formal language, note-taking, and presentations. Designed for advanced non-native speakers of English. **Prerequisite:** Completion of assessment and orientation procedures; successful completion of ENL040C, ENL041L, ENL041S, ENL042L or ENL042S or placement by ESOL program specialist. **Offered as needed**

ENL151A Jumpstart Your Academic Language Skills

3 class hr/wk, 3 cr.

Develops the U.S. American academic skills of note-taking, vocabulary and reading skills and knowledge of American academic culture needed to understand college lectures and textbooks. Designed for low-advanced non-native speakers of English who plan to enter college but need to improve their academic language to be successful. **Prerequisite:** Completion of assessment and orientation procedures; completion of ENL040, ENL041 or ENL042 or placement by ESOL program specialist. **Offered as needed**

ENL151G ENL College Grammar 1

3 class hr/wk, 3 cr.

Focuses on the written and oral use of discrete grammar structures in English. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL042G, or placement by an ESOL program specialist. A score of 55 or above on the CELSA. **Offered as needed**

ENL151L ENL Academic Listening 1

3 class hr/wk, 3 cr.

Develops listening skills needed in social and some simplified academic settings. Addresses vocabulary development and pronunciation needed to understand speech at a normal speed. Designed for non-native English speakers at the advanced level.

Prerequisite: Placement by ESOL program specialists or successful completion of ENL042L. **Offered as needed**

ENL151P Advanced English Pronunciation 1

3 class hr/wk, 3 cr.

Focuses on development of the principles of U.S. American English pronunciation including correct production of English vowels and consonants, word stress, and rhythm. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL042P or placement by an ESOL program specialist. **Offered as needed**

ENL151R ENL College Reading 1

3 class hr/wk, 3 cr.

Introduces extended reading in an academic context. Builds academic vocabulary, reading strategies and cultural knowledge to prepare students for college transition. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL042R or placement by ESOL program specialist. **Offered as needed**

ENL151W ENL College Writing 1

3 class hr/wk, 3 cr.

Focuses on the development of advanced writing skills for college transition. Reviews paragraph writing and provides continued practice of editing skills. Focuses on academic essay writing and introduces use of outside source material. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL042W or placement by an ESOL program specialist. **Offered as needed**

ENL152G ENL College Grammar 2

3 class hr/wk, 3 cr.

Continues focus on the written and oral use of discrete grammar structures in English. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL151G or consent of instructor or placement by ESOL program specialist. **Offered as needed**

ENL152P Advanced English Pronunciation 2

3 class hr/wk, 3 cr.

Focuses on further applying and adapting the principles of U.S. American English pronunciation to the student's occupational and academic communication. Reviews stress, rhythm, vowels and consonants. Introduces intonation, pitch, and thought groups. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL151P or placement by an ESOL program specialist. **Offered as needed**

ENL152R ENL College Reading 2

3 class hr/wk, 3 cr.

Develops higher-level academic vocabulary, reading strategies, and cultural knowledge for college transition. Focuses on extended readings in an academic context. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion ENL151R or placement by an ESOL program specialist. **Offered as needed**

ENL152W ENL College Writing 2

3 class hr/wk, 3 cr.

Focuses on expository writing for college. Covers essay writing process, note-taking, outlines, summarizing, paraphrasing, citation, editing, and word choice. Continues practice in the use of outside source material to support main ideas in essays. Designed for non-native speakers of English at the advanced level. **Prerequisite:** Successful completion of ENL151W or placement by an ESOL program specialist. **Offered as needed**

ENT

Entrepreneurship

ENT145 Introduction to Entrepreneurship

3 class hr/wk, 3 cr.

Evaluates the business skills and commitment necessary to successfully operate an entrepreneurial venture, and reviews the challenges and rewards of entrepreneurship. Examines the role of entrepreneurial businesses in the United States and the impact on the national and global economy. **F, W, Sp, Su**

ENT150A Planning Your Business 1

3 class hr/wk, 3 cr.

Examines the process of researching, developing, and writing a detailed start-up business plan. Centers on the segments of business planning, including opportunity recognition, business concept development, feasibility testing, and the business plan. First of a three-term sequence. **F, W, Sp, Su**

ENT150B Planning Your Business 2

3 class hr/wk, 3 cr.

Examines the process of researching, developing, and writing a detailed start-up business plan. Focuses on the elements of marketing, including industry analysis, market penetration, and product/service pricing. **Prerequisite:** ENT150A or consent of the instructor. **F, W, Sp, Su**

ENT150C Planning Your Business 3

3 class hr/wk, 3 cr.

Examines the process of researching, developing, and writing a detailed start-up business plan. Covers financial planning, including cash flow, inventory, equity and debt, and financial statements. Also addresses plan evaluation and presentation, and next steps in establishing a business. **Prerequisite:** ENT150B. **F, W, Sp, Su**

ES

Emergency Services

ES115 Crisis Intervention

3 class hr/wk, 3 cr.

Provides a theoretical background for understanding crisis intervention and offers an arena to experience a variety of crisis management styles. Assists the emergency service worker or health care provider to evaluate their emotional reactions and methods of coping in order to stay healthy on the job. **F, Sp, Offered as needed; CL**

ES172 Introduction to Emergency Services

4 class hr/wk, 4 cr.

Explores the philosophy and history of emergency services. Presents the history of loss of life and property in fire, major medical emergencies, and natural disasters. Covers the responsibility of emergency services in a community, the roles and responsibilities of a paramedic and firefighter, an overview of the ICS system, and the organization and function of emergency services agencies and allied organizations, education and certification. Includes sources of professional literature, awareness and identification of hazardous materials, emergency services apparatus, fire behavior, detection and protection systems, cultural diversity, harassment in the workplace, survey of professional career opportunities and requirements, and development of a resume. **Offered as needed**

FA

Film Arts

FA255 Understanding Movies: Film Styles

3 class and 2 lab hr /wk, 4 cr.

Features critical analysis and appreciation of cinema through the viewing and study of feature length English-language films, as well as short films and films in translation. Introduces the generic, thematic, and stylistic variety of cinematic art. Also introduces basic cinematic terminology and concepts, film criticism, and the conventions of writing film analysis. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 8 credits total. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **F**

FA256 Understanding Movies: The Great Directors

3 class and 2 lab hr /wk, 4 cr.

Features critical analysis and appreciation of cinema through the viewing and study of 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. Analyzes the generic, thematic, and stylistic tendencies of the director. Also introduces basic cinematic terminology and concepts, film criticism, and the conventions of writing film analysis. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 8 credits total. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **W**

FA257 Understand Movies: Themes and Genres

3 class and 2 lab hr /wk, 4 cr.

Features critical analysis and appreciation of cinema through the viewing and study of films within the context of a specific film genre, national movement, or thematic topic. Emphasizes analysis of categorical similarities, significant differences or deviations, and explores the films' continued relevance. Also introduces basic cinematic terminology and concepts, film criticism, and the conventions of writing film analysis. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 8 credits total. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Sp**

FE**Field Experiences****FE205B Resumes and Job Search Correspondence****1 class hr/wk, 1 cr.**

Shows you 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.**

Focuses on how to prepare and interview for a desired job. Covers follow-up techniques.

F, W, Sp**FE220 Preparing for the Changing Workplace****3 class hr/wk, 3 cr.**

Explores issues of difference, power, and responsibility in the workplace. Focuses on skills, values, social and cultural work issues, including workplace communication. Offers experience working as part of a team in a service learning project. **F, W, Sp, Su; CL**

FE280B-L Cooperative Work Experience**See CWE—Cooperative Work Experience.****FLM****Filmmaking****FLM265 Documentary Filmmaking****2 class and 2 lab hr /wk, 3 cr.**

Introduces digital filmmaking hardware and editing software with a focus on non-fiction production, including news packages and short documentaries. Emphasizes camera technique, audio recording skills, project management, and effective storytelling.

Prerequisite: Demonstrated ability to work with computers. **F, Offered as needed**

FLM266 Narrative Filmmaking**2 class and 2 lab hr /wk, 3 cr.**

Builds on the technical skills acquired in FLM265, Documentary Filmmaking, but focuses production work on narrative styles with emphasis on storyboarding and preparation, directing actors, and effective editing techniques. **Prerequisite:** FLM265 with a grade of C or better; or consent of instructor. **W**

FLM267 Advanced Filmmaking**2 class and 2 lab hr /wk, 3 cr.**

Expands on the technical skills acquired in the first two classes emphasizing integrated graphics, special effects, compositing and complex audio mixes. Applies these skills to documentary projects, narrative projects, or both. Includes a studio production component. **Prerequisite:** FLM265 and FLM266, both with a grade of C or better; or consent of instructor. **Offered as needed**

FN**Foods and Nutrition****See Nutrition and Food Management.****FR****French****FR100 French Life and Culture****4 class hr/wk, 4 cr.**

Offers an introduction to French history, politics, arts and culture, and includes briefings at Parisian museums, ministries, or media centers. Basic French language is included. **Offered as needed**

FR101, 102, 103 First Year French, Terms 1, 2, 3**4 class hr/wk, 4 cr. each**

Introduces 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 courses are to be taken sequentially. FR101: None. FR102: FR101 with a grade of C or better; or one year of high school French; or consent of instructor. FR103: FR102 with a grade of C or better; or two years of high school French; or consent of instructor. FR101, **F**; FR102, **W**; FR103, **Sp**

FR201, 202, 203 Second Year French, Terms 1, 2, 3**4 class hr/wk, 4 cr. each**

Provides extensive practice in all four language skills (reading, writing, speaking, listening). Includes 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 courses are to be taken sequentially. FR201: FR103 with a grade of C or better; or three years of high school French; or consent of instructor. FR202: FR201 with a grade of C or better; or consent of instructor. FR203: FR202 with a grade of C or better; or consent of instructor. FR201, **F**; FR202, **W**; FR203, **Sp**

FRP**Fire Protection Technology****FRP150 Introduction to Fire Protection****3 class hr/wk, 3 cr.**

Introduces the philosophy and history of fire protection. Covers the history of loss of life and property in 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 a resume. **Offered as needed**

FRP151 Fire Incident Related Experience 1**9 lab hr/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 restricted to students chosen through an application process. Consent of instructor required. **Offered as needed**

FRP152 Fire Incident Related Experience 2**9 lab hr/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:** FRP151 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP153 Fire Incident Related Experience 3**9 lab hr/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 1. Includes a practicum for Driver and Pumper Operator certification. Students completing the course will take written and task performance tests for Driver. **Prerequisite:** FRP152 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP154 Water Supply Operations**3 class hr/wk, 3 cr.**

Covers the scope of water supply operations in the fire service. Includes pre-planning operations, water supply requirements, source options, delivery systems and options, and hydraulic calculations. Designed to meet the competencies as set forth by DPSST Firefighter II and Pumper Operator.

Prerequisite: FRP152 and MTH070, both with a grade of C or better; or consent of instructor. **Offered as needed**

FRP157 Hazardous Materials Operations**3 class hr/wk, 3 cr.**

Provides knowledge and skills necessary to safely respond to and manage the defensive operations involved in a chemical emergency. Also provides skills to operate in offensive fashion for some common flammables (gasoline, propane, etc.). **Prerequisite:**

Concurrent enrollment in FRP150. **Offered as needed**

FRP158 Fire Pump Construction and Operation**2 class and 2 lab hr /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:** FRP151, FRP152 or consent of instructor. **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**1 class hr/wk, 1 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**

FRP169 Fire Department Leadership**3 class hr/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:** FRP150 or ES172, either with a grade of C or better; or consent of instructor. **Offered as needed**

FRP170 Fire Fighting Tactics and Strategy**3 class hr/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**

FRP171 Fire Protection Systems and Extinguishers**3 class hr/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**

FRP172 International Fire Codes**3 class hr/wk, 3 cr.**

Interprets the International Building Codes, International 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**

FRP173 Law for Emergency Services**3 class hr/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**

FRP174 Fire Investigation**3 class and 2 lab hr /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:** FRP150 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP179 Wildland Urban Interface**3 class hr/wk, 3 cr.**

Studies causes, standard firefighting orders, urban interface problems, fire suppression methods, fireground management and structure triage. Designed to meet some of the competencies as set forth by DPSST for Wildland Interface Engine Boss. **Prerequisite:** FRP151, FRP152, and FRP153; or consent of instructor. **Offered as needed**

FRP256 Fire Service Rescue Practices**2 class and 4 lab hr /wk, 4 cr.**

Presents technical information on various fire department rescue situations. Covers tools and equipment, ropes and knots, trench rescue, shoring, warehouse searches, outdoor searches, rescue in situations involving elevation differences, package patients, water and ice rescues, and vehicle extrication. **Prerequisite:** FRP151 and FRP152, both with a grade of C or better; or consent of instructor. **Offered as needed**

FRP257 Hazardous Materials for Inspectors**3 class hr/wk, 3 cr.**

Covers 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**

FRP259 Major Emergency Strategy and Tactics**3 class hr/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:** FRP150, FRP151, FRP152, FRP153, and FRP170; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

FRP260 Fundamentals of Fire Prevention**3 class hr/wk, 3 cr.**

Covers the 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. Develops an awareness of, and positive attitude toward, fire prevention as a method of accomplishing the fire department mission. Explores issues of difference, power, and responsibility in the workplace as it relates to early fire prevention efforts and workplace safety.

Offered as needed; CL**FRP261 Fire Incident Related Experience 4****9 lab hr/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 I. Includes a practicum for Driver and Pumper Operator certifications. Students completing the course will take written and task performance tests for Firefighter I and Pumper Operator. **Prerequisite:** FRP153 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP261H Fire Incident Related Experience 4: Honors**9 lab hr/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 NFPA Firefighter I. Includes a practicum for NFPA Driver and NFPA Pumper Operator certifications. Students completing the course will take written and task performance tests for NFPA Firefighter I and NFPA Pumper Operator. Provides a practicum for leadership, supervisory, and management skills. **Prerequisite:** FRP153 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP262 Fire Incident Related Experience 5**9 lab hr/wk, 3 cr.**

Introduces new skills and provides a practicum for Firefighter II, Driver and Pumper Operator certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. **Prerequisite:** FRP261. **Offered as needed**

FRP262H Fire Incident Related Experience 5: Honors**9 lab hr/wk, 3 cr.**

Introduces new skills and provides a practicum for Firefighter II, Driver and Pumper Operator certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. Provides a practicum for leadership, supervisory, and management skills.

Prerequisite: FRP261 with a grade of C or better; or consent of instructor. **Offered as needed****FRP263 Fire Incident Related Experience 6****9 lab hr/wk, 3 cr.**

Offers additional skills and provides a practicum for Firefighter II, 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 II. **Prerequisite:** FRP262 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP263H Fire Incident Related Experience 6: Honors**9 lab hr/wk, 3 cr.**

Offers additional skills and provides a practicum for Firefighter II, 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 II. Provides a practicum for leadership, supervisory, and management skills. **Prerequisite:** FRP262 with a grade of C or better; or consent of instructor. **Offered as needed**

FRP266 Building Construction for Fire Suppression**3 class hr/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**FRP272 International Fire Codes 2****3 class hr/wk, 3 cr.**

Studies the International 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**

FRP277 NFPA Fire Instructor 1**3 class hr/wk, 3 cr.**

Provides training to instructor candidates from multi-discipline activities found within Public Safety (fire, law enforcement, wild-land, emergency medical services, etc.). Prepares the program participants for planning instruction, using a variety of instructional methods, teaching diverse learners, and evaluating course outcomes. Includes guidelines for addressing the critical issues of safety and the legal issues of training, and provides opportunities for participants to take part in application activities. This course meets the competency standards established by the National Fire Protection Association (NFPA) 1041 Standard for Fire Service Instructor Professional Qualifications, Instructor I. **Offered as needed**

FRP278 NFPA Fire Instructor 2**3 class hr/wk, 3 cr.**

Provides training to instructor candidates from multi-discipline activities found within Public Safety (fire, law enforcement, wild-land, emergency medical services, etc.). Uses an intensive instructional methodology program to prepare the participant for planning and developing all aspects of course curriculum. Includes needs analysis, task analysis, course goals and objectives, lesson plan development, instructional support materials and evaluation instruments. **Offered as needed**

FRP280B-L Cooperative Work Experience**See CWE—Cooperative Work Experience.****FRP281 Fire Prevention Inspection****3 class hr/wk, 3 cr.**

Covers methods of contemporary fire prevention inspection practices. Includes preparation, pre-approach information, written inspection notices, relations with owners and occupants, and compliances.

Prerequisite: FRP172, FRP260, and FRP266; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed****FRP282 Juvenile Fire-Setters Intervention****3 class hr/wk, 3 cr.**

Provides basic information regarding the purpose and scope of a juvenile fire setter intervention program and how it should be structured; legal aspects of dealing with juveniles; child development; the continuum of juvenile fire setting; effective communication, interviewing, and questioning techniques; screening juvenile fire setters; and education and referral intervention processes. **Offered as needed**

FRP284 Public Information for the Fire Service

3 class hr/wk, 3 cr.

Provides students with the ability to identify public and proprietary information to form media releases and develop and maintain positive relations with media representatives. **Prerequisite:** FRP173 and FRP174, both with a grade of C or better; or consent of instructor. **Offered as needed**

FRP286 Advanced Detection and Protection Systems

3 class hr/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:** FRP171 with a grade of C or better; or consent of instructor.

Offered as needed

FRP288 Fire Prevention Education Programs

3 class hr/wk, 3 cr.

Uses fire data to analyze the prevention needs in a community and to design a public fire education program directed to preventing or mitigating certain fires in that community. **Offered as needed**

Food Service

See HTM–Hospitality Management

FT

Forest Management Transfer

FT111 Introduction to Forest Resources

3 class and 6 lab hr /wk, 5 cr.

Introduces the functions, structure, and management of forests in the United States. Includes multiple field labs that focus on landowner goals and objectives of forests in northwest Oregon. **Offered as needed**

FT141A Oregon Tree and Shrub Identification 1

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

Examines conifer and evergreen shrub species indigenous to Oregon using a dichotomous key and weekly field trips to identify species and learn taxonomic names. **F**

FT141B Oregon Tree and Shrub Identification 2

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

Examines hardwood trees and deciduous shrub and tree species indigenous to Oregon using a dichotomous key and weekly field trips to identify species and learn taxonomic names. **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. **W**

FT210A Forest Surveying 1

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

Covers basic forest surveying techniques including fundamentals of horizontal and vertical measurements. Provides field and office procedures for forest mapping.

Offered as needed

FT210B Forest Surveying 2

3 class and 6 lab hr /wk, 5 cr.

Continues study of distance and direction measurement, employing transit, theodolites, electronic distance measuring (EDM), and Global Positioning Systems (GPS). **Prerequisite:** FT210A or consent of instructor.

Offered as needed

FT220 Forest Photo Interpretation

2 class and 3 lab hr /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. **Offered as needed**

FT223 Timber Cruising/Log Scaling

3 class and 4 lab hr /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. **Offered as needed**

FT270A Silviculture 1

1 class and 3 lab hr /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. **Offered as needed**

FT270B Silviculture 2

2 class and 3 lab hr /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 or consent of instructor. **Offered as needed**

FT280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience.

FYE

First Year Experience

FYE105 Creating College Success

2 class hr/wk, 2 cr.

Focuses on strategies for taking personal responsibility to create positive outcomes in college and in life. Covers developing self-awareness, personal responsibility, self-motivation, and self management. **Prerequisite:** Placement into RD080 and WR080 recommended; or consent of instructor. **F, W, Sp**

GE

General Engineering

See also EGR–Engineering.

GE101 Engineering Orientation

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

Introduces the engineering profession and engineering problem-solving. **Prerequisite:** MTH111 or consent of instructor. **F**

GE102 Engineering Computations

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

Acquaints engineering students with the use and operation of the micro computer, using a computer algebra system. Covers the code and programs that will be developed and used in the solution of typical engineering problems. Emphasizes structured programming techniques. **Prerequisite:** MTH111 or consent of instructor. **W**

GE103 Engineering Computations

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

Develops a systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing and database operations using spreadsheet software. **Prerequisite:** GE101 or consent of instructor. **Sp**

GEG

Geography

GEG100 Exploring Geography

1 class hr/wk, 1 cr.

Introduces the discipline and tools of geography, including careers in geography, what geographers study, how they think, and how knowledge of geography is helpful in any career field. Also examines basic geographic concepts and themes. **F, W, Sp, Su**

GEG105 Physical Geography

3 class and 3 lab hr /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, Sp**

GEG106 Cultural Geography 1

4 class hr/wk, 4 cr.

Introduces the cultural elements of geography, including the study of human population, migration, language, religion, cultural landscapes, and geopolitics. Emphasizes the unequal distribution of power in the U.S. with regard to religion, ethnicity, and language. **F, W, Sp; CL**

GEG107 Cultural Geography 2

4 class hr/wk, 4 cr.

Introduces economic aspects of cultural geography, including the study of development, agriculture, industry, settlement, urban landscapes, and natural resource issues. **Sp; CL**

GEG140 Map Reading and Interpretation

3 class hr/wk, 3 cr.

Introduces basic concepts in reading, interpreting and analyzing information from a variety of maps. Topics include map projections, map misuse, grid systems, map scale, route planning, Global Positioning System (GPS), Geographic Information System (GIS), contour reading, satellite imagery and computer-based mapping. **Offered as needed**

GEG190 Geography of Natural Hazards

3 class hr/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

4 class hr/wk, 4 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. **F, Sp**

GEG202 World Regional Geography: The Developing World

4 class hr/wk, 4 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 major geographic themes and concepts, including population change, natural resource use, environmental concerns, economic development, geopolitical conflicts, and cultural perceptions. **W, Su**

GEG206 Geography of Oregon

4 class hr/wk, 4 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. **F, W, Sp**

GEG207 Geography of US and Canada

4 class hr/wk, 4 cr.

Examines the natural and cultural environments of the U.S. and Canada, including climate, vegetation, landform regions, natural resource issues, population and settlement patterns. **F, W, Sp, Su**

GEG220 Middle East Geopolitics

3 class hr/wk, 3 cr.

Focuses on recent geopolitical disputes in the Middle East with an emphasis on examining these disputes geographically. Gives special attention to the Arab-Israeli conflict, including the formation of a Palestinian state. Studies the Iran-Iraq War, the 1991 Gulf War, the 2003 war in Iraq, and rivalries over water and other resources. **Offered as needed**

GEO

Geology

GEO142 The Geology of Pacific Northwest Volcanoes, Mountains, and Glaciers

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

Studies plate tectonic and exotic terrains; geomorphic provinces of Oregon; use of topographic maps; mountain building processes, volcanism and plutonism and the geomorphic work of glaciers. Covers mountainous regions of Oregon and Washington, including Blue Mountains, Klamath Mountains, Cascade Range, Coast Range- Willamette Valley, and Olympics-Puget Lowland; earthquakes, faults and tsunamis in the Pacific Northwest. **Offered as needed**

GEO143 The Geology of Pacific Northwest Rocks and Minerals

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

Focuses on the description and identification of the principal rock-forming minerals and the most important igneous, sedimentary and metamorphic rocks. Covers exotic terrains, plate tectonics, and the relationship of rock types to plate tectonic setting; description of types of mineral ore deposits and their plate tectonic settings, and laboratory identification of principal ore minerals; the geologic time scale. Includes a basic understanding of how to read the stratigraphic record. **Offered as needed**

GEO144 The Geology of Pacific Northwest Rivers, Streams, and Deserts

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

Studies plate tectonic and exotic terrains; geomorphic provinces of Oregon; use of Oregon; use of topographic maps; stream processes and characteristics, including Oregon examples; types of lakes and lake basins, including Oregon examples; geology and geologic history of the desert/steppe provinces of Oregon and Washington: Columbia-Deschutes Plateau, High Lava Plains, Basin and Range; fossils as evidence of past life; fossils and fossil sites in Oregon. **Offered as needed**

GEO201 Geology: Rocks and Minerals

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

Presents systematic study of the nature and origin of common rocks and minerals with identification techniques applied in laboratory and field trip activities. **F**

GEO202 Geology: Surface and Environmental Geology

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

Offers a descriptive survey of geologic surface processes including: rivers, coasts, mass movement, groundwater, deserts, and glaciers, and the interaction of climate and climate change on these systems. Includes topographic map interpretation and field activities. **W**

GEO203 Geology: Evolution of the Earth

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

Studies earth history, geologic time, and evolution of life on earth. Includes study in plate tectonics, earthquakes, and structural geology. Includes field and laboratory studies of paleontology. **Sp**

GS

General Science

GS104 General Science: Physics

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

Covers an integrated study of the force, motion, heat, and light phenomena that we observe in the physical world. **F, W, Sp, Su**

GS105 General Science: Chemistry

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

Offers a broad, non-quantitative, and descriptive survey of chemical principles relevant to everyday life. **F, W, Sp, Su**

GS106 General Science: Earth Science

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

Introduces various branches of the earth sciences. Includes basic terminology, fundamental processes and respective interrelations. **F, W, Sp, Su**

GS107 General Science: Astronomy

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

Surveys the physical properties of planets, stars, and galaxies. Examines the size of the universe and the objects within. Also examines the process astronomers use to gather data and form models. **F, W, Sp, Su**

GS120 Rudiments of Meteorology

3 class hr/wk, 3 cr.

Describes the 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 General Science: Earth Systems Science

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

Explores the human population and human technology and their impact on our world. Presents how natural corrective processes are not keeping up with the pace of change and considers how the Earth system works, the consequences of human actions, and how we can use our knowledge to protect our world. Evaluates appropriate responses to local and global environmental problems. **Offered as needed**

GS142 General Science: Geology

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

Introduces geology using the Annenberg Earth Revealed video series. Studies the Earth as a system. **F, W, Sp, Su**

GS143 General Science:**Oceanography**

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

Focuses on the physical properties of the marine environment as a unique feature of planet Earth. **Sp**

HD**Human Development****HD221 Life Skills Seminar 2**

3 class hr/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: Individual intake interview and consent of instructor required. **F, W, Sp**

HDF**Human Development and Family Studies****HDF143 Introduction to Effective Parenting**

1 class hr/wk, 1 cr.

Provides an introduction to parenting skills for both parents and non-parents. Explores the roles and demands of parenting. Introduces parent self-care, stress management, child development and guidance principles and techniques using the evidence-based Make Parenting a Pleasure curriculum. **F, W, Sp, Su**

HDF222 Family Relationships

3 class hr/wk, 3 cr.

Examines communication patterns and relationships between adults, children and adults, and within intimate personal relations (marriage, families, and couple relations). Emphasizes understanding the role of the family and its consequent role in the development of the individual. **F, W**

HDF225 Prenatal, Infant, and Toddler Development

3 class hr/wk, 3 cr.

Studies the basic principles of development, prenatal through two years of age. Emphasizes physical, intellectual, emotional, and social growth and development of young children. **F, W**

HDF227 The Whole Child

3 class hr/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 hr/wk, 3 cr.

Studies growth and development in 6-through 12-year-old children. Emphasizes physical, intellectual, emotional, and social growth of the school-aged child. **Sp**

HDF247 Preschool Child Development

3 class hr/wk, 3 cr.

Examines 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. **F, W**

HDF248 Learning Experiences for Young Children

4 class hr/wk, 4 cr.

Focuses on planning and implementing preschool curriculum based on development theory. Involves 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). **Prerequisite:** HDF225 and HDF247 or consent of instructor. **Sp**

HDF249 Introduction to Working with Infants and Toddlers

3 class hr/wk, 3 cr.

Assists child care practitioners who work with infants and toddlers in child development centers and home settings. Focuses on understanding, facilitating, and respecting infant and toddler development. Appropriate environmental planning, activities, and observation skills will be discussed, demonstrated, and practiced. **F, W**

HDF257 Home, School, and Community

3 class hr/wk, 3 cr.

Emphasizes helping future teachers and child care workers recognize and understand their unique position as resource coordinators and facilitators for parents. Focuses on developing effective and appropriate communication skills. Analyzes issues involving children with disabilities, ethics and values, and parent/school/community opportunities. **Prerequisite:** Second-year standing in the Early Childhood Education program or consent of instructor. **W**

HDF258 Teaching in an Anti-Bias Classroom

3 class hr/wk, 3 cr.

Examines the development of practices for teaching young children in culturally relevant and inclusive ways. Covers identity development in relation to gender, race, and other biases that influence and affect children and families. Focuses on uncovering and naming biases. Examines the social context that contributes to biases that affect teaching attitudes and practices. **W, Sp; CL**

HDF260 Child Abuse and Neglect

3 class hr/wk, 3 cr.

Introduces problems of child abuse and neglect for professionals in situations where children are cared for, such as child care centers and schools. This course may also be useful to other professionals who come into contact with children and need to be aware of issues regarding child abuse and neglect. Includes examining the causes of abuse, the abused child, the abusive parent and adult, the role of the teacher, areas of treatment, and education. **F, Sp**

HDF285 Professional Issues in Early Childhood Education

3 class hr/wk, 3 cr.

Prepares early childhood educators to fill the many professional roles that require basic knowledge of ethics, conflict resolution, understanding of the special needs child, advocacy, governmental processes, and development of an anti-bias professional attitude. Also covers 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 **HM—Health Services Management, HPE—Health and Human Performance.**

HE204 Nutrition, Weight Control, and Physical Fitness

3 class hr/wk, 3 cr.

Presents methods of maintaining or improving fitness, weight control, and lifetime health status through consideration of diets and dieting, obesity, types of exercise, cardiovascular fitness and nutritional concepts. **F, W, Sp, Su**

HE209 Human Sexuality

3 class hr/wk, 3 cr.

Covers mental, physical, and social aspects of human sexuality. Emphasizes development of a decision-making model that enables the individual to make personal choices. **F, W, Sp**

HE213 Women's Health Issues

3 class hr/wk, 3 cr.

Examines selected health issues and their physical and emotional effects on women. Topics include: body image, eating disorders, reproductive life, sexually transmitted infections, violence, menopause, cancer, depression, heart disease, osteoporosis, Alzheimer's disease, and the politics of women's health. **W, Sp**

HE250 Personal Health

3 class hr/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 to apply and practice decision-making models regarding personal health issues. **F, W, Sp**

HE251 Community Health

3 class hr/wk, 3 cr.

Introduces the core functions of community health and the prevention of diseases, health needs of special populations, functions of voluntary and governmental health organizations, and future directions for community health. Includes epidemiology, chronic and infectious disease, social and behavioral factors in health, tobacco, obesity, maternal and child health, environmental impact on health, population growth, and the health care system. **F, W, Sp**

HE262 Cardiopulmonary Resuscitation Instruction

2 class hr/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. **Offered as needed**

HEM

Hemodialysis Technology

HEM101 Hemodialysis Technology 1 **6 class and 4 lab hr /wk, 8 cr.**

Introduces renal replacement therapy for persons with end stage renal disease. Identifies normal kidney functions, causes of renal failure, and options for renal replacement therapy, as well as the specific requirements for hemodialysis and the responsibilities of the hemodialysis technician. Identifies machine set up and preparation, collection of specific patient information and monitoring of the patient during the treatment. Covers the role of the hemodialysis technician in relation to the patient, and the professional team, including documentation and professional behaviors and communication. Also included are Personal Protective Equipment (PPE), Health Information Privacy and Portability Act (HIPPA), First Aid and CPR.

Prerequisite: HM120 with a grade of C or better, or concurrent enrollment; and proof of current health care provider first aid/CPR certification; or consent of instructor. **Offered as needed**

HEM102 Hemodialysis Technology 2 **4 class and 8 lab hr /wk, 8 cr.**

Focuses on the clinical environment for delivery of hemodialysis. Emphasizes preparation of dialysate and the functions of water and water treatment in the hemodialysis procedure. Introduces treatments medications with a focus on medications used in machine preparation. Expands patient monitoring to include dialysate and extracorporeal circuit and water monitoring. Includes preparation of the access site without needle insertion or catheter attachment. Focuses on safety and infection control in response to alarms, urgent, and emergent changes in patient's condition, as well as determining treatment goals and providing the prescribed treatment. Identifies the effects of renal failure on all body systems, and the emotional and social effects of renal failure for patients and their families. **Prerequisite:** HEM101 with a grade of C or better; or consent of instructor. **Offered as needed**

HEM103 Hemodialysis Technology 3 **4 class and 8 lab hr /wk, 8 cr.**

Integrates the knowledge of the hemodialysis patient and the treatment process to deliver a hemodialysis treatment for an assigned patient(s). Recognizes complications during a hemodialysis treatment and makes appropriate responses. Identifies the purpose of specific laboratory tests, including accurate acquisition of the specimens. Focuses on safety and infection control with the machine, water culturing, and disinfection. Covers documentation requirements that include adverse occurrence reporting and the patient "plan of care." Applies understanding of vascular access, quality standards, CQI, and dialysis reimbursement. Includes identification of the roles of dialysis team members; professional standards and certification; professional boundaries; communication with physicians, NPs, and PAs; and state and federal guidelines related to the industry. **Prerequisite:** HEM102 with a grade of C or better; or consent of instructor. **Offered as needed**

HM

Health Services Management

See also AH-Allied Health.

HM101 Medical Law and Ethics **3 class hr/wk, 3 cr.**

Explores 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, Su**

HM105 Professional Development A **1 class hr/wk, 1 cr.**

Develops leadership qualities, enhances awareness of diversity in the healthcare workplace, develops interpersonal communication skills and provides a setting for self-improvement. **F**

HM106 Professional Development B **1 class hr/wk, 1 cr.**

Develops leadership qualities, provides opportunities for community participation, enhances awareness of diversity in the healthcare workplace, explains employment rights, and provides a setting for self-improvement. **F**

HM110 Health Information Systems Procedures 1

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

Provides entry-level skills for Health Information Technician, Medical Coding and Insurance Billing, and Health Services Management students to become proficient in skills required of a healthcare office professional. Introduces students to medical clinics and health-related organizations. Utilizes medical management software in a simulated health-care environment. **Prerequisite:** Admission to Health Services Management programs. Must pass criminal background check in order to enroll. **F**

HM112 Health Information Systems Procedures 2

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

Provides entry-level skills for Health Information Management. Offers basic knowledge of health information systems and the skills necessary for medical and hospital administrative functions. Includes Electronic Health Record (EHR) systems, the health information field, the content of a health record, health record processing of medical reports, and legal/ethical aspects of medical records. **Prerequisite:** Second-term standing in the Health Information Technology, Medical Coding and Insurance Billing, Health Services Management, or Health Informatics programs. **W**

HM113 Medical Insurance Billing

3 class hr/wk, 3 cr.

Provides students with foundation skills required for medical insurance billing. Students will gain understanding of insurance programs and develop a practical approach to medical insurance billing procedures.

Prerequisite: Second-term standing in the Health Information Technology, Medical Coding and Insurance Billing, or Health Services Management programs; or consent of instructor. **W**

HM114 CPT-IV Coding/Reimbursement

3 class hr/wk, 3 cr.

Introduces the use of Current Procedural Terminology (CPT) coding system, insurance terminology and abbreviations, and basic health insurance systems. **Prerequisite:** Third-term standing in the Health Information Technology, Medical Coding and Billing, or Health Services Management programs; or consent of instructor. **Sp**

HM115 ICD-9-CM Coding/Reimbursement

3 class hr/wk, 3 cr.

Introduces basic differences between nomenclature and classification systems, as well as basic coding systems, including CPT (Current Procedure Terminology) and ICD-9-CM. 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:** Second-term standing in the Health Information Technology, Medical Coding and Insurance Billing, or Health Services Management programs; or consent of instructor. **W**

HM120 Medical Terminology 1

3 class hr/wk, 3 cr.

Emphasizes the terminology related to the healthcare professions and specialties, equipment, drugs, symbols, and abbreviations. Includes the anatomy, physiology and pathophysiology of the musculoskeletal, integumentary, nervous systems as well as the sensory organs. Provides practical application in the workplace using case studies, operative, autopsy, diagnostic and laboratory reports. **F, W, Sp, Su**

HM121 Medical Terminology 2

3 class hr/wk, 3 cr.

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 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

HM122 Medical Terminology 3/Human Diseases

3 class hr/wk, 3 cr.

Presents an advanced course using the language of clinical medicine in a variety of settings, including oncology, diagnostic radiology, the clinical laboratory and pharmacology. Focuses on the reading, analyzing, and use of clinical research and literature to explore advanced topics in medical terminology and the diseases and conditions of medical science. Emphasizes written and verbal presentation of the findings of individual and group student research projects.

Prerequisite: HM121 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

HM130 Health Information Technology Practicum

16 lab hr/wk, 5 cr.

Practice health information methods and techniques in clinical situations. Includes effective communication and work-practice skills. **Prerequisite:** Terms One and Two of the Health Information Technology program with a grade of C or better in all required courses; or consent of instructor. **Sp**

HM131 Health Information Technology Seminar

1 class hr/wk, 1 cr.

Studies the relationship between the health information clinical or related setting with theoretical course content; applies information to career and personal goals. **Prerequisite:** Concurrent enrollment in HM130; or consent of instructor. **Sp**

HM144 Medical Transcription Seminar

1 class hr/wk, 1 cr.

Assists 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 hr/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. **Prerequisite:** WR227 with a grade of C or better, or concurrent enrollment; and second-year standing in the Health Services Management or Health Informatics programs; or consent of instructor. **F**

HM214 Advanced CPT-IV Coding

3 class hr/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:** HM114 or one year of experience using CPT-IV codes; and HM120, HM121, or basic knowledge of medical terminology. (All prerequisite courses must be completed with a grade of C or better.) **Su**

HM215 Advanced ICD-9-CM Coding

3 class hr/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, HM121, or basic knowledge of medical terminology. (All prerequisite courses must be completed with a grade of C or better.) **Su**

HM217 Quality Data Management in Health Services

3 class hr/wk, 3 cr.

Introduces the health care student to the basic data sets and statistics used every day in health care organizations. Emphasizes a case-based and experiential learning process to facilitate familiarity with occupancy and discharge rates, disease incidence and prevalence, minimum and universal data sets used in all accredited organizations. **Prerequisite:** Second-year standing in Health Services Management or Health Informatics programs; or consent of instructor **W**

HM230 Health Services Management Practicum

15 lab hr/wk, 5 cr.

Provides workplace experience in a health care or related setting. Covers policies and procedures, work site organization, quality assessment, and job seeking tools. **Prerequisite:** Terms 1-5 of the Health Services Management program with a grade of C or better in all required courses; or consent of instructor. **Sp**

HM231 Health Services Management Seminar

1 class hr/wk, 1 cr.

Studies of the relationship between clinical practicum in health care or related setting with theoretical course content and application to career and personal goals. **Prerequisite:** HM230 with a grade of C or better or concurrent enrollment; or consent of instructor. **Sp**

HM250 Health Services Management 1

3 class hr/wk, 3 cr.

Introduces the management functions, concepts, and principles as well as managerial roles in the context of the health services organization and the health services delivery system. **Prerequisite:** Second-year standing in Health Services Management or Health Informatics programs; or consent of instructor. **W**

HM251 Health Services Management 2

3 class hr/wk, 3 cr.

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:** HM250. **W**

HM252 Health Services Management 3

3 class hr/wk, 3 cr.

Provides 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:** HM251 with a grade of C or better; and second-year standing in Health Services Management or Health Informatics programs; or consent of instructor. **Sp**

HM280B-L Cooperative Work Experience

See CWE-Cooperative Work Experience.

HOR

Horticulture

HOR111 Introduction to Horticulture **2 class and 2 lab hr /wk, 3 cr.**

Provides a broad view of the horticulture industry in Oregon. Introduces environmental factors important to plant growth. Covers basic principles of soils, media and plant nutrition. Discusses major components of horticulture industry including nursery and greenhouse, tree fruits, small fruits, vegetables and landscape. Presents scope of career opportunities in horticulture. **F**

HOR112 Pesticides and Safety **2 class hr/wk, 2 cr.**

Focuses on safe use and handling of pesticides. Covers laws and regulations pertaining to pesticide use. Considers effects of pesticides on air, water, and wildlife. Emphasizes toxicity, safety equipment, and emergencies. Examines pesticide formulations and application equipment. Introduces mixing, loading and transporting pesticides and calibration of equipment. **F**

HOR113 Mathematical Applications in Horticulture

2 class hr/wk, 2 cr.

Uses application-based mathematics to solve problems in production horticulture. Focuses on algebraic and geometric concepts used to determine field layout and area, spray calibration, irrigation planning, and crop scheduling. Covers financial analysis, and other common horticultural calculations. Includes use of fractions, ratios, percentages, decimals, exponents, roots, and unit conversions. **Prerequisite:** MTH060 or equivalent, either with a grade of C or better. **W**

HOR115 Nursery and Greenhouse Equipment and Safety

3 class hr/wk, 3 cr.

Introduces equipment commonly used in nursery and greenhouse production, including operation, basic maintenance, and safety. Covers self-propelled equipment, mechanical attachments, pesticide application equipment, irrigation equipment, and tools. Emphasizes safety practices and regulations in use of all equipment. **Offered as needed**

HOR116 Introduction to Phytotechnology

3 class and 2 lab hr /wk, 4 cr.

Provides an overview of innovative technologies that use plants to clean water, soil, air, and build sustainable ecosystem services in managed (urban and rural) landscapes. Discusses conventional practices used to measure and treat quantity/quality of water, soil and air; the common pollutants found in each; and the impacts on environmental, social, and economic well-being. Explores environmental factors, horticultural practices, and physiological mechanisms that affect plant growth and response to pollution in phytotechnology applications. Introduces the range of career opportunities in this highly multi-disciplinary field. **F**

HOR211 Plant Propagation **3 class and 2 lab hr /wk, 4 cr.**

Presents principles and practices of plant propagation with emphasis on methods used for ornamental nursery stock. Discusses anatomy, physiology and genetics related to plant reproduction. Covers seed propagation, cuttings, grafting, budding, layering, division, specialized roots and stems, and micropropagation. Identifies equipment, tools, and structures required for propagation. **W**

HOR212 Advanced Plant Propagation **1 class and 2 lab hr /wk, 2 cr.**

Presents advanced principles and practices of plant propagation with emphasis on seed propagation and tissue culture. Emphasizes plant propagation techniques employed early in the growing season. Identifies equipment, tools, and structures required for advanced propagation techniques. **Prerequisite:** HOR211 or consent of instructor. **Offered as needed**

HOR221 Nursery Production and Management

3 class hr/wk, 3 cr.

Focuses on production systems and management practices in container and field nurseries. Emphasizes irrigation, fertilization, pruning and other cultural practices that result in high quality plant material and healthy root systems. Covers harvesting, storing and shipping. Examines differences between container and field production. Explores current issues and trends in nursery production in Oregon. **Sp**

HOR224 Horticulture Practicum**6 lab hr/wk, 3 cr.**

Applies nursery and greenhouse production techniques in the greenhouse and nursery. Focuses on practical skills used in greenhouses and container and field production nurseries. Includes plant propagation, transplanting, water, fertilizer and pest management, and growth regulation. Provides skills and experience in retail nursery management. **Prerequisite:** HOR111 and HOR222 or consent of instructor. **Offered as needed**

HOR225 Greenhouse Production and Management**3 class and 2 lab hr /wk, 4 cr.**

Covers structural and mechanical aspects of the greenhouse environment. Compares greenhouse systems with regard to styles, frames, covers, benches, mechanical controls, lighting, irrigation, and fertilization. Focuses on management practices in production greenhouses. Covers irrigation and fertilization practices that result in high quality plant material. Considers regulation of light and temperature to achieve desired plant growth. Emphasizes growth regulation, production scheduling, and shipping and handling. Examines the wholesale and retail nursery industry in Oregon. **W**

HOR226 Fall Plant Identification**1 class and 4 lab hr /wk, 3 cr.**

Identifies species and varieties of woody landscape plants that exhibit seasonal highlights of fruit and fall color. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves, fruit and bark. Considers cultural requirements for individual species and varieties. **F**

HOR227 Winter Plant Identification**1 class and 4 lab hr /wk, 3 cr.**

Identifies species and varieties of woody landscape plants, focusing on conifers and broadleaf evergreens with ornamental value. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves, needles, cones, fruit and bark. Considers cultural requirements for individual species and varieties. **W**

HOR228 Spring Plant Identification**1 class and 4 lab hr /wk, 3 cr.**

Identifies species and varieties of woody landscape plants that exhibit seasonal highlights in spring. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves and flowers. Considers cultural requirements for individual species and varieties. **Sp**

HOR229 Phytotechnology Landscape Practicum**6 lab hr/wk, 3 cr.**

Applies technical skills for maintaining or creating phytotechnology features in the campus landscape, including pruning, weed monitoring, drainage and erosion control, and restoration. Provides practical experience with existing or new features, such as stormwater detention facilities, raingardens, medicinal gardens, bioswales, floating island research, and campus wooded areas. Includes development of maintenance schedules; assessment of need and costs for new features; assistance with site assessment or construction; and training for leading tours. **Prerequisite:** HOR116, HOR268, and BI153; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

HOR236 Integrated Pest Management: Weeds**3 class hr/wk, 3 cr.**

Presents an integrated approach to weed management in the nursery and greenhouse. Reviews weed biology. Emphasizes identification, monitoring, and assessment of common weeds. Focuses on prevention, sanitation, and cultural practices to manage weed problems. Covers preemergent and postemergent application of herbicides. **Sp**

HOR237 Integrated Pest**Management: Insects and Diseases**
3 class and 2 lab hr /wk, 4 cr.

Presents an integrated approach to disease and insect and mite management in the nursery and greenhouse. Covers identification of common insect and mite pests and their natural enemies, insect monitoring, and assessment. Focuses on cultural practices and biological control techniques to manage insect and mite problems. Includes use of insecticides and miticides to manage pest populations. Covers identification of common fungal, bacterial, and viral diseases in the nursery and greenhouse. Discusses monitoring and diagnosing diseases of greenhouse and nursery plants. Focuses on cultural, biological, physical, and chemical methods of disease management. **F**

HOR238 Plant Problem Diagnosis**2 class hr/wk, 2 cr.**

Covers the basic principles of plant problem diagnosis in landscapes and gardens, based on available symptoms and signs. Focuses on distinguishing cultural and environmental problems from those caused by organisms, and mitigating those problems. Introduces the identification of specific biotic causes of plant problems, including fungal, bacterial, and viral plant diseases, insect pests, and vertebrate pest problems. Includes local examples. Identifies book and web-based resources for problem identification. **Sp**

HOR240 Sustainable Landscape Design**3 class and 2 lab hr /wk, 4 cr.**

Provides students with basic skills for designing residential and light commercial landscapes. Focuses on sustainable principles, including energy, soil, and water conservation applications. Introduces fundamental concepts for formulation of a landscape design. Identifies and describes the art and principles of design. Surveys various plants and hardscape materials. Establishes desired uses for public and private outdoor spaces. Explores issues of budget considerations and client needs, while minimizing negative impacts on the future environment. **Offered as needed**

HOR254 Wetland Plant Identification**1 class and 4 lab hr /wk, 4 cr.**

Defines wetlands and compares/contrasts them to wet landscape features. Demonstrates plant adaptations for wet environments. Utilizes frequent field trips to identify wetland plants including trees and shrubs, herbaceous and emergent, aquatic, and ornamental water garden. Distinguishes native wetland plants from invasive species. Develops plant suggestions for various functional landscape applications. **Sp**

HOR255 Identification of Herbaceous Plants 1**1 class and 4 lab hr /wk, 3 cr.**

Identifies species and varieties of annuals, perennials, groundcovers, ornamental grasses, and bulbs grown in Oregon, focusing on spring flowering and greenhouse-produced plants. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of visual details of form, texture, size, leaves, flowers, and fruit. Considers production and cultural requirements for individual species and varieties. **Sp**

HOR256 Identification of Herbaceous Plants 2**1 class and 2 lab hr /wk, 2 cr.**

Identifies species and varieties of annuals, tender and hardy perennials, groundcovers, ornamental grasses, bulbs, and herbs grown in Oregon, focusing on plants with seasonal interest in the summer. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of visual details of form, texture, size, leaves, flowers, and fruit. Considers production and cultural requirements for individual species and varieties. **Su**

HOR257 Horticultural Marketing
3 class hr/wk, 3 cr.

Covers the fundamentals of marketing ornamental plants, including market analysis and market strategies. Explores a variety of marketing communication tools and techniques and examines advantages and disadvantages of each. Examines current situations and future trends in national and international marketing. Focuses on development of a marketing plan for a nursery and greenhouse business. **Offered as needed**

HOR259 Marketing Plant Ecological Services
2 class hr/wk, 2 cr.

Portrays the ecosystem services that plants provide in managed landscapes. Explores current work being done to quantify these services for economic valuation. Discusses the challenges and benefits of putting a price tag on ecological services. Conveys the current national and local status of ecosystem service market establishment. Examines methods used in wholesale/retail to market the functional (as opposed to aesthetic) qualities of plants. Contrasts functional marketing strategies with conventional horticulture marketing. **Prerequisite:** HOR116 with a grade of C or better; or consent of instructor. **Offered as needed**

HOR260 Soils, Media, and Nutrition
3 class and 2 lab hr /wk, 4 cr.

Introduces physical, chemical and biological properties of soils and soilless media. Covers essential plant nutrients, fertilizers and fertilization practices. Discusses soil/water relationships and soil conservation and improvement. Assesses Willamette Valley soils for nursery crop production. **W**

HOR267 Green Roof/Living Wall Design and Management
3 class and 2 lab hr /wk, 4 cr.

Introduces the uses, functions, benefits, and components of green roofs and living walls, with emphasis on their role in a comprehensive and sustainable urban stormwater management plan. Reviews the use of plants to treat water quality and quantity, sequester carbon, insulate buildings, and provide habitat. Examines technical criteria and skills needed to design and construct green-roofs and living walls. Includes planting of a demonstration greenroof and living wall. Evaluates plant growth and management requirements for functional performance in these systems. **Prerequisite:** HOR116 and BI153, both with a grade of C or better; or consent of instructor. **Sp**

HOR268 Urban Stormwater Treatment and Systems Design
3 class and 2 lab hr /wk, 4 cr.

Focuses on how to use the environmental services plants provide to treat and manage stormwater in urban settings. Analyzes the environmental challenges and stresses present in urban landscapes. Examines technical criteria for site evaluation, design, and construction of raingardens, green-streets, bioswales, stormwater detention features, and other engineered green space. Evaluates plant propagation, growth and management requirements for functional performance in these systems. Reviews the role of plants, horticulture, and integrated landscapes in urban sustainability. **Prerequisite:** HOR116 and BI153 with grade of C or better; or consent of instructor. **W**

HOR269 Plant Selection for Phytotechnology
3 class hr/wk, 3 cr.

Develops functional criteria for plant selection for phytotechnology projects. Investigates the debate among native and non-native plant supporters. Explores uses of native and non-native plants in both natural and constructed environments for low impact landscaping, habitat restoration, and ecosystem services. Compares and contrasts ecosystem services provided by native and non-native plants. Discusses physiological characteristics, history, impacts, and alternative uses of invasive plant species. Analyzes current and future market opportunities for native and non-native plants. **Prerequisite:** HOR116 and BI153, both with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

HOR273 Urban and Community Forestry
2 class hr/wk, 2 cr.

Introduces economic, ecological, social, and technical aspects of urban forest management. Focuses on current practices related to the planting, care and management of trees and vegetation in urban areas. Covers the relationship between plants and people in the urban forest. **Offered as needed**

HOR274 Wetlands Design and Management
3 class and 2 lab hr /wk, 4 cr.

Describes wetland types and compares native and constructed wetlands. Explores wetland functions and benefits to the environment and economy. Introduces the wetland construction permitting process. Evaluates design criteria for newly constructed wetlands, including plant propagation and selection. Reviews landscape management challenges with wetlands and strategies for achieving multiple goals. Presents wetland case studies. **Offered as needed**

HOR275 Innovative Strategies for Water Management in Nurseries
2 class hr/wk, 2 cr.

Explores conventional and innovative water management systems that provide adequate quantity and quality of irrigation while protecting the environment and other local resources. Evaluates the benefits and challenges of using either recirculated water or reclaimed wastewater to grow plants. Examines phytotechnologies that can be applied on a nursery/greenhouse scale, such as vegetated filter strips, living machines, hydroponic tanks, floating islands, or wetland ponds. **Offered as needed**

HOR276 Organic Gardening
2 class hr/wk, 2 cr.

Provides the basic knowledge to care for gardens and landscapes without the use of synthetic pesticides and fertilizers. Compares conventional, sustainable, organic and permaculture gardening techniques. Emphasizes soil enrichment techniques and appropriate use of organic fertilizers. Covers organic management of garden and landscape pests. Analyzes sustainability of practices in preparation for the design of a garden or landscape. **Sp**

HOR277 Composting
2 class hr/wk, 2 cr.

Focuses on the composting process, methods of composting, and uses of compost. Covers home and industrial composting with an emphasis on horticultural scale composting (farm and nursery). Reviews regulations and safety considerations. Identifies benefits and challenges of composting. **Offered as needed**

HOR278 Ecological Problem Solving
3 class and 2 lab hr /wk, 4 cr.

Explores current shifts in natural resource management. Reviews conventional practices with global environmental challenges: water, climate, and waste. Focuses on critical thinking activities and direct sensory input. Reviews current literature and sustainability measures. Explores fragmentation and integration of landscape processes. Emphasizes waste as a functional resource. Identifies major energy inputs in horticulture. Compares decentralized versus centralized and mechanical versus ecological management approaches. Presents an ecological problem solving protocol for urban/natural interfaces. Provides provocative environmental literacy to students in all fields. **Offered as needed**

HOR279 Edible Crops in Urban Landscapes

2 class hr/wk, 2 cr.

Demonstrates how to grow a diverse variety of edible crops in any landscape, making use of small spaces and limited resources. Utilizes sustainable horticultural and ecological practices to manage soil health, weed, and pest control. Adapts permaculture concepts to spaces with unique challenges. Emphasizes full-circle recycling of resources, using the waste output from one process to feed the input of another process. Designs edible landscapes to provide as many integrated functions as possible, including water management, nutrient cycling, pollinator support, and temperature mitigation. **Sp**

HOR280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

HOR281 Phytoremediation Research Survey

2 class hr/wk, 2 cr.

Reviews current scientific research relating to the use of plants to remediate water, soil, or air. Defines common vocabulary used in phytoremediation research. Identifies requirements for publication in technical journals. Introduces professional networks, associations, or societies for this field. Summarizes the status of major areas of current and future research. **Prerequisite:** HOR116 and BI153, both with a grade of C or better; or consent of instructor. **Offered as needed**

HPE

Health and Human Performance

See also PE—Physical Education.

HPE184 Sports Medicine: Prevention and Care of Athletic Injuries

3 class hr/wk, 3 cr.

Introduces the basic concepts of athletic injury prevention, including taping and bracing techniques. Addresses injury recognition and management, including common mechanisms of athletic injury, signs and symptoms, and proper care and rehabilitation of common athletic injuries. **F, W, Sp**

HPE270 Sport Psychology

3 class hr/wk, 3 cr.

Introduces the mental, physical, and social aspects of sports. Presents basic psychological mechanics and discusses how they are part of athletic performance. Explores the newest research available. Focuses on decision making and behaviors which help promote team cohesion. **F, W, Sp**

HPE285 Advanced Prevention and Care of Athletic Injuries

3 class and 2 lab hr /wk, 4 cr.

Develops skills used in the field during athletic emergency or injury situations. Includes emergency first aid, CPR, heat and weather related sports considerations and injuries, rehabilitation techniques for return to play after common sport injuries, prevention of injuries through pre-season and in-season conditioning considerations and hydration.

Prerequisite: HPE184 with a grade of C or better; or consent of instructor. **Sp**

HPE295 Health and Fitness for Life

3 class hr/wk, 3 cr.

Focuses on behavior skills to improve lifelong fitness and wellness. Provide an understanding of levels of health and fitness.

F, W, Sp, Su

HPE296 Health and Fitness 2

3 class hr/wk, 3 cr.

Provides a practical study of wellness components with a focus on individual promotion of health behaviors, lifestyles and disease prevention. **F, W, Sp**

HS

Human Services

HS101 Addiction Pharmacology and Physiology

4 class hr/wk, 4 cr.

Explains 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**

HS103 Ethics for Human Service Workers

2 class hr/wk, 2 cr.

Introduces professional issues associated with the helping relationship. Examines how personal characteristics and values affect the helping relationship and considers 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. **F, Sp**

HS120 Alzheimer's Disease: Coping and Caring

3 class hr/wk, 3 cr.

Presents information about Alzheimers Disease and other dementias, exploring the disease process including the stages of Alzheimers and associated behaviors. Focuses on the Best Friends approach to care-giving; addressing issues which families, caregivers, and case managers must attend to. Promotes the individual's adaptation and addressing issues of self-esteem and fear.

Offered as needed

HS122 Women and Chemical Dependency Treatment

2 class hr/wk, 2 cr.

Explores the historical, sociological and physiological implications for women and chemical dependency. **Offered as needed**

HS129 Understanding Grief, Loss, and Transition

3 class hr/wk, 3 cr.

Explores individual attitudes towards death, dying, and personal loss(es) and related values clarification. Includes practical assessment and intervention strategies for working with individuals who are either dying and/or are experiencing loss. Covers specific therapeutic tools used by professionals in addressing grief and mourning. Offers an overview of individual issues related to loss such as rituals, near death experiences, end of life planning, personal responses related to suicide, out of sequence losses, and medical issues (practical and ethical). **F, W, Sp**

HS140 Handling the Violent Client

1 class hr/wk, 1 cr.

Introduces the recognition, prevention, and control of aggressive behavior in clients. Stresses prevention of violence through early intervention and includes information on pre-aggression warning signs, as well as practice with defusing behavior and physical defense responses. **F, Su**

HS150 Personal Effectiveness for Human Services Workers

3 class hr/wk, 3 cr.

Develops knowledge and skills to improve personal effectiveness. Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, problem solving and conflict management. **Prerequisite:** Admission to Human Services program; recommended concurrent enrollment in HS154 and HS170. **F, W**

HS151 Compulsive Gambling

1 class hr/wk, 1 cr.

Covers basic information concerning problem gambling and its consequences. Focuses on the stages of progression from recreational to pathological gambling. Addresses screening, diagnosis, intervention and treatment. **Prerequisite:** HS101 or consent of instructor. **Offered as needed**

HS152 Stress Management

1 class hr/wk, 1 cr.

Provides information on managing stress in all settings. Teaches relaxation techniques and their impact on health and well-being. Covers a variety of the major relaxation techniques and emphasizes the analysis of life stressors and the development of a personalized stress management plan. **F, W, Sp, Su**

HS154 Community Resources**3 class hr/wk, 3 cr.**

Develops an understanding of the history and values of community resources designed to meet the needs of vulnerable populations. Familiarizes students with local social service agencies/organizations; provides information about making appropriate referrals for services. Introduces application of basic research techniques. **Prerequisite:** Concurrent enrollment recommended in HS150 and HS170 for Human Services program students and for students designated Pre-Human Services. **F, W**

HS155 Interviewing Theory and Techniques**3 class hr/wk, 3 cr.**

First of a two-course sequence. Provides the theory and specific techniques required for entry level interviewing in human service settings. **Prerequisite:** HS150, HS154, and HS170; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

HS156 Counseling Theories**3 class hr/wk, 3 cr.**

Introduces the major counseling theories that have demonstrated effectiveness with substance disorders and a variety of mental health issues. Presents an overview of ten specific theories, their founders, key concepts, techniques and appropriate applications. **F**

HS157 Illness Management and Recovery**3 class hr/wk, 3 cr.**

Trains mental health workers, consumers, and client families on an evidenced-based practice that develops personalized strategies for managing psychiatric symptoms and recovery. Emphasizes assisting people to set and pursue personal goals through action strategies that can be used in their everyday lives. **Offered as needed**

HS158 Trauma: Theory to Practice**2 class hr/wk, 2 cr.**

Introduces the sources and characteristics, and the acute and long-term impact of trauma on individuals, couples, and families in a developmental, biosocial context. Explores effects on those working with trauma survivors and the inadvertent re-traumatization of victims by the social service system. Discusses policy and advocacy issues. Analyzes a trauma framework designed to work successfully with trauma that may or may not have been previously diagnosed. Examines key elements necessary to provide trauma-informed interventions and examples of trauma-informed services. **Offered as needed**

HS165 Activity Director Training: Long-Term Care**3 class hr/wk, 3 cr.**

Meets the 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 the continual growth and development of long-term care residents. **Offered as needed**

HS170 Introduction to Practicum**3 class hr/wk, 3 cr.**

Provides the background and specific skills needed to select and succeed in the practicum placement. Serves as a prerequisite for Human Services practicum courses (HS284A,S - HS288A,S). **Prerequisite:** Admission to Human Services program and recommended concurrent enrollment in HS150 and HS154. **F, W**

HS201 Addiction and the Family System**3 class hr/wk, 3 cr.**

Presents basic information regarding addiction and its effects on the whole family. Focuses on the family system and dynamics related to coping with addiction and other chronic conditions that impact the family life cycle. Introduces the major schools of family therapy including strengths-based and solution-oriented approaches. **Prerequisite:** Grade C or better in HS101 or consent of instructor. **Sp**

HS205 Youth Addiction**3 class hr/wk, 3 cr.**

Focuses on working with chemically-dependent youth. Includes prevention, intervention, assessment, and continuing recovery techniques for individuals and groups.

Prerequisite: HS101 or consent of instructor. **Su**

HS206 The Addicted Criminal**3 class hr/wk, 3 cr.**

Assists human services workers to develop skills with chemically-dependent clients who are convicted criminals. Includes information on recognizing, confronting and treating the addicted criminal. **Prerequisite:** HS101 with a grade of C or better; or consent of instructor. **F**

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 ensuing problems in adulthood. Discusses family dynamics, denial, relationships, work, social skills and feelings. **F, Sp**

HS209 Co-occurring Disorders**2 class hr/wk, 2 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 these areas in a blended format. **Prerequisite:** HS101 or consent of instructor. **Offered as needed**

HS211 HIV, TB, and Infectious Diseases: Risk Assessment, Harm Reduction, and Counseling**1 class hr/wk, 1 cr.**

Explores the relationship between alcohol and other drug abuse and infectious diseases, including HIV/AIDS, tuberculosis, sexually-transmitted diseases and hepatitis. Provides counseling techniques for assisting clients to identify personal risk and practice harm reduction. Also addresses special issues affecting diverse populations. Examines personal issues/discomforts arising from frankly discussing sexual behaviors of clients. **Prerequisite:** HS101, HS150 and HS155 recommended. **F, W, Sp, Su**

HS213 Multicultural Practice**3 class hr/wk, 3 cr.**

Explores the ways membership in a racial, ethnic, or cultural group affects the client and helping professional relationship. Builds multicultural competency by increasing awareness and knowledge of cultural differences and the skills to develop and apply appropriate intervention strategies in cross-cultural situations. Focuses on factors that affect racial, ethnic and cultural groups in the United States including African Americans, Asians, Latinos, Native Americans, gays, lesbians, persons with disabilities, and the elderly. **Prerequisite:** HS150 with a grade of C or better; or consent of instructor. **W, Sp; CL**

HS214 Advanced Interviewing and Counseling Skills**3 class hr/wk, 3 cr.**

Introduces intentional interviewing. Focuses on developing advanced skills and strategies with significant opportunity for hands-on practice. Second of a two-course sequence. **Prerequisite:** HS155 with a grade of C or better; or consent of instructor. Concurrent enrollment in HS284-288 recommended. **F**

HS215 Conflict Resolution**3 class hr/wk, 3 cr.**

Explores the sources and dynamics of conflict in interpersonal, family, and work settings. Stresses developing an awareness of personal style in conflict situations and use of effective strategies for resolving conflict. **F**

HS216 Clinical Screening, Assessment, and Treatment Planning

3 class hr/wk, 3 cr.

Introduces diagnostic criteria for substance use disorders as well as a number of other major mental health disorders often seen in substance abusing clientele. Provides a systematic approach to screening, assessment and treatment planning in order to determine the most appropriate initial course of action given the client's needs, characteristics and available resources. Provides significant opportunity for hands-on practice. **Prerequisite:** HS214 or consent of instructor. Concurrent enrollment in HS284-288 is highly recommended. **W**

HS217 Group Counseling Skills

3 class hr/wk, 3 cr.

Presents strategies from accepted and culturally appropriate models for group counseling with clients with a variety of disorders including substance abuse. Focuses on the ethical use of groups as an effective therapeutic intervention. Addresses leadership behaviors, group formation and group stages. **Prerequisite:** HS155 and HS260 or consent of instructor. Concurrent enrollment in HS284-288 is highly recommended. **W**

HS218A Group Processes A

1 class hr/wk, 1 cr.

Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules and norms as well as self-disclosure, roles and group skills. First course in a three-term sequence. **Prerequisite:** Admission into the Human Services program; and HS155 and HS260, both with a grade of C or better; or consent of instructor. Concurrent enrollment in HS284-288 recommended. **F**

HS218B Group Processes B

1 class hr/wk, 1 cr.

Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules and norms as well as self-disclosure, roles and group skills. Second course in a three-term sequence. **Prerequisite:** Admission into the Human Services program; and HS218A with a grade of C or better; or consent of instructor. Concurrent enrollment in HS284-288. **W**

HS218C Group Processes C

1 class hr/wk, 1 cr.

Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules and norms as well as self-disclosure, roles and group skills. Third course in a three-term sequence. **Prerequisite:** Admission into the Human Services program; and HS218B with a grade of C or better; or consent of instructor. Concurrent enrollment in HS284-288 recommended. **Sp**

HS219 Case Management and Client Records

3 class hr/wk, 3 cr.

Covers the preparation of clinical documentation related to screening and intake processes, assessments, treatment plans, reports, progress notes, discharge summaries and other client-related data. Applies State, ASAM and other professionally relevant standards. Concurrent enrollment in HS284-288 is highly recommended. **Sp**

HS220 Aging and Society

3 class hr/wk, 3 cr.

Introduces the field of social gerontology and explores the relationship between the aging individual and society. Serves as an introduction to the field of gerontology. **W**

HS222 Aging and Behavior

3 class hr/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. **W**

HS260 Group Dynamics

3 class hr/wk, 3 cr.

Provides students with the theory and experience to work as effective members of small task groups. Defines and studies styles of leadership, member roles and diversity problem solving, decision-making, status and power, communication, and resolving conflicts/controversy. Offers students the opportunity to evaluate personal performance within a group. **Prerequisite:** HS150 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **W**

HS265 Casework Interviewing

3 class hr/wk, 3 cr.

Provides training in the casework interviewing skills needed for culturally sensitive human services work. Includes advanced interviewing skills, a strength based assessment process. **Prerequisite:** HS155 with a grade of C or better; or consent of instructor. Concurrent enrollment in HS284-288 recommended. **F**

HS266 Case Management

3 class hr/wk, 3 cr.

Provides theory and application in case-work and interviewing applied to diverse populations and cultures in human services. Includes interviewing for assessment, problem solving, planning, monitoring, crisis intervention and development of a case file. **Prerequisite:** HS265; and HS284-288 or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

HS284-288A, S Practicum-Human Services

11-23 lab hr/wk, 4-8 cr.

Provides experience working on-site in a human service agency to integrate field and classroom experiences. Offers students two different practicum sites, each at least two terms in length, during the two years. The second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. Students in the post-baccalaureate Addiction Counselor Certification option remain at one site for three terms. **Prerequisite:** HS150 and HS170, both with a grade of C or better; or consent of instructor. **F, W, Sp**

HST

History

HST104, 105, 106 History of World Civilization

4 class hr/wk, 4 cr. each

Surveys human cultural, social, economic, intellectual, and political development of world civilizations. HST104: 3500 B.C to 1450. HST105: 1450 C.E. to 1870. HST106: 1870 to the present. **F, W, Sp, Su**

HST157 History of the Middle East and North Africa

3 class hr/wk, 3 cr.

Surveys human cultural, social, economic and political developments in the Middle East and North Africa. **Offered as needed**

HST158 History of Latin America

3 class hr/wk, 3 cr.

Surveys cultural, social, economic and political development in Latin America. **Offered as needed**

HST201, 202, 203 History of the United States

4 class hr/wk, 4 cr. each

Explores the cultural, economic, social, and political developments of the United States. HST201: to 1840. HST202: 1840 to 1900. HST203: 1900 to the present. **F, W, Sp, Su; CL**

HST228 History of Modern Europe

3 class hr/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

HST237 Protest, War and Peace: America in the Sixties

4 class hr/wk, 4 cr.

Presents an overview of American/U.S. history during the turbulent years of the Sixties. Covers a broad range of themes and ideas that occurred during the Sixties. **Sp**

HST257 Native American History

3 class hr/wk, 3 cr.

Studies the history of native peoples in the United States, from prehistory to the present. Examines how Native American societies have adapted over time to a constantly changing world. Emphasizes the relationship between European Americans and Native Americans after 1492. **Offered as needed; CL**

HST258 African American History

4 class hr/wk, 4 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 and social lives of African Americans. Additionally, examines the decisions and social institutions that determined public policy regarding Americans of African descent. **Sp; CL**

HST262 Women in US History

3 class hr/wk, 3 cr.

Studies the transformation of the role of women in American society. **Offered as needed; CL**

HST269 Pacific Northwest History

4 class hr/wk, 4 cr.

Examines the diverse history of the Pacific Northwest. Discusses political, economic, social, and cultural transformations in the region, placed in a national and international context. **F, Sp; CL**

HST279 History of Soviet and Contemporary Russia

3 class hr/wk, 3 cr.

Surveys human cultural, social, economic and political developments of Soviet and contemporary Russia. Covers 1917 to the present. **Offered as needed**

HTM

Hospitality and Tourism Management

HTM100 Hospitality and Tourism Industry

3 class hr/wk, 3 cr.

Introduces the hospitality and tourism industry as a single, interrelated industry composed of food and beverage; travel and tourism; lodging, meeting, and planning; leisure and recreation; recreational entertainment; and eco and heritage tourism. Includes industry components, their current issues, and future trends. Assesses the impact of North America's changing demographics and lifestyles. Discusses economic impact, career opportunities, and service ethics. **F, W, Sp**

HTM103 Service Marketing Fundamentals

3 class hr/wk, 3 cr.

Studies how marketing activities direct the flow of goods and services from product to consumer in the hospitality and tourism industry. Covers satisfaction of customer's needs and wants, nature of marketing, sequential steps in marketing, key role of marketing research, interdependence of hospitality and travel organizations, and organization-wide and multi department efforts. Analyzes various industry marketing strategies. **F, Sp**

HTM105 Food and Beverage Industry

3 class hr/wk, 3 cr.

Covers the food service industry including its structure, organization, size, economic impact, regulatory industries and peripheral industries. Explores managerial problems and practices, trade journals, and resources. Reviews food service segments. Discusses current industry operational topics. **F, Sp**

HTM107 Hospitality Cost Control

3 class hr/wk, 3 cr.

Covers principles and practices of profit management for the hospitality industry. Explains cost control and yield analysis processes from purchasing through receiving, storage, issuing, preparing and serving. Includes inventory control techniques. **Sp**

HTM109 Front Desk Operations

3 class hr/wk, 3 cr.

Focuses on specific functions of front desk operations at a hotel, motel or resort. Covers front desk functions including reservations, registration, room and rate assignment, guest services, room status, maintenance and settlement of guest accounts, and creation of guest history records. Discusses development and maintenance of databases of guest information, coordination of guest services, and ensuring guest satisfaction. **Offered as needed**

HTM114 Travel Destination

Geography 1

3 class hr/wk, 3 cr.

Focuses on the geographical areas of North, Central and South America. Provides in-depth geographical, political and cultural information on the countries emphasized. **F**

HTM115 Travel Destination

Geography 2

3 class hr/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. **W**

HTM116 Travel Destination

Geography 3

3 class hr/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**

HTM125 Special Events Planning

3 class hr/wk, 3 cr.

Covers the management and operational activities required for successful coordination of special events and weddings. Focuses on research, design, planning, coordination stages and career opportunities within the special event and wedding industry. **F, W, Sp**

HTM127 Selling in Hospitality and Tourism

3 class hr/wk, 3 cr.

Focuses on learning how to sell services for a hospitality or tourism based business and how consumer use of the internet impacts purchase decisions. Analyzes the different selling strategies used by the industry. **F, Sp**

HTM130 Beverages

3 class hr/wk, 3 cr.

Provides a comprehensive study of alcoholic and non-alcoholic beverages as they pertain to the hospitality industry. Discusses customer demographic shifts and beverage trends and the importance of responsible alcohol beverage service. Covers wine and beer appreciation, including regional differences, production methods, and upscale product features of distillates. Incorporates beverage mixology, marketing, and profit management. **F, Sp**

HTM131 Customer Service Management 1

3 class hr/wk, 3 cr.

Covers the full spectrum of quality service delivery, from the customer's unique perspective. Outlines customer expectations for both task completion and quality experience. Discusses key personal traits, skills and techniques for successful service delivery, including conflict resolution. Covers the unique perspectives of service in a 24/7 business environment. **F, W, Sp**

HTM143 Computer Reservation Systems 1

3 class hr/wk, 3 cr.

Focuses on the current methods that tourists and travel providers use to connect to, purchase, and/or sell travel related products and services. Explores travel information systems, rate negotiation, and distribution of services. **W**

HTM201 Customer Service Management 2

3 class hr/wk, 3 cr.

Provides an in-depth study of the methods and techniques employed by the hospitality and tourism industry to accomplish effective and efficient customer service operation. Includes combined discussions of management theory, systems, decision-making, and leadership directly relevant to any profession with emphasis on the hospitality industry. Also covers the business facets of human resource management, finance, ethics, and Total Quality Management within a business environment. **Prerequisite:** Recommend HTM131 with a grade of C or better, or consent of instructor. **W**

HTM203 Service Marketing: Promotion and Advertising

3 class hr/wk, 3 cr.

Assumes a basic understanding of service marketing and how it differs from product marketing. Incorporates these concepts into market differentiation and segments, including a consumer's service expectations. Focuses on building a brand with a distinct market position and incorporating promotion and advertising strategy. Includes designing a marketing plan as a final project. **Prerequisite:** HTM103 recommended, or consent of instructor. **Sp**

HTM206 Resort Management

3 class hr/wk, 3 cr.

Explores the exciting and challenging world of the resort industry. Discusses scope of the industry along with the various adjunct industries concerning the successful marketing, management, and development of a resort. **W**

HTM207 Gourmet Culture

3 class hr/wk, 3 cr.

Explores the evolution of modern gastronomy and the culture of cuisine. Identifies key chefs and food writers who have contributed to the emergence of celebrity chefs and their impact on the American diet. Covers basic cooking techniques, cuts of meat, produce seasonality, and wine and food pairings. Explores creating marketable culinary experiences. Uses multiple media sources to deliver the content. **W**

HTM208 Attractions and Entertainment

3 class hr/wk, 3 cr.

Examines major components of the attractions and entertainment industries in tourism. Explores leisure tourism from the perspective of both the tourist and the provider. Focuses on three categories: heritage attractions, commercial attractions, and live entertainment. Covers staff, structures, marketing, and successful financial management techniques. **F, Sp**

HTM223 Computer Reservation Systems 2

3 class hr/wk, 3 cr.

Surveys travel computer reservation systems (CRS), including APOLLO, SABRE, WORLDSPAN, and PARS. Includes use of reservation system simulations to identify flights, auto rentals, lodging and associated travel information. Emphasizes problem solving in the workplace. **Prerequisite:** Recommend HTM143. **Sp**

HTM224 Catering Operations

3 class hr/wk, 3 cr.

Studies on-premise catering facilities including operations, sales, and relationships with outside vendors and related departments and industries. Emphasizes logistical operations and seeking and servicing various market segments. **Prerequisite:** Recommend HTM105 or second-year standing in Hospitality Management or Tourism and Travel Management. **F**

HTM226 Event Management

3 class hr/wk, 3 cr.

Focuses on the management and operations of the convention and meeting market in the hospitality and tourism industry. Covers market sales, promotional activities, negotiations for meeting services, and convention servicing. Incorporates facilities, technology, and media. **Prerequisite:** HTM127 or concurrent enrollment. **F, Sp**

HTM230 Hotel, Restaurant and Travel Law

3 class hr/wk, 3 cr.

Covers legal aspects of the hospitality and tourism industry. Utilizes critical thinking skills needed to communicate with attorneys and recognize ramifications of policies and practices in everyday operations. Discusses current legal situations, case studies, and the reasoning behind the course of action taken. Also covers the 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. **Prerequisite:** Recommend second-year standing in Hospitality Management or Tourism and Travel Management. **Offered as needed**

HTM232 Menu Design

3 class hr/wk, 3 cr.

Covers principles of planning a menu from concept development and design mechanics to menu pricing and marketing issues. Addresses current foodservice industry needs, including operations, sanitation, and nutrition concerns, design mechanics, and increasing sales through the menu. **Prerequisite:** Recommend HTM105 or second year standing in Hospitality Management. **F, Sp**

HTM233 Strategies in Tourism and Destination Marketing

3 class hr/wk, 3 cr.

Provides an overview of long-range strategic issues in community-based tourism. Focuses on strengths, weaknesses, opportunities, and threats in the international tourism industry. Discusses the role of destination management organizations in areas of strategic planning, marketing, product development, and community visioning. Explores concept of Destination Team and impact on participants and funding mechanisms. **Sp**

HTM235 Leadership in Tourism

3 class hr/wk, 3 cr.

Emphasizes the information, tools, and techniques to provide strategic human resource and fiscal leadership for destination management organizations (DMOs). Focuses on developing work teams and creation of information and financial management systems. Discusses leadership styles for diverse stakeholder groups such as volunteers, paid staff, elected officials, and community leaders. **W**

HTM236 Tour Operations

3 class hr/wk, 3 cr.

Covers basic tour management concepts and principles. Provides understanding of relationships of group travel to tourism industry, including economic, geographic, technological, political, and social forces. Examines the specific knowledge and skills required by tour operators, suppliers and representatives of destination marketing organizations. Analyzes industry distribution channels and packaging strategies. **F**

HTM237 Tourism Transportation

3 class hr/wk, 3 cr.

Provides understanding of relationships between the transportation and tourism industries. Defines tourist transportation systems incorporating traveler needs into management and planning. Examines key issues which transport providers, decision makers, managers and tourists face in the use, operation and management of tourist transportation. **W**

HTM244 Practicum 1: Hospitality and Tourism Management

1 class and 9 lab hr /wk, 4 cr.

Provides on-site experience in a hospitality or tourism industry setting integrating field and classroom experience related to meeting program outcomes and individual student career goals. **Prerequisite:** Third-term standing in Hospitality Management or Tourism and Travel Management certificate or fifth term standing in Hospitality Management or Tourism and Travel Management degree with a grade of C or better in each of the required HTM courses, or consent of instructor or program advisor. **Sp, Su**

HTM245 Practicum 2: Hospitality and Tourism Management

1 class and 24 lab hr /wk, 9 cr.

Provides on-site experience in a hospitality or tourism industry setting integrating field and classroom experience related to meeting program outcomes and individual student career goals. **Prerequisite:** Fifth-term standing in Hospitality or Tourism and Travel degree with a grade of C or better in each of the required HTM courses, or consent of instructor or program advisor. **Sp, Su**

HTM280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

HTM290 Operations Management

3 class hr/wk, 3 cr.

Reviews and refines essential skills needed for career success in the hospitality and tourism industry. Covers developing competency in creative problem-solving, critical thinking, effective oral and written communication, ethical reasoning, quantitative analysis, and the use of technology.

Prerequisite: Second-year standing in Hospitality Management or Tourism and Travel Management programs. **W, Sp**

HUM

Humanities

HUM106 British Life and Culture

3 class hr/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**

HUM120 International Community Development in Action

4 class hr/wk, 4 cr.

Examines the themes and concepts of international community development in impoverished global regions and provides direct cross-cultural experience by living and working in another country, with emphasis on the unequal distribution of wealth and power evident in the world. Develops a broad understanding and critical thinking about global forces and culture through the disciplines of education, philosophy, literature, economics and community development. Prepares students to participate thoughtfully and responsibly in community development field work (service learning). **Sp; CL**

HUM220 Resisting Empire: Latin American Revolution

3 class hr/wk, 3 cr.

Focuses on the culture, ideas, and actions that typify revolutionary movements in Latin America since the dawning of the twentieth century. Examines a Latin American emphasis against the backdrop of empire as manifested in the actions of local elites, first-world countries, especially the United States, and worldwide capitalist structures.

Offered as needed; CL

JNL

Journalism

JNL215 Publications Lab

4 lab hr/wk, 2 cr.

Applies 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 hr/wk, 3 cr.

Focuses on gathering and processing the news. Includes specific treatments on lede formats, organizing and constructing news stories, developing a news writing style, and both straight and feature materials. Covers editorial and column writing with considerable time devoted to the craft of writing.

Prerequisite: Familiarity with keyboarding. **F**

JNL217 Feature Writing

3 class hr/wk, 3 cr.

Emphasizes feature, in-depth, and investigative reporting beyond gathering and processing of news. Requires presenting material for possible publication in the student newspaper. **Prerequisite:** JNL216 or consent of the instructor. **W**

JNL224 Introduction to Mass Communication

3 class hr/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 and Public Relations

3 class hr/wk, 3 cr.

Introduces the communications and production aspects of advertising and public relations. Combines criticism and analysis with assignments in copy writing, design, and marketing strategy. Provides hands-on experience through work on the weekly student newspaper. **W**

JNL226 Editing and Design

3 class hr/wk, 3 cr.

Provides a working example of newspaper management in relation to editing, production, and design procedures. Includes various printing processes, typography, page design, style, photo editing, and headline writing. Provides opportunity to obtain hands-on experience through work on the weekly student newspaper. **Prerequisite:** JNL224 or consent of instructor. **Sp**

JNL227 Media Ethics

3 class hr/wk, 3 cr.

Introduces media ethics, with emphasis on the First Amendment. Covers its philosophical framework, corporate social responsibility, the legal system, the changing face of the modern media, editors and readers in the debate process, and issues of taste versus responsibility. Examines important dilemmas confronting print and broadcast journalists, with current examples of situations that are facing legal challenges to the system by the courts. Includes shifting standards of the public at large. Recommended for journalism majors; open to non-majors. **Prerequisite:** JNL224 or consent of instructor. **W**

JNL228 Media and Motion Pictures

3 class hr/wk, 3 cr.

Examines significant historical events, the media coverage generated at the time, and eventual film depiction. Emphasizes individuals or issues that have changed laws, conventions, mores, rules, life in general, and especially the way the media operates, ranging from McCarthyism to Watergate, the Cold War to presidential politics. Evaluates legal and ethical dilemmas. Recommended for journalism majors but is open to all. **Prerequisite:** JNL224 or consent of instructor. **F, Sp**

JPN

Japanese

JPN101, 102, 103 First Year Japanese, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Introduces 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 courses are to be taken sequentially. JPN101: None. JPN102: JPN101 with a grade of C or better; or one year of high school Japanese; or consent of instructor. JPN103: JPN102 with a grade of C or better; or two years of high school Japanese; or consent of instructor. JPN101, F; JPN102, W; JPN103, Sp

JPN201, 202, 203 Second Year Japanese, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Provides extensive practice in all four language skills (reading, writing speaking, and listening). Includes cultural and literary readings and an in-depth review and expansion of basic Japanese grammar and vocabulary, as well as a broadening of the understanding of Japanese culture. All classroom interaction (both by instructor and students) takes place in Japanese. **Prerequisite:** These courses are to be taken sequentially. JPN201: JPN103 with a grade of C or better; or three years of high school Japanese; or consent of instructor. JPN202: JPN201 with a grade of C or better; or consent of instructor. JPN203: JPN202 with a grade of C or better; or consent of instructor. JPN201, F; JPN202, W; JPN203, Sp

Job Search

See FE—Field Experience.

Literature

See ENG—English.

Management

See BA—Business Administration.

Mechanical Design

See DRF—Drafting Technology.

MT

Industrial

MT101 Introduction to Process Control 2 class hr/wk, 2 cr.

Provides an overview of industrial process control and measurement systems. Presents a foundation for technicians, engineers, and managers to communicate with other control system professionals. Reviews the roles and responsibilities of process technicians, engineers, and managers. Serves as a solid fundamental course for introduction to other process control courses. Information provided promotes and supports sustainable and green technologies. **F, Offered as needed**

MT110 Microelectronics and Solar Cell Manufacturing 3 class hr/wk, 3 cr.

Surveys the field of microelectronics. Covers an overview of the technology and manufacturing processes used and the economic and social impacts. Applies to students considering a career in Oregon's high growth semiconductor and solar cell manufacturing industries. Information provided promotes and supports sustainable and green technologies. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor. **F, Offered as needed**

MT211 Sensors and Control Elements 1

2 class hr/wk, 2 cr.

Examines the types and uses of industrial sensors and actuators. Includes temperature, pressure, optical, position and flow sensors. Covers operation of AC, DC, and three phase motor drives. Focuses on wiring and troubleshooting of sensors and actuators. **Prerequisite:** ELT100 or ELT133; and MT101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Offered as needed**

MT212 Sensors and Control Elements 2

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

Offers a working understanding of smart field devices with an emphasis on more reliable information gathering, decreased maintenance time, ease-of-use, and multi-tasking capabilities. Discusses conventional systems and enhancements when combined with digital control networks, including basic and multivariable smart transmitters and smart valve-positioners. Provides an understanding of electrical grounding from electrical and instrumentation loop relationships. Covers grounding for personnel/equipment protection as well as for electrical noise. Presents signal wiring and noise reduction methods. **Prerequisite:** ELT100 or ELT133; and MT101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Offered as needed**

MT215 Instrumentation

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

Presents a systematic approach to troubleshooting and start-up of single- and multi-loop control loops. Focuses on how pressure, level, flow, and temperature loops operate to maintain good process control systems. **Prerequisite:** ELT100 or ELT131; MT101 and MT211; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Offered as needed**

MT221 Fluid and Vacuum Systems

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

Covers theory, operation and application of hydraulic, pneumatic and vacuum systems. Includes operation, diagnosis, service, maintenance and repair of components and systems. **Offered as needed**

MT223 High Vacuum Technology

3 class hr/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. **Offered as needed**

MT227A Pneumatics and Hydraulics Fundamentals

2 class and 3 lab hr /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 or consent of instructor. **Offered as needed**

MT231 Programmable Logic Controllers 1

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

Covers the operation, maintenance, or purchase of automated equipment. Introduces the theory of operation of Programmable Logic Controllers and how they are integrated and function in an automated system. Focuses on configuration, programming, and installation of Programmable Logic Controllers within a factory setting. Prerequisite: ELT100 or ELT131; and MT212; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Offered as needed**

MT232 Programmable Logic Controllers 2

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

Offers advanced PLC configuration, including networking, analog systems, advanced instruction set features, PLC to PLC communications, diagnostics, modem and internet connections. Also covers remote I/O, Ethernet, motion control and practical tips on designing, implementing and testing industrial based networks and how to apply them securely and reliably in an industrial environment. Includes the functions and purposes of the elements used to create and protect an industrial network including switches, routers, firewalls and intrusion detection/prevention systems. **Prerequisite:** ELT100 or ELT131; and MT231; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

MT235 Human Machine Interfaces

1 class and 2 lab hr /wk, 2 cr.

Examines the human-machine interface (HMI), the software application that permits operators to visualize the process. Provides an introduction to the primary aspects of HMI configuration, including best practices in information presentation for process equipment, text, numbers, historical trends, and alarm information. Presents related on-demand information, including reports and links out to other documents. **Prerequisite:** MT211 and MT231, both with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

MT241 System Calibration and Standards

1 class and 2 lab hr /wk, 2 cr.

Presents the why's and how's for organizing, modifying, and improving the operation of industrial calibration and repair. Covers examination of the standards and criteria for evaluating a process control system or proposed laboratory. Offers a combination of practical information and hands-on experience, covering proper installation, calibration, and maintenance of electronic instruments. Builds on the characteristics of electronic control systems, including techniques for installing electronic instruments; and procedures for configuring and calibrating transmitters, transducers, and controllers in process control systems. **Prerequisite:** ELT100 or ELT131; and MT215; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

MT281 Process Control Practicum 1

6 lab hr/wk, 2 cr.

Provides related on-the-job experience with area employers, under instructional oversight. Utilizes supervised industrial experience to develop basic process control procedures, including equipment scheduling, documentation, and process management at local industry partners. Successful completion of the first year of the Process Control program or proof of technical proficiency. **Prerequisite:** Completion of or concurrent enrollment in MT101; second-year standing in the Process Control Technology program or proof of technical proficiency; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Offered as needed**

MT282 Process Control Practicum 2

6 lab hr/wk, 2 cr.

Provides related on-the-job experience with area employers, under instructional oversight. Utilizes supervised industrial experience to develop intermediate process control procedures, including equipment maintenance, standardization, limited calibration, and process management at local industry partners. **Prerequisite:** MT281 with a grade of C or better; or consent of instructor. **W, Offered as needed**

MT283 Process Control Practicum 3

1 class and 9 lab hr /wk, 4 cr.

Provides on-the-job experience with area employers, under instructional oversight. Utilizes limited supervised industrial experience to develop advanced process control procedures, including equipment scheduling, equipment calibrations, process charting, and factory management with local industry partners. **Prerequisite:** MT282 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

MTH

Mathematics

MTH020 Basic Mathematics

4 class hr/wk, 4 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 hr/wk, 3 cr.

Introduces basic algebraic, geometric, and two dimensional graphing techniques and applications. The course is designed primarily for students in specific vocational or technical programs. **Prerequisite:** Grade of C or better in MTH020 or equivalent. **F, W, Sp, Su**

MTH053 Introduction to Trigonometry with Geometry

3 class hr/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 of C or better in MTH052 or equivalent. **F, W, Sp, Su**

MTH060 Introductory Algebra

4 class hr/wk, 4 cr.

Gives students with no algebra background a strong, fundamental background in beginning algebra. 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 better in MTH020 or equivalent. **F, W, Sp, Su**

MTH070 Elementary Algebra

4 class hr/wk, 4 cr.

Covers linear equations, linear systems, linear inequalities and quadratic equations in verbal, numerical, graphical, and symbolic forms. Also covers negative exponents, scientific notation and dimensional analysis. Explores topics using a graphic calculator as well as traditional approaches. **Prerequisite:** Grade of C or better in MTH060 or equivalent. **F, W, Sp, Su**

MTH075 Applied Geometry**1 class hr/wk, 1 cr.**

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. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** Grade of C or better in MTH060 or equivalent. **F, W, Sp, Su**

MTH076 Applied Geometry**1 class hr/wk, 1 cr.**

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. Includes applied problems involving these figures. Offers an individualized course that may be started and completed any time during the term. **Prerequisite:** Grade of C or better in MTH075 or equivalent. **F, W, Sp, Su**

MTH078 Applied Trigonometry**1 class hr/wk, 1 cr.**

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. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** Grade of C or better in MTH070, MTH075, and MTH076 or equivalent. **F, W, Sp, Su**

MTH079 Applied Trigonometry**1 class hr/wk, 1 cr.**

Covers trigonometric ratios of obtuse angles, law of sines, law of cosines, vectors and radian measure. Includes applied problems involving these concepts. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** Grade of C or better in MTH078 or equivalent. **F, W, Sp, Su**

MTH081 Technical Mathematics 1**4 class hr/wk, 4 cr.**

Offers the first course of a two-term technical mathematics sequences 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 better in MTH070 or equivalent. **F, W**

MTH082 Technical Mathematics 2**4 class hr/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 better in MTH081. **W, Sp**

MTH095 Intermediate Algebra**4 class hr/wk, 4 cr.**

Introduces the study of functions with emphasis on power, linear, quadratic, exponential, and rational functions. Solves equations using a variety of methods, including logarithms. **Prerequisite:** Grade of C or better in MTH070 or equivalent. **F, W, Sp, Su**

MTH105 Introduction to Contemporary Mathematics**4 class hr/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 better in MTH095 or equivalent. **F, W, Sp, Su**

MTH111 College Algebra**5 class hr/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 better in High School Algebra 2 or MTH095. **F, W, Sp, Su**

MTH112 Trigonometry**5 class hr/wk, 5 cr.**

A pre-calculus course covering trigonometric functions, conic sections, vectors, parametric equations, and polar coordinates, with emphasis on applications and graphing calculators. **Prerequisite:** Grade of C or better in MTH111 or equivalent. High School Geometry or MTH075 recommended. **F, W, Sp, Su**

MTH211 Foundations of Elementary Mathematics**4 class hr/wk, 4 cr.**

Introduces the first course of a three-course 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 better in MTH095 or equivalent. **F**

MTH212 Foundations of Elementary Mathematics**4 class hr/wk, 4 cr.**

Offers the second course of a mathematics sequence designed for prospective elementary education teachers. Covers basic concepts about rational numbers, real numbers, statistics, and probability. Uses manipulatives to deepen conceptual understanding. **Prerequisite:** Grade of C or better in MTH211 or equivalent. **W**

MTH213 Foundations of Elementary Mathematics**4 class hr/wk, 4 cr.**

Presents the third course in a mathematics sequence designed for prospective elementary education teachers. Covers topics in geometry. Utilizes computer programs and manipulatives to deepen conceptual understanding. **Prerequisite:** Grade of C or better in MTH212 or equivalent. **Sp**

MTH231 Discrete Mathematics**4 class hr/wk, 4 cr.**

Introduces logic, sets, functions, algorithms, matrices, graph theory, and trees, with applications. Offers the first course for computer science and mathematics majors. **Prerequisite:** Grade of C or better in MTH111 or equivalent. **Offered as needed**

MTH232 Discrete Mathematics**4 class hr/wk, 4 cr.**

Applies fundamentals from MTH231 to tree theory, advanced counting techniques, relations and Boolean algebra. Offers a second course for computer science and mathematics majors. **Prerequisite:** Grade of C or better in MTH231 or equivalent. **Offered as needed**

MTH241 Elementary Calculus**4 class hr/wk, 4 cr.**

Emphasizes techniques of calculus in applied problem solving. A one-term terminal course with an intuitive approach to differential and integral calculus. Intended for non-math majors. **Prerequisite:** Grade of C or better in MTH111 or equivalent. **F, W, Sp**

MTH243 Probability and Statistics 1
4 class hr/wk, 4 cr.

Introduces descriptive statistics. Covers data analysis, regression and correlation, counting and probability, common probability distributions, sampling, confidence intervals, and one-sample hypothesis testing. **Prerequisite:** Grade of C or better in MTH111 or equivalent. **F, W, Sp, Su**

MTH244 Probability and Statistics 2
4 class hr/wk, 4 cr.

Offers a second course open to all majors 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 of C or better in MTH243 or equivalent. **Sp**

MTH251 Differential Calculus
5 class hr/wk, 5 cr.

Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers rates of change and derivatives with applications, the definite integral in modeling sums of products such as distance, area, and average function value; and an intuitive development of the fundamental theorem of calculus. Graphing calculator required. **Prerequisite:** Grade of C or better in MTH112 or equivalent. **F, W, Sp, Su**

MTH252 Integral Calculus
5 class hr/wk, 5 cr.

Covers the development of definite and indefinite integrals, the fundamental theorem of calculus, applications of integrals, constructing functions from their rates of change, and techniques of integration. Introduces differential equations. **Prerequisite:** MTH251 with a grade of C or better, or equivalent course as determined by the instructor; or consent of instructor. **F, W, Sp**

MTH253 Series Calculus and Linear Algebra
5 class hr/wk, 5 cr.

Combines topics from linear algebra and infinite series. Includes geometric, Taylor and Fourier Series work with applications; and systems applications using matrices and determinants. **Prerequisite:** MTH252 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **W, Sp, Su, Offered as needed**

MTH254 Vector Calculus 1
5 class hr/wk, 5 cr.

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. Also explores multivariable integration with spherical and cylindrical coordinates. Offers the first of two courses in multivariable calculus. **Prerequisite:** MTH253 with a grade of C or better; or consent of instructor. **F, Sp, Su, Offered as needed**

MTH255 Vector Calculus 2
4 class hr/wk, 4 cr.

Explores vector fields, motion in space, Green's Theorem, Stokes' Theorem, the Divergence Theorem, surface areas, and line and surface integrals along with their related topics including divergence, curl, and flux. Offers the second course in multivariable calculus. **Prerequisite:** Grade of C or better in MTH254, or equivalent. **W**

MTH256 Applied Differential Equations
4 class hr/wk, 4 cr.

Covers solutions of linear and first-order non-linear differential equations. Includes Laplace transforms and convolutions. Graphing calculator required. **Prerequisite:** Grade of C or better in MTH254 or equivalent. **Sp**

MUS

Music

MUS105 History of Rock and Roll
3 class hr/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. **Offered as needed**

MUS161 Music Appreciation
3 class hr/wk, 3 cr.

Highlights 17th to 20th century instrumental and vocal music and the growth of the orchestra. Covers acknowledged masters such as Mozart, Haydn, and Beethoven. **Offered as needed**

MUS197 Chorus
4 lab hr/wk, 2 cr.

Offers singing in a choral ensemble, in a mixed voice (soprano, alto, tenor, bass) chorus. Includes proper singing habits, basic musical terms and expressions, rehearsal techniques procedures, and exposure to a wide variety of music literature, culminating in a final performance. Course may be repeated for a maximum of 8 credits. **Prerequisite:** Consent of instructor and previous experience singing with a school, civic or church choir is helpful but not mandatory. **F, W, Sp**

MUS201 Introduction to Music and Its Literature
3 class hr/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 symphony of Haydn, Mozart, and Beethoven. **F**

MUS202 Introduction to Music and Its Literature
3 class hr/wk, 3 cr.

Focuses on the 18th and 19th centuries, including Beethoven and his Ninth Symphony; the growth of the orchestra and the music written for it; the emergence of the piano as an important musical and sociological factor; the new dimensions of song and opera. **W**

MUS203 Introduction to Music and Its Literature
3 class hr/wk, 3 cr.

Focuses on the music of the 20th Century, including Impressionism, Expressionism, Atonality, Neo-classicism, electronic music, random and chance music, and minimalism. Covers popular music traditions of the 20th Century including musical theater, jazz, and rock and roll. **Sp**

MUS211 Music Theory 1
3 class hr/wk, 3 cr.

Focuses on Western European music practices, music fundamentals, music analysis, basic sight-singing, and listening. Covers intervals, scales, modes, circle of fifths, triads, seventh chords, figured bass, basic four-part writing, and more. Emphasizes terminology and music concepts from the Renaissance to the present day. **Prerequisite:** Students must be able to read music in the treble and bass clefs. **F**

MUS212 Music Theory 2
3 class hr/wk, 3 cr.

Focuses on Western European music practices and four-part writing practices, music analysis, sight-singing, and listening. Emphasizes terminology and music concepts from the Renaissance to the present day. **Prerequisite:** MUS211 with a grade of C or better within the last two years. **W**

MUS213 Music Theory 3
3 class hr/wk, 3 cr.

Focuses on Western European music practices and advanced four-part writing practices, music analysis, sight-singing, and listening. Emphasizes terminology and music concepts from the Renaissance to the present day. **Prerequisite:** MUS211 and MUS212, both with a grade of C or better within the last two years. **Sp**

NET

Network Technology

NET123 Network Computer Operating Systems
3 class and 2 lab hr /wk, 4 cr.

Introduces network computer operating systems using the command line. Includes hands-on work with network computer operating systems in a structured lab environment. **Prerequisite:** CIS101 or equivalent experience. **F, Offered as needed**

NET141 Network for Small Business **3 class and 3 lab hr /wk, 4 cr.**

The first course of four part sequence teaches the skills needed to work in small-to-medium network environments. Develops entry-level skills needed by computer network technicians, cable installers, and industry network support technicians. Provides an introduction to networking and Internet connectivity, using tools and hardware commonly found in small-to-medium business and industrial networks. Lab exercises provide practical hands-on experience. **Prerequisite:** CIS101 or consent of instructor. **Sp, Offered as needed**

NET142 Medium Business Networks **3 class and 3 lab hr /wk, 4 cr.**

The second course in a four-part sequence prepares students for jobs as network technicians; develops additional skills required for computer Network Support technicians. Includes an overview of routing and remote access, addressing, and security, network servers used for email services, web space, and authenticated access. Lab exercises provide practical hands-on experience. **Prerequisite:** CIS101 or consent of instructor. **F, Offered as needed**

NET143 Routing and Switching Systems **3 class and 3 lab hr /wk, 4 cr.**

The third course in a four-part sequence familiarizes students with the equipment applications and protocols installed in enterprise networks. Focuses on switched networks, IP Telephony requirements, and security. Introduces advanced routing protocols such as Enhanced Interior Gateway Routing Protocol (EIGRP) and Open Shortest Path First (OSPF) Protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. **Prerequisite:** CIS101 or consent of instructor. **W, Offered as needed**

NET144 Network Design and Support **3 class and 3 lab hr /wk, 4 cr.**

The fourth course in the four-part sequence introduces students to network design processes using a large enterprise network and a medium-sized network. Students follow a standard design process to expand and upgrade each network, which includes requirements gathering, proof-of-concept, and project management. Lab exercises provide practical hands-on experience. **Prerequisite:** CIS101 or consent of instructor. **Sp, Offered as needed**

NET271 IP Telephony

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

Introduces Cisco IP Telephony, a converged voice and data network. Includes the challenges faced by these different technologies. Covers Voice over IP (VoIP) and Quality of Service (QoS) concepts as they apply to the Cisco CallManager Express (CME) environment. **Offered as needed**

NFM

Nutrition and Food Management

NFM215 Nutrition for Foodservice and Culinary Professionals

3 class hr/wk, 3 cr.

Focuses on nutrition as it relates to food-service or culinary professionals. Explores the potential issues and hot topics behind dietary concerns of restaurant patrons. Emphasizes food and recipe composition. Applies nutrition concepts to creative menu planning designed to meet dietary needs. **Offered as needed**

NFM225 Nutrition

4 class hr/wk, 4 cr.

Covers nutrients, their sources and body utilization to promote optimum health. Includes development of eating patterns, current dietary trends, nutrition information in mass media, and current national and international problems. **F, W, Sp, Su**

NFM240 Nutrition in the Lifecycle

3 class hr/wk, 3 cr.

Covers the sources and utilization of nutrients to promote optimum health during each stage of life, from infancy to older age. Emphasizes nutritional concerns, health issues and metabolic disorders. Summarizes appropriate food selections. **Prerequisite:** NFM225. **Offered as needed**

NUR

Nursing

NUR106 Fundamentals of Nursing

5 class and 12 lab hr /wk, 9 cr.

Presents concepts and skills that lay a foundation for socialization into the nursing profession. Provides opportunities to attain the knowledge and skills that are necessary to promote health, prevent disease, and deliver basic nursing care to individual patients across the lifespan. **Prerequisite:** Admission to the Nursing program; registration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current Healthcare Provider or Professional Rescuer CPR certification is required. Corequisite: BI232 and PSY201. Corequisites may be completed prior to enrollment in NUR106. **F**

NUR106A Skills Applications for NUR106

3 lab hr/wk, 1 cr.

Provides practical application and hands-on learning for basic nursing skills, including hygiene skills, transmission-based and standard precautions, moving and positioning, transferring, administering intramuscular injections (IMs), patient assessment, vital signs, specimens, and medication administration. **Prerequisite:** Concurrent enrollment in NUR106. **F**

NUR108 Care of Acutely Ill Patients and Developing Families 1

6 class and 12 lab hr /wk, 10 cr.

Provides opportunities to obtain the knowledge and skills necessary to implement the roles of a practical nurse in providing care to the elderly in long term care and to acutely ill patients across the lifespan. Focuses on the care of individual patients with health problems related to the respiratory, cardiovascular, endocrine, musculoskeletal, and neurological systems. Includes pathophysiological effects, such as fluid and electrolyte imbalances and pain, and treatment modalities, such as pharmacology and surgery, associated with these health problems. Also provides opportunities to learn concepts related to the care of developing families.

Prerequisite: NUR106 with a grade of C or better. Corequisite: BI233 and PSY237. Corequisites may be completed prior to enrollment in NUR108. **W**

NUR108A Skills Applications for NUR108

3 lab hr/wk, 1 cr.

Provides practical application and hands-on learning for nursing skills, including enteral nutrition; subcutaneous injections; scrubbing, gowning and gloving; changing intravenous (IV) bags and tubing; sterile dressing changes; urinary catheterization; and medication administration. **Prerequisite:** Concurrent enrollment in NUR108. **W**

NUR109 Care of Acutely Ill Patients and Developing Families 2

5 class and 15 lab hr /wk, 10 cr.

Provides opportunities to obtain the knowledge and skills necessary to implement the roles of a practical nurse in providing care to patients across the lifespan who are acutely ill. Focuses on the care of patients with health problems related to the neurological, hematological, gastrointestinal, and genitourinary systems, as well as conditions related to cancer, mental health, infectious diseases, and complications of obstetrics. Also provides opportunities to implement the roles of a practical nurse in providing care to developing families. **Prerequisite:** NUR108 with a grade of C or better. Corequisite: BI234 and WR121. Corequisites may be completed prior to enrollment in NUR109. **Sp**

NUR109A Skills Applications for NUR109

3 lab hr/wk, 1 cr.

Provides practical application and hands-on learning for nursing skills, including previously learned skills, converting an intravenous (IV) infusion to an intermittent device, saline flushes via an intermittent venous access device, intradermal injections, wound care, nasogastric tube insertion and removal, suctioning and tracheostomy care. **Prerequisite:** Concurrent enrollment in NUR109. **Sp**

NUR171 Strategies for Success in the Nursing Program

1 class hr/wk, 1 cr.

Reinforces the basic skills of the nursing curriculum. Includes a review of the Nursing program, study skills, campus resources, dosage calculation, coping strategies, testing, the nursing process, medical terminology, and documentation. Provides a hands-on approach to learning through application of concepts within the Nursing Program.

Prerequisite: Concurrent enrollment in NUR106. **F**

NUR206 Care of Patients with Complex Health Problems

6 class and 15 lab hr /wk, 11 cr.

Provides the foundation for practice as an associate degree registered nurse. Builds on the curriculum of the first year of the Nursing Program and socializes students into the nursing roles at the registered nurse level of responsibility. Provides opportunities to learn and apply the knowledge and skills necessary to implement these roles in giving care to clients/patients with complex physical and mental health problems. Prerequisite(s): NUR109 with a grade of C or better. 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 Healthcare Provider of Professional Rescuer CPR certification is also required. Corequisite: CIS101; corequisite may be completed prior to enrollment in NUR206. **F**

NUR208 Crisis and Community Settings

5 class and 15 lab hr /wk, 10 cr.

Provides students with opportunities to learn and to apply the knowledge and skills that are necessary to implement the roles of an associate degree registered nurse in providing care to patients experiencing a health-related crisis such as a critical illness, an acute exacerbation of a chronic illness, or an end-stage disease. Students will also have the opportunity to gain knowledge and explore nursing practice in community-based settings. **Prerequisite:** NUR206 with a grade of C or better. Corequisite: Social Science elective, and sociology elective. Corequisites may be completed prior to enrollment in NUR208. **W**

NUR209 Preparation for Entry into Practice

3 class and 15 lab hr /wk, 8 cr.

Provides students with opportunities to demonstrate mastery of the concepts and skills inherent in the beginning practice roles of an associate degree registered nurse. Focuses on the first-level management skills necessary for providing nursing care to groups of patients in acute or sub-acute care settings. As the culmination of the Nursing program clinical sequence, NUR209 incorporates a four-week preceptorship during which students demonstrate achievement of program outcomes. **Prerequisite:** NUR208 with a grade of C or better. Corequisite: Humanities/fine arts/Communication elective, and general education elective. Corequisites may be completed prior to enrollment in NUR209. **Sp**

NUR261 Transitions to Long Term Care

2 class hr/wk, 2 cr.

Prepares nursing students and new nurses for transition into leadership roles, primarily in long term care (LTC) settings. Provides knowledge and skills to successfully prepare for the responsibilities to work as a beginning LPN or RN in this setting. **Prerequisite:** NUR109 with a grade of C or better, or concurrent enrollment; or current licensure as an LPN or RN; or consent of instructor. **Sp**

NUR272 Pathophysiology for Nurses

3 class hr/wk, 3 cr.

Applies anatomy and physiology concepts to examine alterations of human function. Explores major pathophysiological concepts using a body systems approach. Uses theories relating etiology, pathogenesis, and clinical manifestations to study common health problems. **Prerequisite:** BI231, BI232, and BI233. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

NUR280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience.

OC

Oceanography

OC133 Introduction to Oceanography

3 class hr/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–Art, VC–Visual Communications.

PE

Physical Education

PE185AA, AB, AC Sports Conditioning, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Offers a conditioning program to improve sports skills and specific athletic activities. Improves fitness, speed, balance, core conditioning, and coordination with various protocols including plyometrics, agility, games, strength, and conditioning exercises. **F, W, Sp**

PE185BG Baseball–Advanced

3 lab hr/wk, 1 cr.

Introduces students to the fundamentals of baseball. **F, W**

PE185BJ, BK, BL Basketball–Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Emphasizes fundamental skills, team play and a knowledge of the sport. **F, W, Sp**

PE185BS, BT Body Building, Beginning, Intermediate

3 lab hr/wk, 1 cr. each

Focuses on developing a strength and body building program to fit individual needs. **F, W, Sp**

PE185BV, BW, BX Bowling–Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Familiarizes students with the fundamentals, rules and etiquette of bowling. Also develops specific skills necessary for successful recreation or lifetime sports activity. **F, W, Sp, Su**

PE185CA, CB, CC Conditioning–Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. Each

Offers a conditioning program designed to complement individual interests, needs, and goals. May improve some or all of the areas of physical fitness: cardiovascular, muscular, body composition, and flexibility. **F, W, Sp, Su**

PE185CM, CN Cross Country Skiing–Beginning, Intermediate

3 lab hr/wk, 1 cr. each

Provides instruction in cross country skiing on tracked and untracked terrain. **W**

PE185CW, CX, CY Cycling, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Maintain or improve fitness through participation in a regular schedule of bicycle riding. Examines cycling techniques, basic bicycle maintenance, and safety factors. **Offered as needed**

PE185DA, DB, DC Aerobics-Low Impact-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Studies how to obtain cardiovascular, strength, and flexibility benefits. Class activities may include: power aerobics, step aerobics, jazz aerobics, line dancing, yoga aerobics, hi/lo aerobics, step/sculpt/box, and kickboxing. **F, W, Sp, Su**

PE185DJ, DK, DL Dance, Modern-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Studies a variety of styles within the modern dance realm. Introduces the concepts of space, time, and force and explores how each of these elements plays a part in movement and dance technique. Focuses on correct alignment, efficient and proper use of the body, and includes axial and locomotor movement. Incorporates increased flexibility, coordination, balance, and muscular strength in warm-up and cool-down periods. **Offered as needed**

PE185DM, DN, DO Group Exercise, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Increases cardiovascular endurance, muscular strength and endurance or flexibility, and overall health. Incorporates a combination of step, cardio kickboxing or dance routines, strengthening exercises, Pilates and/or stretching activities. Supports incorporating exercise into a lifestyle. **F, W, Sp, Su**

PE185DR, DS, DT Ballroom Dance-Beginning, Intermediate, Advanced

3 lab hr/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. **Offered as needed**

PE185FD, FE, FF Soccer-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Provides a group setting and instruction for conditioning and participation in the fundamental skills of soccer. **F, W, Sp**

PE185GJ, GK, GL Golf-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Offers training for the beginning to advanced golfer. Emphasizes the development of basic swing fundamentals. Covers proper golf etiquette, rules and playing procedures. **F, Sp, Su**

PE185JA, JB, JC Dance-Jazz-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Covers basic warm-ups to develop flexibility and isolations. Begins with terminology and movement and builds to combinations. Emphasizes technique, alignment, strength, coordination, and contemporary jazz dance with varying levels of difficulty. **F, W, Sp**

PE185JJ, JK, JL Jogging-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Covers jogging or running to gain and maintain cardiorespiratory fitness. **F, Sp**

PE185KA, KB, KC Karate-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Develops the basic language and movements of martial arts. **F, W, Sp, Su**

PE185PA, PB, PC Personal Defense-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Presents an active self-defense course designed to introduce the knowledge and safety in self-defense. Uses elements of surprise and the principles of leverage as key factors in the methods. Develops skills to defend oneself if needed. **Offered as needed**

PE185RA, RB, RC Racquet Ball-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Familiarizes students with racquetball fundamentals, including grip, swing mechanics, rules, strategy and etiquette. **F, W, Sp**

PE185RE Rock Climbing-Beginning

3 lab hr/wk, 1 cr.

Covers the fundamentals of basic rock climbing including equipment, a range of climbing techniques, knots, belaying, and basic anchor use. Emphasizes skill development, safety, risk management, and leadership. Includes field sessions. **Offered as needed**

PE185SA, SC Scuba Diving-Beginning, Advanced

3 lab hr/wk, 1 cr. each

Promotes and encourages the safety aspects, techniques, and enjoyment of underwater activities. Develops social, emotional, nutritional, and environmental sensitivity related to wellness. Includes stress management, and physical wellness skills. **F, W, Sp, Su**

PE185SD, SE, SF Swim for Fitness, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Develops cardiovascular endurance through swimming. Covers stroke technique, interval training and lap swimming. **Prerequisite:** PE185SS with a grade of C or better; or consent of instructor. **F, W, Sp**

PE185SH, SJ, SK Skiing-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Presents fundamental downhill skiing techniques through instruction and skill application. **W**

PE185SR Softball-Advanced

3 lab hr/wk, 1 cr.

Covers 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. **F**

PE185SS, ST, SU Swimming, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Develops and improves swimming skills and fitness levels through a pool workout. Emphasis will include stroke improvement and swim conditioning. **F, W, Sp**

PE185TF, TG, TH Tennis, Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

An activity course promoting fitness and recreation through instruction on tennis fundamentals. Instruction on play will include stroke production, rules, scoring, strategy, and tennis etiquette. **F, W, Sp, Su**

PE185TI, TJ Tai Ji-Beginning, Intermediate

3 lab hr/wk, 1 cr. each

Teaches a classic Chinese form of exercise comprised of slow, fluid movements, which are imitations of animals in nature. Benefits various parts of the body, quiets the nervous system, benefits the heart and circulation, and disciplines the body and mind on a meditative level. Includes student option: Qi Gong, a Chinese form of meditation and a healing technique, is a complement to Tai Ji. Six Silent Sound Qi Gong encourages energy (ji) in the body to smoothly move to each of six different internal organs to improve health. Involves doing six exercises using a controlled reverse breathing technique and toning a companion sound internally, which enhances the flow of the energy to each internal organ. **F, W, Sp**

PE185VJ, VK, VL Volleyball-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Includes the fundamentals, rules, and strategy of volleyball. Develops specific skills necessary for successful recreational and/or competitive experience in volleyball. Covers physical fitness, student support systems, social, emotional, nutritional development, and stress management. **F, W, Sp**

PE185WA, WB, WC Weight Management-Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Educates, supports and motivates individuals interested in managing their weight. Includes nutrition information, weigh-in, class discussion and daily exercise management. **F, W, Sp, Su**

PE185WD, WE, WF Strength, Beginning, Intermediate Advanced
3 lab hr/wk, 1 cr. each

Focuses on developing and executing a strength and conditioning program to meet individual goals. **F, W, Sp, Su**

PE185WK, WL, WM Walking Fitness, Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Develop and participate in a walking plan to gain and maintain cardio-respiratory fitness. **F, W, Sp**

PE185WN, WO, WP Water Exercise, Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Includes warm-up, stretching, strength, cardiorespiratory activity, and cool downs to improve flexibility, muscular strength, endurance and cardiovascular fitness. Incorporates education about basic fitness components as they apply to exercise in the water and emphasizes safe exercise. Intended for non-swimmers and swimmers. **Offered as needed**

PE185WT White Water Rafting–Beginning
3 lab hr/wk, 1 cr.

Offers preparation for rafting in the river environment. Covers safety in the outdoors and around the water, hypothermia, reading currents and water hydrology, techniques of paddling and rowing, equipment, and conditioning knowledge. **Offered as needed**

PE185WW White Water Kayaking–Beginning
3 lab hr/wk, 1 cr.

Covers the fundamentals for participation in kayaking in the river environment. Includes safety in the outdoors and around the water, hypothermia, reading currents and water hydrology, techniques of paddling, equipment, and physical conditioning. **Offered as needed**

PE185YA, YB, YC Yoga–Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Introduces Hatha physical yoga. Includes the background, safety precautions and value of yoga. Emphasizes stretching postures (asanas), proper breathing techniques and stress reduction. **F, W, Sp, Su**

PE194TF Tennis–Professional
1 class and 2 lab hr /wk, 2 cr.

Demonstrates how to teach tennis. **Sp**

PE266 Basketball Coaching Theory
2 class hr/wk, 2 cr.

Develops an understanding of basketball coaching. Covers the fundamentals of organizing a basketball program, strategies and techniques of coaching, leadership, and interpersonal communication to build knowledge and skills of successful coaching. **Prerequisite:** None; PE185BJ, BK, BL recommended. **F**

PE294VP Professional Activities–Volleyball

1 class and 2 lab hr /wk, 2 cr.

Covers skill progressions, knowledge, strategy, practice, and conditioning; rules interpretation; and teaching and coaching techniques, and wellness in the areas of physical, student support systems, social, emotional, nutrition and stress management. **Offered as needed**

PE294WP Professional Activities–Weight Training

1 class and 2 lab hr /wk, 2 cr.

Provides a basic foundation for students to progress into the role of a personal trainer, teacher, or strength coach. .Emphasizes strength concepts, safety and prevention of injuries, practical anatomy, workout variables, effective training and coaching techniques, and program design. **Prerequisite:** PE185WD with a grade of C or better; or consent of instructor. **Offered as needed**

PH

Physics

PH060 Applied Physical Science
2 class and 3 lab hr /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**

PH111 Physical Science for Fire Science and Emergency Services
3 class, 2 lab and 1 recitation hr /wk, 5 cr.

Introduces the necessary concepts and skills in physical science required to enter the fire science and paramedic programs. **Prerequisite:** MTH070 or equivalent or consent of instructor. **Offered as needed**

PH121 Applied Physics
3 class and 2 lab hr /wk, 4 cr.

Covers fundamental principles, concepts, and applications of work, energy, and power; basic machines; and straight line and rotary motion. Uses vectors to analyze and solve problems. Provides demonstrations and experiments to clarify physics principles and procedures. **Prerequisite:** MTH082 or MTH053 or consent of instructor. **F, W**

PH122 Applied Physics
3 class and 2 lab hr /wk, 4 cr.

Covers applied physics including mechanics of measurement, structure of matter, heat energy, heat engines, sound, light and nuclear physics. Includes demonstrations and experiments to clarify physics principles and procedures. **Prerequisite:** PH121 or consent of instructor. **Offered as needed**

PH201 General Physics
3 class and 3 lab hr /wk, 4 cr.

Offers the first term of a three-term sequence of introductory algebra-based college physics. Includes kinematics, Newton's laws, energy, momentum, and rotation.

Prerequisite: MTH111 and MTH112. **F**

PH202 General Physics
3 class and 3 lab hr /wk, 4 cr.

Covers the second term of a three-term sequence of introductory algebra-based college physics. Includes fluids, oscillations, waves, thermodynamics, and electricity.

Prerequisite: PH201. **W**

PH203 General Physics
3 class and 3 lab hr /wk, 4 cr.

Offers the third term of a three-term sequence of introductory algebra-based college physics. Includes circuits, magnetism, electromagnetic waves, and optics.

Prerequisite: PH202. **Sp**

PH207 Astronomy: Solar System
3 class and 3 lab hr /wk, 4 cr.

Considers Earth's coordinate system, observational astronomy, the moon and the planets, evolution of the solar system, and the sun. Examines physical properties of earth and other members of the solar system in depth. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor. **F**

PH208 Astronomy: Stars
3 class and 3 lab hr /wk, 4 cr.

Focuses on stellar coordinates and sidereal time, the nature of light and the spectroscopic, and the birth and death of stars.

Prerequisite: MTH070 with a grade of C or better; or consent of instructor. **W**

PH209 Astronomy: Galaxies
3 class and 3 lab hr /wk, 4 cr.

Examines astronomical, optical, and radio telescopes; the galaxies; the clusters of galaxies; and the origin of the universe.

Also considers the physical properties of the Milky Way Galaxy. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor. **Sp**

PH211 Physics for Engineers and Scientists

4 class and 3 lab hr /wk, 5 cr.

Presents the first term of a three-term sequence of introductory calculus-based physics. Includes kinematics, Newton's laws, energy, momentum, rotation, and gravitation. **Prerequisite:** MTH251. **F**

PH212 Physics for Engineer and Scientists

4 class and 3 lab hr /wk, 5 cr.

Presents the second term of a three-term sequence of introductory calculus-based physics. Covers fluids, oscillations, waves, thermodynamics and electricity. **Prerequisite:** MTH252 and PH211. **W**

PH213 Physics for Engineers and Scientists

4 class and 3 lab hr /wk, 5 cr.

Offers the third term of a three-term sequence of introductory calculus-based physics. Includes circuits, magnetism, and light. **Prerequisite:** PH212. Sp

PHL

Philosophy

PHL201 Introduction to Philosophy

4 class hr/wk, 4 cr.

Uses reflective and critical reading, thinking, writing, and discussion to explore the methods and ideas of ancient and modern philosophy. Focuses on the nature of reality, free will, determinism, the existence of God, knowledge, Ethics, the nature of personhood, and whether or not there is a meaning in life. Features such important figures as Socrates, Plato, Aristotle, Descartes, Kant, James, and Sartre. Prepares students for other classes in Philosophy and Religion.

Prerequisite: Placement into WR121; or WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su**

PHL203 Ethics

4 class hr/wk, 4 cr.

Uses reflective and critical reading, thinking, writing, and discussion to explore the methods and ideas of ancient and modern Ethics. Includes explanations and illustrations of the central theories of Ethics as well as close scrutiny of standard arguments supporting and critiquing these theories. Applies ethical theories to contemporary moral problems and personal dilemmas. **Prerequisite:** Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su**

PHL205 Biomedical Ethics

3 class hr/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. Canvasses professional ethical codes and explicitly-stated obligations in order to identify the health care professional's special responsibilities in arriving at decisions which often have profound consequences. **Prerequisite:** Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su**

PHL206 Faith, Reason and World View: Philosophy of Religion

4 class hr/wk, 4 cr.

Uses reflective and critical reading, thinking, writing, and discussion to explore the complex relationships between faith, reason, experience, religion, and worldview. Analyzes classical and contemporary texts, focusing on the nature, scope, and limits of faith and reason. Examines the major themes and arguments of the Philosophy of Religion. Considers theistic and atheistic religious and non-religious worldviews and values. Explores issues of difference, power, and responsibility in worldview as related to discrimination and fundamentalism. Examines the assumptions and convictions of worldview values and how their application benefits or harms particular groups.

Prerequisite: Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su; CL**

PHM

Pharmacy Technician/ Pharmacy Management

PHM101 Introduction to Pharmacy Technology

1 class hr/wk, 1 cr.

Introduces the job responsibilities and knowledge and skills required of a pharmacy technician. Overviews assisting the pharmacist in collecting, organizing, and evaluating information for direct patient care. **Prerequisite:** Current enrollment in the Pharmacy Technician program. **F**

PHM110 Pharmacy Calculations

3 class hr/wk, 3 cr.

Presents the essential mathematics concepts and skills used by a pharmacy technician to calculate medication dosages using the formula, ratio, and dimensional analysis methods. Includes medication, drug calculations, and administration; measurement of doses; drug orders; conversions; and reconstitution. Stresses the prevention of medication errors and details the implications of any error. **Prerequisite:** Successful completion of Term 1 in the Pharmacy Technician Program with grades of C or better in all courses. **W**

PHM115 Pharmacy Operations/ Management

3 class hr/wk, 3 cr.

Introduces pharmacy operations as they relate to management. Includes pharmacy record maintenance, communication and customer service, inventory systems, insurance procedures, and accounts receivable methods. **Prerequisite:** Admission to the Pharmacy Technician program. **F**

PHM120 Pharmacy Operations/ Laboratory

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

Covers the various controls of pharmaceutical inventory, accessing of non-compounded products, and compounding preparation of pharmaceuticals for distribution. **Prerequisite:** Successful completion of Term 1 in the Pharmacy Technician program with grades of C or better in all courses. **W**

PHM130 Pharmacy Info/Law and Ethics

3 class hr/wk, 3 cr.

Focuses on collecting, organizing, screening, and evaluating information/payment and prescription documentation pertaining to the patient. Covers customer health records as well as determining counseling requirements in accordance with the laws and ethics that apply to pharmacy operations. Also stresses the management of inventory within the pharmacy. **Prerequisite:** Successful completion of Terms 1 and 2 in the Pharmacy Technician program with grades of C or better. **Sp**

PHM150 Pharmacy Technician Practicum 12 lab hr/wk, 4 cr.

Provides pharmaceutical workplace experience in a healthcare or related setting. **Prerequisite:** Successful completion of Terms 1 and 2 in the Pharmacy Technician program with grades of C or better in all courses. **Sp**

PHM151 Pharmacy Technician Seminar 1 class hr/wk, 1 cr.

Prepares students for the required national pharmacy certification examination taken upon completion of the Pharmacy Technician program. Also covers identification of potential career opportunities and job search preparation. **Prerequisite:** Third-term standing in the Pharmacy Technician program with a grade of C or better in all courses. **Sp**

PHM160 Hospital/Ambulatory Pharmacy Practicum 6 lab hr/wk, 2 cr.

Provides workplace experience in an ambulatory or hospital setting. Focuses on compliance with the institutions policies and procedures, use of drug dispensing systems, compounding, package and labeling of medications, processing data on electronic systems, preparing sterile products, use of proper procedures in working with controlled substances, inventory maintenance, use of technology including automated dispensing machines and recordkeeping. **Prerequisite:** Successful completion of Terms 1 and 2 in the Pharmacy Technician program with grades of C or better in all courses. **Sp**

PHM205 Pharmacy Specialized Care
3 class hr/wk, 3 cr.

Introduces specialty pharmacies. Covers acute care (long-term care), home-care practice, ambulatory, community or outpatient pharmacy practice, pediatrics, elderly, oncology, and nuclear medicine. **Prerequisite:** Successful completion of Term 1 in the Pharmacy Technician program with grades of C or better in all courses. **W**

PHM210 Over-the-Counter (OTC) Products

2 class hr/wk, 2 cr.

Covers medications, both prescription (legend) and non-prescription over-the-counter (OTC) drugs available to pharmacy customers. **W**

PHM215 Sterile Compound/Cytotoxic Medications

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

Provides in-depth concepts of the sterility and quality assurance processes involving cytotoxic/hazardous medication products. Includes performance in accordance with the laws, regulations, and standards which govern. **Prerequisite:** Successful completion of Terms 1 and 2 in the Pharmacy Technician program with grades of C or better. **W**

PHM220 Multicultural Patient Healthcare

2 class hr/wk, 2 cr.

Introduces approaches to healthcare for multicultural patients. Covers aspects of western medicine as practiced in the United States. **F**

PHM230 Pharmaceutical Drug Classifications

3 class hr/wk, 3 cr.

Covers the sources and classifications/ prototypes of drugs. Examines pharmaceutical names; routes of administration; pharmacokinetics and pharmacodynamics of xenobiotics; variables that affect drug actions including contraindications and drug interactions; prescription abbreviations and interpretations; drug marketing; and drug approval processes. **F, Sp**

PHM231 Pharmacology 1

5 class hr/wk, 5 cr.

Provides a basic understanding of structure and function of certain biological systems within the human body, including the integumentary, skeletal-muscle, endocrine, special senses, and nervous systems. Presents general concepts of medication therapeutics, and the pathophysiology regarding diseases being treated in said body systems as well as involving cellular physiology and drug transport through the cell membranes. Provides an overview of chemical concepts utilized in pharmacy. **Prerequisite:** PHM230 with a grade of C or better or concurrent enrollment; or consent of instructor. **F**

PHM232 Pharmacology 2

5 class hr/wk, 5 cr.

Provides a basic understanding of structure and function of certain biological systems within the human body, including the circulatory/hematology, cardiovascular, lymphatic/immune, and respiratory systems, as well as oncology principles. Continues pharmacological principles which involve therapeutic medications and diseases/pathophysiology within said body systems. **Prerequisite:** PHM231 with a grade of C or better. **W**

PHM233 Pharmacology 3

3 class hr/wk, 3 cr.

Provides a basic understanding of structure and function of certain biological systems within the human body, including gastrointestinal, renal, and reproductive systems. Continues pharmacological principles involving therapeutic medications and diseases/pathophysiology affecting said body systems. **Prerequisite:** PHM232 with a grade of C or better. **Sp**

PHM240 Advanced Pharmacy Management 1

3 class hr/wk, 3 cr.

Presents concepts, principles and fundamentals of pharmacy operations, pharmacy leadership, organizational structure, and financial management. Includes business planning, quality assurance, workplace issues, organizational skills, third party reimbursement, and business finances. **Prerequisite:** PHM115 with a grade of C or better; or consent of instructor. **W**

PHM241 Advanced Pharmacy Management 2

3 class hr/wk, 3 cr.

Covers concepts, principles and fundamentals of pharmacy management. Includes marketing, inventory, services, risk management, and management applications in various pharmacy settings. **Prerequisite:** PHM115 with a grade of C or better; or consent of instructor. **Sp**

PHM280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

PS

Political Science

PS201 American Government

4 class hr/wk, 4 cr.

Introduces 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 inherent within the United States Constitution. Examines foundational studies of Federalism, civil liberties and equal rights. Also provides an analysis of democratic theory and process, and the role of education and the mass media in shaping American politics. **F, W, Sp, Su**

PS202 American Government

4 class hr/wk, 4 cr.

Provides a close examination of the three branches of government and the Federal Administration in general. Focus on public policy; includes economic, environmental, welfare, education, foreign relations, and defense issues at both the state and federal level. PS201 recommended but not required. **F, W, Sp, Su**

PS203 State and Local Government

4 class hr/wk, 4 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

4 class hr/wk, 4 cr.

Introduces world politics and international relations. 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 resolution between nations. Examines current global issues facing nation-states and helps students think critically about the challenges faced by the United States in an era of globalization. **Offered as needed**

PSY

Psychology

PSY100 Introduction to Psychology

4 class hr/wk, 4 cr.

Provides a general overview of the field of psychology. Explores a range of topics including the history of psychology as a discipline, contemporary approaches to psychology, psychological research, the brain and behavior, sensation and perception, states of consciousness, learning, memory, intelligence, human development, motivation and emotion, personality, social psychology, health psychology and psychological disorders. **F, W, Sp, Su**

PSY101 Psychology of Human Relations

4 class hr/wk, 4 cr.

Applies psychological principles to understanding relationships with ourselves and others. Includes an overview of basic personality and social psychology principles in addition to skill development in the following areas: dealing with emotions, interpersonal communication, developing close relationships, conflict resolution, and stress management. **F, W, Sp, Su**

PSY104 Psychology in the Workplace
4 class hr/wk, 4 cr.

Focuses on a number of important factors for effective performance in the workplace. Includes interpersonal skill development and communication; understanding individual differences; developing conflict resolution skills; group problem solving and decision making; becoming an effective leader; motivation and goal planning; time management; cross-cultural relations and diversity; stress management; enhancing job search and career management skills; enhancing ethical behavior; and managing various work conditions. Covers the history of work in the United States including important laws and regulations (ie., Discrimination and Harassment (EEO, ADA, Civil Rights Acts) & Taft-Hartly Act of 1947). **F, W, Sp, Su; CL**

PSY201 Introduction to Psychology: Mind and Body

4 class hr/wk, 4 cr.

Offers the first term of two courses in introductory psychology. Focuses on psychology as a science stressing history, methodology, the biological foundations of behavior, human development, sensation, perception, learning, memory, language, and problem solving. **F, W, Sp, Su**

PSY202 Introduction to Psychology: Mind and Society

4 class hr/wk, 4 cr.

Covers emotion, motivation, intelligence, personality theory, health psychology, stress, abnormal psychology, therapies, and social psychology. Focuses on the study of the unequal distribution of power as it relates to difference and the unequal distribution of power across cultures and/or social institutions. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp, Su; CL**

PSY206 Introduction to Social Psychology

4 class hr/wk, 4 cr.

Introduces the problems, theories, and methods of social psychology. Emphasizes diverse ways in which people's thoughts and actions are influenced by the presence or implied presence of social stimuli. Illustrates theories and research on such topics as self-concepts, relationships, conformity, helping behavior, leadership, and aggression. Exposes students to the practical nature of many of social psychology's theories with real life examples and class assignments. **Prerequisite:** Recommend PSY201. **Offered as needed**

PSY217 Experimental Methods for Psychology

4 class hr/wk, 4 cr.

Explores psychological research including topics of design, methodology, statistics, and report writing. Includes conducting original research and preparing a formal paper on their work adhering to APA guidelines. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp**

PSY237 Life Span Development

4 class hr/wk, 4 cr.

Introduces the science of developmental psychology, emphasizing the interrelatedness of the biological, cognitive, and psychosocial domains from genetics and conception through prenatal development, birth, infancy, childhood, adolescence, adulthood, and death and bereavement. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

PSY239 Introduction to Abnormal Behavior

4 class hr/wk, 4 cr.

Provides a broad overview of abnormal psychology. Include assessment and classification of psychological disorders, biological and environmental factors associated with psychopathology, treatment, and ethical legal issues. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

PSY282 Psychology of Adolescence

4 class hr/wk, 4 cr.

Introduces major theories, current research, and issues pertaining to early, middle, and late adolescent development. Includes normal biological, cognitive, and psychosocial development, as well as deviant or problematic behavior. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp**

RD

Reading

See also SSP–Study Skills

RD080 Effective Reading

3 class hr/wk, 3 cr.

Focuses on active reading by identifying main ideas and major details in a variety of materials. Improves comprehension by understanding vocabulary clues and patterns of organization. Introduces outlining, mapping, and summarizing to improve learning. **Prerequisite:** Recommendation of college placement test or consent of instructor. **F, W, Sp, Su**

RD090 College Textbook Reading

3 class hr/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 Academic Thinking and Reading

3 class hr/wk, 3 cr.

Prepares students to become active participants in the process of reading college level materials. Encourages students to build and apply a repertoire of reading and thinking strategies to meet the demands of an academic setting. **Prerequisite:** Grade of C or better in RD090; college reading placement test score at or above 80–90 or consent of instructor. **F, W, Sp, Su**

RD120 Critical Thinking and Reading

3 class hr/wk, 3 cr.

Develops vital critical and creative thinking and reading skills. Students will apply these skills as they consider issues of Difference, Power and Responsibility (DPR) within American society. **Prerequisite:** College placement score at or above RD115 or consent of instructor. **F, W, Sp, Su; CL**

REL

Religion

REL201 Asian Religions

4 class hr/wk, 4 cr.

Uses reflective and critical reading, thinking, writing, and discussion to explore the principal components of the dominant religions in Asia: Hinduism, Buddhism, and Taoism. Traces the historical development, fundamental beliefs and practices, and recommended lifestyle of each. Includes how to study a religion. **Prerequisite:** Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su**

REL202 Middle Eastern Religions

4 class hr/wk, 4 cr.

Uses reflective and critical reading, thinking, writing, and discussion to explore the principal components of the dominant monotheistic religions of the Middle East: Judaism; Christianity; and Islam. Traces the historical development and fundamental beliefs and practices of each religion. Includes how to study a religion. **Prerequisite:** Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp, Su**

REL203 American Religions

3 class hr/wk, 3 cr.

Focuses on the dominant religions of U.S. America, both contemporary and historical. Examines the dynamic relation between American history and American faith traditions. **Prerequisite:** Placement into WR121; or completion of WR115 with a grade of C or better recommended; or consent of instructor. **F, W, Sp**

RNW

Renewable Energy Management

RNW110 Solar Energy Systems

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

Focuses on a collective and holistic technical and engineering approach for effectively using solar energy as a viable and economical energy source. Covers the designing, implementing, and auditing of energy-efficient, cost-effective solar power systems for residential, commercial, and industrial buildings. Includes basic theory on project planning, cost estimating, and manufacturing methods for solar power design success. Discusses energy conservation as a method of energy replacement. Provides practical experiences including roof installation.

Prerequisite: ELT133 with a grade of C or better; or consent of instructor. **F, Offered as needed**

RNW120 Wind Energy Systems

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

Focuses on a collective and holistic technical and engineering approach for effectively using wind energy as a viable and economical energy source. Represents a multidisciplinary field that requires mechanical, aeronautical, electrical, civil, materials engineering, meteorology, and land developing knowledge. Covers Wind Energy Systems from conception of the wind turbine to completion and maintenance of wind turbines. Includes practical experience including climbing and rigging. **Prerequisite:** ELT133 with a grade of C or better; or consent of instructor. **W, Offered as needed**

RNW130 Biomass Energy Systems

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

Focuses on the technical and engineering approach for effectively using renewable fuels as a viable and economical energy source. Covers the cost-effective and environment-friendly methods of handling, storing and burning these fuels. Also covers the economic evaluation method, introduces pollution control equipment for limiting the emission from fuel combustion, and costs and carbon emission comparisons between conventional and alternate fuels. Includes local case studies and practical experience in biodiesel production. **Prerequisite:** ELT133 with a grade of C or better; or consent of instructor. **W, Offered as needed**

RNW140 Hydroelectric and Geothermal Energy Systems

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

Focuses on hydroelectric and geothermal energy systems as a mainstay of energy supply. Covers the technical and engineering approach for effectively using hydroelectric and geothermal energy as a viable and economical energy source. Discusses the cost effectiveness and environmental impact of those methods. Identifies the economic evaluation method and compares costs with carbon emission between conventional and alternate energy sources. Uses local case studies and practical experience with hydroelectric systems including a small hydroelectric generation plant. **Prerequisite:** ELT133 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

RNW180 Energy Management

3 class hr/wk, 3 cr.

Focuses on how renewable energy sources are typically different from traditional energy sources in that they cannot be scheduled. Develops an integrative approach to such variables as time and cost. Identifies "distributed" or "embedded" sources in electricity networks that require special consideration. Covers the pros and cons of integration of renewable energy into the electricity distribution system as well as into the transmission system. **Prerequisite:** ELT133 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

RUS

Russian

RUS101, 102, 103 First Year Russian, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Introduces 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 the class. **Prerequisite:** These courses are to be taken sequentially. RUS101: None. RUS102: RUS101 with a grade of C or better; or one year of high school Russian; or consent of instructor. RUS103: RUS102 with a grade of C or better; or two years of high school Russian; or consent of instructor. RUS101, **F**; RUS102, **W**; RUS103, **Sp**

RUS201, 202, 203 Second Year

Russian, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Provides extensive practice in all four language skills (reading, writing, speaking, and listening). Includes 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 courses are to be taken sequentially. RUS201: RUS103 with a grade of C or better; or three years of high school Russian; or consent of instructor. RUS202: RUS201 with a grade of C or better; or consent of instructor. RUS203: RUS202 with a grade of C or better; or consent of instructor. RUS201, **F**; RUS202, **W**; RUS203, **Sp**

Secretarial

See **BT–Business Technology**.

SLP

Speech-Language Pathology Assistant

See also **ED–Education**.

SLP180 Survey of Speech and Language Disorders

3 class hr/wk, 3 cr.

Provides an overview of the profession of speech language pathology. Describes the nature of various speech, language, voice and hearing; covers communication development in children and descriptions of language differences. Includes the training, scope, and practice of a speech language pathologist and a speech language pathology assistant. **F, Offered as needed**

SLP181 Phonetics for Language

3 class hr/wk, 3 cr.

Covers the listening/discrimination and transcription skills required to identify normal and disordered speech behaviors. Describes the motoric and linguistic acquisition of normal and disordered speech along with basic approaches to intervention that can be used by speech language pathology assistants. Focuses on transcription of American English speech sounds and the physical and linguistic development of speech. **W, Offered as needed**

SLP182 Intervention Strategies for SLP Assistants

3 class hr/wk, 3 cr.

Focuses on approaches to intervention that speech and language pathology assistants can use with children, adolescents and adults within the limits of a specified scope of practice. Covers data and record keeping methodologies along with types of materials and approaches that are motivating for students/clients in different age groups.

Prerequisite: SLP180. **F, Offered as needed**

SLP183 Introduction to Language Development**3 class hr/wk, 3 cr.**

Introduces language development for students pursuing training as a speech language pathology assistant, and those in early childhood education. Provides an overview of basic linguistics and practical applications of the theoretical explanations of language acquisition. Includes observation of infants, children, and adolescents are the major focus for the identifying and the milestones of language development.

Offered as needed**SLP184 Language Therapy****3 class hr/wk, 3 cr.**

Offers an advanced clinical course for students pursuing training as speech-language pathology assistant. Focuses primarily on the age groups of early childhood, childhood, and adolescence; however, intervention approaches that can be used successfully with adults are included. Provides directed application of language, cognitive, and behavioral therapy techniques in individual and group intervention modalities. Stresses integration of interpersonal and paraprofessional knowledge and skills into clinical activities. **Prerequisite:** SLP180, SLP182, SLP183. **Offered as needed**

SLP185 Anatomy and Physiology of Speech and Language**3 class hr/wk, 3 cr.**

Focuses on the anatomy and physiology specific to speech as a medium of communication and to the underlying modalities of language. Presents the anatomical structures and the physiology fundamental to various speech disorders, along with the role of anatomy and physiology in speech and language rehabilitation. Provides differentiation when appropriate among the anatomy and physiology of infants, children, adolescents, and adults. **Offered as needed**

SLP186 Speech Intervention with Children, Adolescents, and Adults**3 class hr/wk, 3 cr.**

Presents an advanced clinical intervention course for speech language pathology assistants. Covers the various uses of group and individual therapy. Discusses treatment content and pacing. Includes the application of reinforcement schedules along with effective use of various speech sound teaching and correction strategies. **Prerequisite:** SLP180, SLP181. **W, Sp**

SLP187 Clinical Documentation and Materials Management for the SLPA**3 class hr/wk, 3 cr.**

Covers the development and use of therapeutic teaching materials based on knowledge of communication disorders, speech production, clinical intervention, and normal language and cognitive development. Includes various approaches to documenting the results of intervention. Focuses on the use of developmental and behavioral models to produce materials and assessment of various intervention programs. **Prerequisite:** SLP180. **W, Sp**

SLP188 Communication Disorders in Low Incidence Populations**3 class hr/wk, 3 cr.**

Focuses on the nature of communication and on swallowing and feeding disorders in groups of children with various types of disabilities that occur with a low frequency in the general population. Describes the specific communication, swallowing, and feeding disorders manifested in these various groups, along with the approaches to and types of intervention. Emphasizes the role of the assistant in the administration of behavioral treatment and methods and the tracking of progress with various data methods as a major key to success for these clients in both group and individual treatment models. Includes an overview of the various genetic disorders. **Prerequisite:** SLP180. **Offered as needed**

SLP189 SLPA Practicum 1**1 class and 6 lab hr /wk, 3 cr.**

Focuses on guided practice in speech language pathology assisting. Includes working with a speech language pathologist supervisor at one or more sites of service. Emphasizes skill shaping and improvement using input from the supervising clinician and the college instructor. **Prerequisite:** Successful completion of all SLPA courses or consent of instructor. **F, W, Sp**

SLP190 SLPA Practicum 2**1 class and 6 lab hr /wk, 3 cr.**

Focuses on guided practice in speech language pathology assisting. Includes working with a speech language pathologist supervisor at one or more sites of service. Emphasizes skill shaping and improvement using input from the supervising clinician and the college instructor. **Prerequisite:** SLP189 or consent of instructor. **F, W, Sp**

SLP191 Ethical and Legal Considerations in Speech-Language Pathology**3 class hr/wk, 3 cr.**

Presents analysis, review, and discussion of ethical considerations in speech-language pathology across practice setting. Covers patient confidentiality regulations, quality control, SLPA supervision, and licensure requirements. Discusses federal and state regulations relating to special education, IEP due process, patient privacy and confidentiality. **Prerequisite:** SLP180 with a grade of C or better; or consent of instructor. **Offered as needed**

SLP192 Augmentative and Alternative Communication**3 class hr/wk, 3 cr.**

Introduces augmentative communication and technologies associated with the field of communication disorders. Examines characteristics of various augmentative communication systems and explores communication strategies related to the needs of the users. Discusses person-centered intervention and problem solving strategies. Includes case studies and designing materials that demonstrate the effective use of assistive technology, including alternative augmentative communication in relation to school, work, recreation, home, or community environments. **Prerequisite:** SLP180, SLP183, and SLP188; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

SLP193 Adult Communication Disorders**3 class hr/wk, 3 cr.**

Explores neurogenic disorders that cause or contribute to communication disorders in adults. Examines speech and language disorders of aphasia, apraxia and dysarthria, and medical conditions of stroke, brain injury and dementia. Provides directed application of speech and language therapy techniques and intervention. **Prerequisite:** SLP180 and SLP183, both with a grade of C or better; or consent of instructor. **Offered as needed**

SLP194 Language, Culture and Society: Cross Cultural Communication
3 class hr/wk, 3 cr.

Introduces topics of communication disorders and language acquisition within the framework of culture, identity, language acquisition, and use. Explores cultural attitudes and beliefs about communication disorders and disabilities, cultural differences, cultural identity and second and bilingual language acquisition. Introduces intervention strategies and factors for working with clients across a variety of settings including children, adolescents, and adults. **Prerequisite:** SLP180 AND SLP183, both with a grade of C or better; or consent of instructor. **Offered as needed**

SOC

Sociology

SOC204 The Sociological Perspective 4 class hr/wk, 4 cr.

Introduces and employs the sociological imagination to explore society and social experience. Emphasizes the complex relationships between individuals and society by introducing students to a diverse range of sociological approaches. Includes socialization, social structure, social interaction, culture, groups, stratification, social class, deviance, social science methodology, and the intellectual history of sociology. **F, W, Sp, Su; CL**

SOC205 United States Society 4 class hr/wk, 4 cr.

Examines organized systems of behavior and how institutions interrelate and impact individuals and groups. Emphasizes the differential benefits of established social arrangements. Covers the family, government, religion, education, health care and medicine, the economy, formal organizations, and the sociology of work. Although focus is on U.S. society, global themes are explored. **F, W, Sp, Su; CL**

SOC206 Social Problems 4 class hr/wk, 4 cr.

Applies the sociological perspective to the causes and consequences of social problems and examines the ways in which problems are constructed and defined. Covers inequalities based on race, ethnicity, gender, and age as well as problems such as crime, urbanization, population change, poverty, health, and the environment. Explores public policy and sociologically-informed solutions. **F, W, Sp, Su; CL**

SOC210 Sociology of the Family 4 class hr/wk, 4 cr.

Offers a sociological perspective of the family, marriage, partnerships, and family life in the U.S. Treats the family as a social institution and focuses on structural arrangements, social inequalities, social problems, and socialization processes that impact family forms and experiences. **F, W, Sp, Su; CL**

SOC213 Sociology of Race and Ethnicity 4 class hr/wk, 4 cr.

Offers a sociological perspective of race and ethnicity in the U.S. Treats race and ethnicity as systems of social relations and analyzes how racial domination operates in politics, place, education, economic matters, associations, families, and other fields of social life. **F, W, Sp, Su; CL**

SOC221 Juvenile Delinquency 4 class hr/wk, 4 cr.

Examines the nature, extent, causes, reaction, and control of juvenile delinquency in the United States from a sociological frame of reference. **F, W, Sp, Su**

SOC232 Death and Dying: A Socio-Cultural Perspective 4 class hr/wk, 4 cr.

Introduces the study of death and dying from a socio-cultural frame of reference. Studies social attitudes, cultural perspectives, and social-institutional factors associated with death and dying. Explores aspects of end-of-life issues, bereavement, and the after life. **F, W, Sp, Su; CL**

SP

Speech

SP100 Introduction to Communication 4 class hr/wk, 4 cr.

Surveys the areas of communication with emphasis on intrapersonal, interpersonal, group, and mass communication. **F, W, Sp**

SP111 Fundamentals of Public Speaking 4 class hr/wk, 4 cr.

Introduces how to prepare and deliver public speeches with an emphasis on informative speaking. Develops understanding and practical application of communication skills and includes techniques in controlling speech anxiety, structuring and organizing information to present to a variety of audiences, and physical and vocal delivery skills. **Prerequisite:** Recommended WR121 or equivalent placement test score. **F, W, Sp, Su**

SP112 Fundamentals of Persuasion 3 class hr/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 4 class hr/wk, 4 cr.

Explores the impact of culture on communication. Investigates how elements like language, nonverbal communication, values, beliefs, worldview, and identity impact communication between different cultures and co-cultures. Explores how culturally-based assumptions influence perceptions, behaviors, and communication. **Prerequisite:** Recommended completion of WR115 with a grade of C or better, or equivalent test score placement into WR121. **F, W, Sp, Su; CL**

SP130 Business and Professional Speaking 3 class hr/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 4 class hr/wk, 4 cr.

Introduces communication in person-to-person interactions, emphasizing theoretical principles and their practical application. Concentrates on development of communications skills in interpersonal contexts.

Prerequisite: Recommended completion of WR115 with a grade of C or better, or equivalent test score placement into WR121. **F, W, Sp, Su**

SP219 Fundamentals of Small Group Communications 3 class hr/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**

SP237 Gender and Communication 3 class hr/wk, 3 cr.

Examines the role of gender in communication and identifies many of the personal and public factors involved in communication between men and women. Includes sex-differentiated language and conversational styles, the impact of the mass media on sex roles, how intimacy is expressed in same and opposite-sex friendships, and the question of what constitutes ethical communication when it comes to gender talk. **Offered as needed; CL**

SP285 Computer Mediated Communication 3 class hr/wk, 3 cr.

Explores the impact of the computer on human-to-human communication. Investigates the areas of intrapersonal and interpersonal communication including: e-mail, texting, instant messaging, chat, and other interaction through computer mediated channels. Emphasizes increasing skills to more effectively communicate via the Internet/cellular technology in social, professional, and educational settings. **Prerequisite:** SSP125 recommended. **F, W, Sp, Su**

SPN

Spanish

SPN101, 102, 103 First Year Spanish, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Introduces 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 courses are to be taken sequentially. SPN101: None. SPN102: SPN101 with a grade of C or better; or one year of high school Spanish; or consent of instructor. SPN103: SPN102 with a grade of C or better; or two years of high school Spanish; or consent of instructor. SPN101, **F, W, Sp, Su**; SPN102, **F, W, Sp, Su**; SPN103, **F, W, Sp, Su**

SPN111, 112, 113 Beginning Spanish Conversation Terms 1, 2, 3

3 class hr/wk, 3 cr. each

Provides Spanish conversation 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 courses are to be taken sequentially. SPN111: None. SPN112: SPN111 with a grade of C or better; or consent of instructor. SPN113: SPN112 with a grade of C or better; or consent of instructor. SPN111, **F**; SPN112, **W**; SPN113, **Sp**

SPN121, 122, 123 Espanol para Nativos (Spanish for Native Speakers) 1, 2, 3

4 class hr/wk, 4 cr. each

Focuses on helping native speakers of Spanish to 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. Emphasizes spelling, accents, vocabulary, punctuation, verb morphology and sentence grammar of standard Spanish, facilitated by readings, dictation and composition. All classroom interaction (both by instructor and students) takes place in Spanish. **Prerequisite:** 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 with a grade of C or better; or consent of instructor. SPN123: SPN122 with a grade of C or better; or consent of instructor. **Offered as needed**

SPN150, 151 First Year Spanish, Accelerated Terms 1, 2

6 class hr/wk, 6 cr. each

Introduces 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. SPN150 is equivalent to SPN101 and the first half of SPN102; SPN151 is equivalent to the second half of SPN102 and all of SPN103. Spanish is the primary language of the class. **Prerequisite:** SPN150: None. SPN151: SPAN150 with a grade of C or better; or one year of high school Spanish; or consent of instructor. **Offered as needed**

SPN201, 202, 203 Second Year Spanish, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Provides extensive practice in all four language skills (reading, writing, speaking, listening). Includes cultural and literary readings and an in-depth review and expansion of basic Spanish grammar and vocabulary, as well as a broadening of the student's understanding of Hispanic culture. All classroom interaction (both by instructor and students) takes place in Spanish. **Prerequisite:** These courses are to be taken sequentially. SPN201: SPN103 with a grade of C or better; or three years of high school Spanish; or consent of instructor. SPN202: SPN201 with a grade of C or better; or consent of instructor. SPN203: SPN202 with a grade of C or better; or consent of instructor. SPN201, **F, Su**; SPN202, **W, Su**; SPN203, **Sp, Su**

SPN211, 212, 213 Intermediate Spanish Conversation, Terms 1, 2, 3

3 class hr/wk, 3 cr. each

Provides Spanish conversation 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 courses are to be taken sequentially. SPN211: SPN113 with a grade of C or better; or consent of instructor. SPN212: SPN211 with a grade of C or better; or consent of instructor. SPN213: SPN212 with a grade of C or better; or consent of instructor. SPN211, **F**; SPN212, **W**; SPN213, **Sp**

SSC

Social Science

See also CLA—Chicano/Latino Studies.

SSC100 Foundation of American Indian Languages

3 class hr/wk, 3 cr.

Introduces the diversity and cultural contexts of American Indian Languages. Explores historic migrations, ways of word-borrowing, humor, and musical texts. Also covers gender issues, ecological concerns, spirituality and political views of their speakers combined with rudiments of linguistics, phonetics, writing systems and efforts to revitalize indigenous languages. **Offered as needed**

SSP

Study Skills

See also—Reading.

SSP015 Vocabulary Building

3 class hr/wk, 3 cr.

Focuses on improving and expanding vocabulary by using strategies for learning general and academic vocabulary. Uses context clues, word analysis (prefix, suffix, root) and print and online resources such as dictionaries and a thesaurus to determine the meanings of new words. **F, W, Sp, Su**

SSP051 Studying for College

3 class hr/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. **Offered as needed**

SSP060 Study Strategies for Learning Math

1 class hr/wk, 1 cr.

Develops study skills critical for success in math courses. **Prerequisite:** Concurrent enrollment in a math course. **F, W, Sp, Su**

SSP112 Effective Learning

3 class hr/wk, 3 cr.

Prepares students to become active and efficient participants in the learning process. Encourages students to build and employ a collection of effective learning strategies necessary to meet the learning challenges of academic and career settings. Develops note taking, listening, textbook study-reading, time management, test-taking and concentration and memory strategies. Focuses on reducing test anxiety and procrastination. Identifies campus resources and learning preferences. **Prerequisite:** Placement into RD115; or RD090 with a grade of C or better; or consent of instructor. **F, W, Sp, Su; CL**

SSP115 Advanced Time Management

1 class hr/wk, 1 cr.

Develops practical and efficient time management strategies. **Prerequisite:** Reading placement test score at or above RD090 or consent of instructor. **F, W, Sp, Su**

SSP116 Advanced Textbook Reading
1 class hr/wk, 1 cr.

Develops practical and efficient textbook study reading strategies. **Prerequisite:** Reading placement test score at or above RD090 or consent of instructor. **F, W, Sp, Su**

SSP117 Advanced Note Taking
1 class hr/wk, 1 cr.

Develops practical and efficient textbook and lecture note taking as well as listening strategies. **Prerequisite:** Reading placement test score at or above RD090 or consent of instructor. **F, W, Sp, Su**

SSP118 Advanced Test Taking
1 class hr/wk, 1 cr.

Develops practical and efficient test taking strategies. **Prerequisite:** Reading placement test score at or above RD090 or consent of instructor. **F, W, Sp, Su**

SSP125 Learning Strategies for Online Students
1 class hr/wk, 1 cr.

Prepares students to manage responsibilities and technology for online class success. Covers learning strategies and skills necessary to accomplish online goals. **F, W, Sp, Su**

ST

Occupational Skills Training
ST050A-P Occupational Skills Training
1-15 cr.

Occupational Skills Training (OST) is a work-site-based short-term training program. Students receive hands-on instruction at work sites based on individualized competency-based curricula developed to meet employment requirements in students' chosen occupations. Competencies are developed, taught, and evaluated by knowledgeable site trainers; and programs are closely monitored by OST coordinators and other appropriate partners. **Prerequisite:** Students must meet screening criteria for admission to the program. **F, W, Sp, Su**

VC

Visual Communications
See also ART-Art.

VC101-103 Special Topics in Visual Communications
1-3 class hr/wk, 1-3 cr.

Offers a variable format class to gain an enhanced knowledge of software, current graphic arts issues, and industry standards. Presents different topics each term. Examples include graphics software, papers and inks, and interactive media. Course may be repeated for a maximum of six credits. **Prerequisite:** Enrollment in the Visual Communications program may be required for some topics and will be identified in the schedule of classes each term. Varies depending on the topic each term. **Offered as needed**

VC111 Introduction to Visual Communications
4 class hr/wk, 4 cr.

Presents an overview of the graphic arts and the Visual Communications program. Includes the history and practice of communications and graphic arts, the evolution of digital graphics and current career possibilities. **Prerequisite:** Enrollment in the Visual Communications program or consent of instructor. **F**

VC114 Introduction to Digital Graphics
2 class and 4 lab hr /wk, 4 cr.

Introduces students to professional raster and vector image editing software for the graphic artists. Includes instruction in page layout, illustration and photo manipulation software. **Prerequisite:** Enrollment in the Visual Communications Program or consent of instructor. **F**

VC115 Introduction to Interactive Media
2 class and 4 lab hr /wk, 4 cr.

Introduces interactive and time-based software for the graphic arts. Includes web editors, FTP clients, video editors, and multimedia authoring tools, file formats and output. **Prerequisite:** Enrollment in the Visual Communications program or consent of instructor. **F**

VC121 Layout 1: Page Design
2 class and 4 lab hr /wk, 4 cr.

Introduces the basics of page layout using Adobe InDesign . Includes assignments focusing on common challenges in digital page layout, developing both technical and creative thinking skills. **Prerequisite:** Successful completion of VC111, VC114, ART244 or consent of instructor. **Sp**

VC122 Layout 2: Intermediate Page Design
2 class and 4 lab hr /wk, 4 cr.

Further develops the basic skills required in the design and layout process of the graphic arts. Includes assignments in advanced electronic page layout with type, photographs and other graphic elements. **Prerequisite:** Successful completion of VC121. **Sp, Offered as needed**

VC130 PhotoShop 1
1 class and 2 lab hr /wk, 2 cr.

Introduces the concepts and techniques of digital imaging manipulation and correction. **Prerequisite:** Previous computer experience. **F, W, Offered as needed**

VC131 Photoshop 2
1 class and 2 lab hr /wk, 2 cr.

Refines and expands the concepts and techniques of digital imaging tools with application to digital illustration. **Prerequisite:** VC130 or consent of instructor. **Sp**

VC134 Dreamweaver
1 class and 2 lab hr /wk, 2 cr.

Introduces Dreamweaver software to create Web pages and maintain a Web presence. **Prerequisite:** Previous computer experience. **Offered as needed**

VC135 Flash 1
1 class and 2 lab hr /wk, 2 cr.

Introduces the concepts and techniques of creating animation, sound and interactivity for Web sites. **Prerequisite:** Previous computer experience. **Offered as needed**

VC136 Flash 2
1 class and 2 lab hr /wk, 2 cr.

Covers techniques including sound, advanced interactivity and video into Flash Projects, as well as optimizing movies. **Prerequisite:** VC135 or consent of instructor. **Offered as needed**

VC137 Web Graphics 1
1 class and 2 lab hr /wk, 2 cr.

Develops the techniques and skills needed to create, edit, save and post basic images on the World Wide Web. Investigates the basic reasons for using graphics on a web page and explores the various types of usage. **Prerequisite:** VC130 or equivalent experience. **Offered as needed**

VC138 Web Graphics 2
1 class and 2 lab hr /wk, 2 cr.

Further develops the techniques and skills needed to create, edit, save and post complex images on the World Wide Web. Investigates the reasons for using graphics on a web page and explores the various types of usage. **Prerequisite:** VC137 or consent of instructor. **Offered as needed**

VC139 Illustrator 1
1 class and 2 lab hr /wk, 2 cr.

Introduces the use of vector graphic software Illustrator. **Prerequisite:** Previous computer experience. **Offered as needed**

VC140 Illustrator 2
1 class and 2 lab hr /wk, 2 cr.

Continues the use of vector graphic software Illustrator. **Prerequisite:** VC139 or consent of instructor. **Sp**

VC144 Dreamweaver 2
1 class and 2 lab hr /wk, 2 cr.

Expand web development skills and knowledge using Adobe Dreamweaver web development software. **Prerequisite:** VC134 or equivalent experience and consent of instructor. **Offered as needed**

VC151 Print Production
2 class and 2 lab hr /wk, 3 cr.

Introduces commercial printing processes and the preparation of digital files including raster images, vector artwork, and application files for offset printing. **Prerequisite:** Enrollment in the Visual Communications Program; and VC111 and VC114, both with a grade of C or better; or consent of instructor. **W, Offered as needed**

VC171-173 Special Projects

1 class and 2-4 lab hr/wk, 2-3 cr.

Provides the opportunity to work on special projects agreed upon by contract between student and instructor. Topics may include individualized tutorial study of software, independent work on projects, or in-depth study of graphic arts processes and procedures. May be repeated for a total of six VC171-173 credits. **Prerequisite:** Enrollment in the Visual Communications program. **F, W, Sp**

VC201-203 Advanced Topics in Visual Communications

1-3 class hr/wk, 1-3 cr.

Presents variable formats, discussions, and demonstrations. Topics vary each term. Examples include freelance work, pre-flighting, graphics software, papers and inks, or the exploration of new software or techniques. Course may be repeated for a maximum of six credits. **Prerequisite:** Second year standing in the Visual Communications program or evidence of equivalent experience required by topic. **Offered as needed**

VC221 Layout 3: Publication Design

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

Applies the concepts and skills of the design and layout process to the principles of publication design. **Prerequisite:** Second year standing in the Visual Communications program and successful completion of VC122. Co-requisite: VC246 and VC238. **F**

VC235 Interface Design

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

Introduces students to interface design for desktop and mobile browser-based platforms. Curriculum approaches design problems from both a design principles point of view as well as user-centric perspectives. Includes requirements analysis, design process, grid and hierarchy, usability, and basic technical features and limitations of the medium. **Prerequisite:** Successful completion of VC114, ART224, and VC121, or consent of instructor. **W**

VC237 Web Design 1

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

Introduces the techniques and skills needed to plan and create basic graphics and layouts for the World Wide Web using industry standard coding practices, web editors, and graphics applications. **Prerequisite:** VC115 and second-year standing in the Visual Communications program. **Offered as needed**

VC238 Web Design 2

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

Develops the techniques and skills needed to plan, design, and implement web sites and create complex graphics and layouts for the World Wide Web using industry standard coding practices, web editors, and graphics applications. **Prerequisite:** VC237. **W**

VC239 Web Design 3

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

Further develops advanced techniques and skills needed to plan, design, build and launch complex web sites using industry standard technologies and web editors. Focuses on building sophisticated web sites using standards-based coding practices in Cascading Style Sheets and HTML5, and on the study of web hosting, web statistics, content management, and other advanced topics in web design. **Prerequisite:** VC238. **Sp**

VC241 Interactive Media

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

Introduces the planning and production of multimedia projects, using various software programs. Topics include the art of storytelling, digital sound and video, animation, interactivity, incorporating text and still images, and interactive presentations. **Prerequisite:** Second year standing in the Visual Communications program or consent of instructor. **Sp**

VC243 Animation 1

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

Covers concepts, methods and techniques of creating traditional animations. **Offered as needed**

VC244 Animation 2

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

Applies the basic principles of 2D animation in a computer environment. Includes developing a short animation project by first scripting and storyboarding the project and then using traditional and computer skills to animate it. **Offered as needed**

VC246 File Prep

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

Builds knowledge of readying digital files for film output and printing. Presents common file problems and their solutions. **Prerequisite:** Second year standing in the Visual Communications program or equivalent work experience; working knowledge of the Mac Operating System, and graphic arts software. Corequisite: VC221. **W**

VC251 Color Correction

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

Covers advanced study of color correction and print preparation techniques for photographs. **Prerequisite:** VC114 and VC151, both with a grade of C or better; or consent of instructor. **W, Offered as needed**

VC271-3A Design Studio

1 class and 0-4 lab hr /wk, 1-3 cr.

Provides the opportunity to work with an instructor on the design and production of live graphic design projects. Any combination of the courses may be repeated for a maximum of six credits. **Prerequisite:** Second year standing in the Visual Communications program. **Offered as needed**

VC271-3B Web Studio

1 class and 0-4 lab hr /wk, 1-3 cr.

Provides the opportunity to work with an instructor on the design and production of live web sites. Any combination of the courses may be repeated for a maximum of six credits. **Prerequisite:** Second year standing in the Visual Communications program. **Offered as needed**

VC271-3C Photo Studio

1 class and 0-4 lab hr /wk, 1-3 cr.

Provides the opportunity to work with an instructor on photography for live projects. Any combination of the courses may be repeated for a maximum of six credits. **Prerequisite:** Consent of instructor. **Offered as needed**

VC280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

VC283 Business of Graphic Arts

4 class hr/wk, 4 cr.

Introduces running a creative business. Emphasizes graphic arts trade practices, production schedules, estimating, working with clients, markups, hourly rates, record keeping, and billing procedures. **Prerequisite:** Second year standing in the Visual Communications program; concurrent enrollment in VC284, or consent of instructor. **Offered as needed**

VC284 Portfolio Preparation

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

Serves as a capstone course for all students in the Visual Communications program. Includes portfolio building, job markets, resumes and business stationery, and mock interviews. Participation in a class portfolio show is a graduation requirement. **Prerequisite:** Second year standing in the Visual Communications program; concurrent enrollment in VC241 and VC283. **Sp**

VMW

Vineyard Management/ Winemaking

VMW101 General Viticulture

3 class hr/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**

VMW102 Wine Industry Exploration

3 class hr/wk, 3 cr.

Examines various segments of the wine industry and how they function as a whole. Reviews the legal entities for doing business. Explores different business models in the Oregon wine industry. **Offered as needed**

VMW105 Spanish in the Vineyard**3 class hr/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. **Prerequisite:** SPN111 or consent of instructor. **W**

VMW114 Winter Vineyard Practices**3 class and 2 lab hr /wk, 4 cr.**

Surveys winter vineyard management practices. Covers training, pruning, propagation, bench grafting, and simple trellis designs.

Prerequisite: VMW101 with a grade of C or better; or consent of instructor. **W**

VMW115 Spring Vineyard Practices**3 class and 2 lab hr /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. **Prerequisite:** VMW114 with a grade of C or better; or consent of instructor. **Sp**

VMW116 Summer Vineyard Practices**3 class and 2 lab hr /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. **Prerequisite:** VMW114 and VMW115, both with a grade of C or better; or consent of instructor. **Su**

VMW117 Fall Vineyard Practices**3 class and 2 lab hr /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. **Prerequisite:** VMW114, VMW115, and VMW116; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

VMW122 Introduction to Winemaking**3 class hr/wk, 3 cr.**

Surveys the history of wine, wine grape varieties, and world wine regions. Covers the annual cycle of vine growth and berry ripening; wine grape processing practices; and fermentation of wines. Examines the winemaking practices used for white, red, sparkling, and dessert wines. Introduces the application of sensory science to wine quality evaluation. Reviews wine and health issues. **W**

VMW131 Wine Appreciation**3 class hr/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. **F, Sp**

VMW132 Wines of the World**3 class hr/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. **W**

VMW134 Wines of the Pacific Northwest**3 class hr/wk, 3 cr.**

Focuses on the viticultural regions of the United States Pacific Northwest and the sensory evaluation of representative wines.

Emphasizes knowledge of the winemaking history of the area. Promotes a basic understanding of the wines of the regions. **Prerequisite:** VMW131 or consent of instructor. Student must be 21 years of age. **F**

VMW170 Introduction to Wine Marketing**3 class hr/wk, 3 cr.**

Explores wine marketing in Oregon and worldwide. Introduces concepts and topics useful to winery and vineyard owners; marketing personnel, retail and wholesale wine marketers and wine buyers. **Sp**

VMW222 Science of Winemaking**3 class hr/wk, 3 cr.**

Focuses on the scientific principles of wine production. Cover the physiology of grape berry development and wine grape processing. Stresses wine microbiology; the chemical composition of juice and wines; wine stabilization and clarification; fining and filtration; maturation; aging; and bottling. **Prerequisite:** CH122, CH122R, CH172, or VMW122; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) Student must be 21 years of age. **Sp**

VMW232 Sensory Evaluation of Wine Varietals**3 class hr/wk, 3 cr.**

Reviews sensory evaluation procedures. Focuses on wine varietal evaluation through sensory methods. Covers major worldwide wine varietals, distinguishing wine styles and blending wines. Identifies wine defects.

Prerequisite: VMW131 with a grade of C or better; or consent of instructor. Student must be 21 years of age. **W**

VMW233 Sensory Evaluation of Wine Components**3 class hr/wk, 3 cr.**

Stresses sensory evaluation of wine components. Surveys the most important components commonly found in table wines. Emphasizes identification of components through tasting a series of wines which have been constructed to show the effects of steadily increasing the amount of the component in a wine. **Prerequisite:** Student must be 21 years of age. **Sp**

VMW244 Wine Production**3 class and 6 lab hr /wk, 6 cr.**

Focuses on wine processing practices and quality control management. Demonstrates harvest and pre-fermentation processing decisions. Covers equipment operation, maintenance, sanitation and safety. Examines juice analysis, additions, selection of wine microorganisms, and managing fermentations. Covers post fermentation management practices, managing malolactic fermentation, and new wine analysis.

Prerequisite: CH122, CH172, VMW222, or consent of instructor. Students must be 21 years of age. **F**

VMW245 Wine Clarification and Stabilization**2 class and 4 lab hr /wk, 4 cr.**

Focuses on wine processing practices and quality control management. Covers physical, chemical, and microbial stabilization of new wines. Includes tartrates, proteins, oxidation, reduction, color and phenols, microbial stability, use of fining agents, and causes and corrections of wine defects.

Prerequisite: CH123, CH172, VMW244, or consent of instructor. Students must be 21 years of age. **W**

VMW246 Wine Aging, Filtration, and Bottling**3 class and 2 lab hr /wk, 4 cr.**

Focuses on wine processing practices and quality control management. Covers wine transfer methods and wine filtration using pad, diatomaceous earth, and membrane filters, aging and barrel storage, bottling practices and equipment, and required wine analysis. **Prerequisite:** CH123, CH172, VMW245, or consent of instructor. Students must be 21 years of age. **Sp**

VMW254 Wine Process Planning and Design**3 class hr/wk, 3 cr.**

Focuses on winemaking systems, winery operations, utilities and equipment. Covers process technologies and systems used in wineries, winery design and layout. Stresses regulatory issues in planning and operating a winery and workplace safety. **W**

VMW256 Agriculture Business Management**3 class hr/wk, 3 cr.**

Emphasizes the importance of business management principles to the financial success of nurseries, greenhouses, vineyards, and wineries. Focuses on developing skills in business planning, goal setting, financial record keeping, financial analysis and budgeting. Addresses regulatory issues including, but not limited to, environment, taxes and employment. **Prerequisite:** consent of instructor. **Sp**

VMW257 Tasting Room Management
3 class hr/wk, 3 cr.

Focuses on establishing, managing, and marketing a winery or other tasting room. Discusses physical layout for tasting rooms. Reviews management of employment issues and procedures. Explores the relationship between on-site and online winery sales and how to leverage them together. Demonstrates tools for accessing wine online and on-site sales, and various strategies for augmenting those tools, including e-commerce, point of sale inventory management technology, and knowledge of wine shipping compliance rules. Discusses integrating technology with other winery systems.

Offered as needed

VMW260 Soil and Plant Nutrition
4 class hr/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 hr/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 viticultural practices. **W**

VMW271 Wine Marketing: Brand Development
4 class hr/wk, 4 cr.

Focuses on establishing and managing a brand in the wine industry, with emphasis on the Oregon wine industry. Examines multiple models and aspects of product differentiation, brand planning, public relations, and media relations. **Prerequisite:** VMW170 or consent of instructor. **Offered as needed**

VMW272 Wine Marketing: Understanding the Wine Market Place
4 class hr/wk, 4 cr.

Stresses the channels of wine distribution, focusing on the three-tier system. Covers technological tools to target the market. Emphasizes effective sales presentations and techniques. Reviews the political and legal aspects of the wine marketplace. **Prerequisite:** VMW170 or consent of instructor. **Offered as needed**

VMW273 Wine Marketing: Assessing and Targeting the Market
4 class hr/wk, 4 cr.

Emphasizes how to move the wine marketing business past the romance stage to the next level. Combines practical and theoretical practices. Provides tools for assessing the wine market place. Examines how external events impact a wine marketing plan. Integrates all aspects of wine marketing. Focuses on preparing and presenting a wine marketing plan. **Prerequisite:** VMW170, VMW271, and VMW272; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**
VMW280B-L Cooperative Work Experience
See CWE–Cooperative Work Experience.

WFB**Welding Fabrication****WFB087 Fabrication Practices 3**
1 class and 6 lab hr /wk, 3 cr.

Emphasizes structural fabrication using steel and aluminum. **Prerequisite:** Enrollment in Welding Fabrication program or consent of program chair. **W**

WFB088 Fabrication Practices 4
1 class and 6 lab hr /wk, 3 cr.

Includes instruction and experience in production-type welding with use of jigs, fixtures and positioners. **Prerequisite:** WFB087 or consent of program chair. **Sp**

WFB096 Shop Projects
1 class and 3 lab hr /wk, 2 cr.

Emphasizes 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. **Sp**

WFB097 Welding Shop Problems 2
1 class and 15 lab hr /wk, 6 cr.

Provides continuation of welding shop problem experience with an emphasis toward on-the-job work experience. Encourages students to begin the CWE (Cooperative Work Experience) program in order to transition from school to the work place. **Prerequisite:** Sixth-term standing in the Welding Fabrication AAS degree program or consent of instructor. **Sp**

WFB280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience.

WLD**Welding****WLD051 Basic Arc Welding**
2 class and 9 lab hr /wk, 5 cr.

Studies 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. **F**

WLD052 Intermediate Arc Welding
2 class and 9 lab hr /wk, 5 cr.

Continues WLD051 covering ferrous and non-ferrous alloys and welding procedures. Demonstration and supervised practice of techniques on various metals applied in fabrication and repair. **Prerequisite:** WLD051 or consent of program chair. **W**

WLD053 Advanced Arc Welding
1 class and 6 lab hr /wk, 3 cr.

Prepares 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. **Sp**

WLD056 Blueprint Reading and Sketching
6 lab hr/wk, 2 cr.

Covers 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 hr/wk, 1 cr.

Studies the 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. **W**

WLD058 Welding Shop Problems**2 class and 15 lab hr /wk, 7 cr.**

Offers 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. **Sp**

WLD059 Ornamental Iron Work**1 class and 3 lab hr /wk, 2 cr.**

Introduces the design and creation of metal sculpture and decorative structures through welded fabrication. **F, Offered as needed**

WLD061 Basic Gas Metal Arc Welding (MIG)**1 class and 6 lab hr /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. **F**

WLD062 Intermediate Gas Metal Arc Welding (MIG)**1 class and 6 lab hr /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. **W**

WLD063 Advanced Gas Metal Arc Welding (MIG)**1 class and 6 lab hr /wk, 3 cr.**

Continues 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. **Sp**

WLD070 Oxyacetylene Processes**1 class and 6 lab hr /wk, 3 cr.**

Familiarizes the student with the safe use, care, and operation of oxyacetylene welding, brazing and cutting equipment. **F**

WLD073 Basic Gas Tungsten Arc Welding (TIG)**1 class and 9 lab hr /wk, 4 cr.**

Covers the 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. **W**

WLD077 Welding Processes**2 class and 6 lab hr /wk, 4 cr.**

Introduces the fundamentals of shielded metal arc welding, oxyacetylene welding and cutting, metallic inert gas welding (MIG), and arc-air procedures. **Prerequisite:**

Current enrollment in manufacturing program or consent of program chair. **Sp**

WLD080 Metallurgy for Welders**2 class hr/wk, 2 cr.**

Studies basic metallurgy as it pertains to welding. Covers identification of ferrous metals and nonferrous metals. Includes mechanical properties, grain structure, and effects of heat. **W**

WLD097 Welding**1 class and 3 lab hr /wk, 2 cr.**

Covers the fundamentals and application of arc welding, oxyacetylene welding, brazing and cutting pertaining to the automotive industry. **Sp**

WLD280B-L Cooperative Work Experience**See CWE-Cooperative Work Experience.****WR****Writing****See also SSP-Study Skills.****WR080 Basic Writing****4 class hr/wk, 4 cr.**

Focuses on developing essential writing skills at the sentence and paragraph levels. Emphasizes fluency in the writing process through use of invention strategies, drafting, revising, and editing in order to produce organized and coherent writing. **Prerequisite:** Recommendation of college writing placement test or consent of instructor. **F, W, Sp, Su**

WR090 Fundamentals of Writing**4 class hr/wk, 4 cr.**

Focuses on writing essentials that build confidence in writing for a variety of academic purposes. Emphasizes skills necessary to produce thesis-driven essays. Reinforces grammar and sentence-level editing skills in the context of paragraphs and short essays. Covers critical reading of college-level texts. **Offered as needed**

WR091 Writing Essentials**1 class hr/wk, 1 cr.**

Covers the mechanical and linguistic aspects of writing and other skills needed in college writing courses. Course may be repeated for a maximum of two credits. **F, W, Sp**

WR115 Introduction to Composition**4 class hr/wk, 4 cr.**

Introduces the conventions and skills of college-level writing; emphasizes clear writing and critical reading and thinking; bridges developmental writing courses and WR121.

Prerequisite: Ability to organize thoughts and competency in Edited Standard Written English, as demonstrated by (a) a score of 75 or higher on the Compass test or (b) grade of C or better in WR090. **F, W, Sp, Su**

WR121 English Composition:**Exposition****4 class hr/wk, 4 cr.**

Emphasizes clear, detailed writing that employs critical reading and thinking and basic research skills. **Prerequisite:** Ability to organize thoughts and competency in Edited Standard Written English, as demonstrated by (a) a score of 95 on the Compass placement test or (b) grade of C or better in WR115. **F, W, Sp, Su; IL**

WR122 English Composition:**Argumentation and Research****4 class hr/wk, 4 cr.**

Focuses on the writing of logical, effective, argumentative prose; use of stylistic elements; awareness and consideration for different audiences; research and documentation skills; and critical reading. WR122 is recommended as a prerequisite for WR227.

Prerequisite: Grade of C or better in WR121. **F, W, Sp, Su; IL**

WR201 Advanced Editing Strategies**1 class hr/wk, 1 cr.**

Covers advanced punctuation and editing skills needed in upper level college writing courses and writing-intensive jobs. Course may be repeated for a maximum of two credits. **Prerequisite:** It is strongly suggested that students have completed the WR049/090/115/121 sequence or have an equivalent placement test score. **Offered as needed**

WR227 Technical Writing**4 class hr/wk, 4 cr.**

Covers a variety of reports and workplace writing. Addresses issues of organization, document supplements, bibliography, illustration, and document design. Emphasizes detailed, factual content, objective presentation, and a defined purpose for specific readers. Includes a research component calling for formal documentation. **Prerequisite:** Grade of C or better in WR121 or BA214. **F, W, Sp, Su; IL**

WR240 Creative Nonfiction**4 class hr/wk, 4 cr.**

Introduces the basic elements of creative nonfiction, including memoir and researched essays; the process of creating nonfiction works; and the workshop system used to share and discuss the work of peers. Students will create and revise at least one new work of creative nonfiction, which may be either a short work or part of a longer project. **Prerequisite:** WR121 or consent of instructor. **Offered as needed**

WR241 Fiction**4 class hr/wk, 4 cr.**

Introduces the basic elements of the short story, the process of creating short stories, and the workshop system used to share and discuss the work of peers. Includes the creation and revision of at least one new short story. (Note: Focuses on short stories rather than novels or portions of novels.) **Prerequisite:** WR121 or consent of instructor. **F, W, Sp, Su**

WR242 Poetry**4 class hr/wk, 4 cr.**

Introduces the basic elements of poetry, the process of creating original poems, and the workshop system used to share and discuss the work of peers. Students will create and revise several new poems of their own. **Prerequisite:** WR121 or consent of instructor. **F, W, Sp, Su**

WR243 Playwriting**4 class hr/wk, 4 cr.**

Introduces the basic elements of play scripts, the process of creating original short plays, and the play lab system used to share and discuss the work of peers. Students will create and review at least one new short play of their own. **Prerequisite:** WR121 or consent of instructor. **Sp**

WR244 Advanced Fiction**4 class hr/wk, 4 cr.**

Further develops the techniques of creating and revising short fiction introduced in WR241, and examines in greater complexity the foundational theories of imaginative writing. Also examines current methods of finding print and electronic audiences for works of fiction. Employs a workshop format of presenting and critiquing student work. **Prerequisite:** WR241 or consent of instructor. **W**

WR245 Advanced Poetry**4 class hr/wk, 4 cr.**

Develops the techniques of creating and revising short poetry that were introduced in WR242 and examines in greater complexity the foundational theories of imaginative writing. Examines current methods of finding print and electronic audiences for works of poetry. Employs a workshop format of presenting and critiquing student work. **Prerequisite:** WR242 or consent of instructor. **Offered as needed**

WR250 Writing for Children**4 class hr/wk, 4 cr.**

Introduces the basic elements of children's literature writing, including picture books, nonfiction books, and young adult fiction. Includes the process of creating children's literature and the workshop system used to share and discuss the work of peers. Covers creating and revising one new work of children's literature. Course may be repeated once for credit. **Prerequisite:** WR121 or consent of instructor. **Offered as needed**

WR262 Screenwriting**4 class hr/wk, 4 cr.**

Introduces the basic elements of the screenplay, the process of creating screenplays, and the workshop system used to share and discuss the work of peers. Includes reading a breadth of representative works, creating and revising at least one short screenplay or the first act of a feature-length screenplay, and writing formal critical analyses. Course may be repeated for a maximum of eight credits. **Prerequisite:** WR121 with a grade of C or better; or consent of instructor. **Offered as needed**

WR263 Advanced Screenwriting**4 class hr/wk, 4 cr.**

Explores the fundamentals of advanced screenwriting while focusing on understanding narrative theories and strategies through creation and revision of two short screenplays and production of at least one screenplay that could be used as the basis for a low-budget, independently produced short film. Course may be repeated once for credit. **Prerequisite:** WR262 or consent of instructor. **Offered as needed**

Women's Studies**WS101 Introduction to Women's Studies****4 class hr/wk, 4 cr.**

Introduces Women's Studies, feminism, and the concept of gender. Focuses on the lives and status of women in the U.S. society and explores how social institutions such as family, work, media, education, and health/medicine affect different groups of women. Explores issues of gender, race, class, age, sexual orientation, size, and ability. **F, W, Sp, Su; CL**

WS102 Women of the World**4 class hr/wk, 4 cr.**

Examines women's issues in a global context. Compares women's lives from a cross-cultural perspective. Explores women's lives within key social institutions. Focuses on human rights, globalization, environmental issues, and global stratification. **F, W, Sp, Su; CL**

Faculty and Administration



Board of Education

Members of the Chemeketa Board of Education are elected to represent seven geographical zones in the college district.

Zone One—**Ed Dodson**

Zone Two—**Ron Pittman**

Zone Three—**JoAnne Beilke**

Zone Four—**Dan Ostlund**

Zone Five—**Ray Beaty**

Zone Six—**Gerald Watson**

Zone Seven—**Richard Riggs**

Faculty and Administration as of July 2011

This is a partial listing of Chemeketa Community College's administration and faculty. It includes most of the people who are employed full time in instructional, coordinating, and administrative roles.

Aebi, Eric—Instructor, Hospitality & Tourism Management
MBA, Business Administration Capella University
BA, Arts & Letters Portland State University

Agee, CS (Steve)—Instructor, Automotive Technology
Cert., Auto Technician Mt. Hood Community College

Alfaqueh, Nuri—Instructor, Mathematics
BS, Engineering—Nuclear Oregon State University

Alvarez, Maria (Cleo)—Counselor
MS, Counseling Western Oregon University

Anderson, Kenneth—Instructor, Mathematics
MS, Systems Analysis Air Force Institute of Technology
BS, Mathematics Western Oregon University
BS, Secondary Education Western Oregon University

Andrews, Peggy—Instructor, Emergency Medical Technology
Cert., Emergency Medical Technician—Paramedic
Houston Community College
Cert., Paramedic Training Houston Community College

Antoine, Patricia—Instructor, Sociology/Diversity
MS, Sociology Portland State University
BS, Sociology Portland State University
AA, Lower Division Collegiate
Chemeketa Community College

Bagnall, Marcia—Coordinator, Small Business Development Center
MBA, Administration
California State Polytechnic University
MA, Education California State Polytechnic University
BA, History Occidental College

Ballard, Justus—Instructor, Composition/Literature
MFA, Creative Writing Antioch University
BA, English University of California-Los Angeles

Balyo, JM (Mike)—Instructor, History
MA, History Western Michigan University
BA, History The King's College

Barber, Wayne—Instructor, Mathematics
MS, Teaching: Mathematics University of Oregon
BS, Mathematics University of Oregon

Bates, Michael—Instructor, Computer Science
MS, Mathematics Idaho State University
BS, Mathematics University of Utah

Beach, Natalie—Director, Library and Tutoring Services
MLS, Library Science Rutgers
MA, Humanities: History of Ideas
University of Texas-Dallas
BA, English Rutgers

Bean Joseph S—Instructor, Life Science
BS, Interdisciplinary Studies College of William & Mary
MD, Medicine University of Virginia

Beck, Sally—Coordinator, Developmental Education
MS, Language Arts; Secondary Education
Western Oregon University
BA, English Willamette University

Behnard, Sheeny—Instructor, Mathematics
MS, Math Science: Statistics
Eastern Kentucky University
MS, Statistics Oregon State University
BA, Mathematics Berea College
BA, Physics Berea College

Belmodis, Cassie—Director, Health & Human Performance, and Athletics
BA, Physical Education Willamette University
BA, Psychology Willamette University

Bernhisel, Donna—Instructor, English/Writing
MA, English Utah State University
BS, Social Work Brigham Young University

Berntson, Tom—Instructor, Physical Science
MS, Biochemistry Iowa State University
BS, Chemistry Western Illinois University

Bibler, Margaret (Carol)—Instructor, Art
BA, Art University of Washington

Bolante, Rebecca—Coordinator, Disability Services
MS, Rehabilitation Western Oregon University
BS, Psychology Western Oregon University

Bone, Andrew—Executive Dean
MA, Humanities
California State University at Dominguez Hills
MS, Business California State University at Fresno
BS, Business Administration
Saint Mary's College of California

Borden, Tiffany—Counselor
MS, Counseling Western Oregon University
BA, Liberal Arts Stephens College

Borjesson, Peggy—Director of Human Resources
BS, Social & Behavior Sciences Linfield College
AA, General Studies Linn-Benton Community College

Bowman, Roberta (Bobbi)—Instructor, Reading and Study Skills
MS, Interdisciplinary Studies Western Oregon University
BS, Elementary Education
University of Kansas Main Campus

- Brase, Amy**—Instructor, Nursing-Clinical
MSN, Nursing Gonzaga University
BSN, Nursing University of Washington
- Brase, Don**—Dean, Humanities & Communications
MA, English University of Montana
BA, English University of Washington
- Buckholz, Cheryl**—Instructor Pharmacy Technician
PhD, Pharmacy Oregon State University
BS, Botany Oregon State University
- Bunnenberg-Boehmer, Kay**—Instructor, Arts, Literature
MFA, Painting San Francisco Art Institute
BA, Art Sonoma State University
- Burke, Michele**—Reference Librarian
MLS, Library Science Emporia State University
BA, Philosophy Portland State University
- Burns, Barbara**—Instructor, Nursing-Clinical
BSN, Nursing Oregon Health Science University
- Busha, Cathleen (Cathy)**—Instructor, Human Services
BS, Secondary Education Millerville University
MSW, Social Work Arizona State University
- Cammack, Janice**—Instructor, Physical Science
PhD, Chemistry Oregon State University
BS, Chemistry George Fox University
- Campbell, Kathleen**—Dean, Enrollment Services
BA, Human Resources Management George Fox University
AA, Transfer Coursework Lane Community College
- Canoy, David**—Instructor, Life Science
MS, Zoology Oregon State University
BS, Biology Western Oregon University
BS, Secondary Education Western Oregon University
- Carnegie, Kay**—Dean, Health Sciences
MS, Nursing University of Portland
BSN, Nursing Illinois Wesleyan University
- Cegon, Lori**—Instructor, Center for Business & Industry
Small Business Management
BS, Public Administration Western Oregon University
- Chou, Cerbrina**—Instructor, Speech
MA, Communications Central Michigan University
BA, Speech Communications Shih Hisn University
- Christophersen, Kristin**—Associate Dean, General
Education and Transfer Studies
MS, Sociology Portland State University
BS, Psychology Portland State University
- Clark, Lori**—Instructor, Health & Human Performance
MA, Physical Education University of Oregon
BA, Norwegian Pacific Lutheran University
BA, Physical Education: Corrective Therapy Pacific Lutheran University
- Colantino, Kimberly (Kim)**—Instructor, Composition/
Literature
MS, English Washington State University
BA, Literature George Fox University
- Collins, Aileen**—Instructor, Psychology
MS, Psychology University of Georgia
BA, Psychology University of Georgia
- Conlon, Trisha**—Executive Director, Mid-Willamette
Education Consortium
MS, Education Point Loma Nazarene University
BS, Biology Washington State University
- Cortez, Julio**—Counselor
MS, Counseling-Rehabilitation Western Oregon University
BA, Psychology Western Oregon University
- Craven, Linda**—Instructor, Early Childhood Education
M.Ed, Education University of Portland
BA, Human Development Pacific Oaks College
AS, Early Childhood Education Chemeketa Community College
- Crawford, LeAnna**—Instructor, English
MA, Creative Writing Antioch University
BA, English University of Northern Colorado
- Crossler-Laird, Jannie**—Instructor, English as a Second
Language
M.Ed, Adult Education Oregon State University
BA, German Pacific Lutheran University
BA, Social Sciences Pacific Lutheran University
- Cudmore, Wynn**—Instructor, Life Science
PhD, Life Sciences: Ecology Indiana State University
BS, Biology Northeastern University
- Darby, Sydney**—Instructor, English
MA, English Boston College
BA, English Portland State University
- Davis, Cheryl**—Instructor, Health Services Management
MBA George Fox University
BS, Health Education University of Oregon
- Dishong McCormack, Michele**—Instructor, Speech
MA, Communications Washington State University
BA, English and Speech Communication Chadron State College
- Dobay, Deborah**—Instructor, Psychology
MA, Human Development Pacific Oaks College
BS, Education: Child & Family Development Bowling Green State University
- Duncan, Nancy**—Director, Special Projects
MSC, Counseling Oregon State University
BS, Home Economics University of Wisconsin—Madison
- Dye, Kevin**—Instructor, Composition/Literature
PhD, English University of New Mexico
MA, English Western Washington University
BA, English New York University
AA, Liberal Arts Nassau Community College
- Edwards, Karen**—Instructor, Business Management
MBA, Business & Administration Willamette University
BA, History Willamette University
- Ellis, Jane**—Instructor, Health Services Management
MPE, Physical Education Lewis & Clark College
BSE, Physical Education Western Oregon University
AAS, Medical Records Technology Portland Community College

- Emme, Larry**—Instructor, Physical Science
MS, Chemistry Portland State University
BS, Chemistry Portland State University
- Ensminger-Stapp, Colin**—Instructor, Learning Technologies Facilitator
BA, Telecommunications Pacific University
AAS, Television Production Technology Mt. Hood Community College
- Eustrom, James**—Executive Dean, Student Development and Learning Resources
M.Ed, College Student Services Administration Oregon State University
BA, Sociology Willamette University
- Evans, Michael**—Coordinator, TRiO/SSS
MS, Counseling Western Oregon University
BS, Psychology Corban College
AA, Refrigeration/Heating/Air Conditioning Linn-Benton Community College
- Fallow, Gary**—Instructor, English as a Second Language
MA, International Management American Graduate School of Management
BA, German University of Oregon
BA, Political Science University of Oregon
- Farjami, Javad**—Instructor, Mathematics
MS, Electrical & Computer Engineering Oregon State University
BS, Electrical & Computer Engineering Oregon State University
- Feller, Larry**—Coordinator, Brooks RTF
MS, Electrical & Computer Engineering Oregon State University
BS, Electrical & Computer Engineering Oregon State University
- Ferguson, Mark**—Instructor, Mathematics
MA, Mathematics Oregon State University
BA, Business Western Oregon University
BA, Mathematics Western Oregon University
- Ferry, Marjorie**—Instructor, Composition/Literature
PhD, Literature: Russian Yale University
MA, English University of Oregon
BA, Russian Bryn Mawr College
- Fifer, Pamela**—Instructor, Nursing
MS, Nursing University of Portland
BS, Nursing University of Portland
- Finholt, James**—Instructor, Computer Science
MBA, International Business Our Lady of the Lake University
BA, Economics Luther College
- Florence, William (Bill)**—Instructor, Journalism Student Newspaper Advisor
General Studies St. Clair Community College
General Studies University/College, Dublin, Ireland
- Frank, Andrew**—Instructor, Physical Science/Geology
PhD, Geology University of Texas at Austin
MS, Geology Northern Arizona University
BA, Geology University of The Pacific
- Freeman, Jeremiah (Sage)**—Media Production Specialist
BS, Fine Arts University of Oregon
- Frey, Melissa**—Coordinator, College Admissions
EDM, College Student Services Administration Oregon State University
BS, Business Administration Oregon State University
- Frey, Phil**—Director, Auxiliary Services
BS, Humanities Oregon State University
BS, Social Sciences Oregon State University
- Fry, Mitchel**—Instructor, Computer Science
MS, Computer Sciences Oregon State University
BS, Psychology Western Oregon University
BS, Computer Sciences Western Oregon University
- Furey, Kevin**—Instructor, Economics
PhD, Economics University of Washington
BA, Chemistry California State University
- Furr, William (Laney)**—Instructor, Business Management Program
MBA, Business Administration: Finance Texas A&M University
BM, Music Literature Sam Houston State University
- Gastoni, William (Bill)**—Instructor, Corrections Ed/Automotive
Cert., 1000 hrs Specialist: Masters Pro Ford Motor Credit Technical School
Cert., 200 hrs Corrections Oregon Police Academy
- Gelder, Minna**—Registrar
BS, Computer Sciences Western Oregon University
- Gentile, Benedict (Ben)**—Instructor, Hospitality & Tourism Management
BA, Geography University of Illinois at Chicago
- George, Lynn**—Instructor, Dental Assisting
MS, Policy Foundation & Administration Portland State University
BS, Business Admin. Warner Pacific College
Cert., Dental Assisting Chemeketa Community College
- Gilley, Robin**—Instructor, Reading and Study Skills
M.Ed, Education Purdue University
BA, Education Purdue University
- Goodyear, John**—Executive Director, Chemeketa Cooperative Regional Library Service
MS, Instruction Systems Technology Indiana University-Bloomington
BA, Telecommunications Indiana University-Bloomington
- Graham, Jerry**—Instructor, Center for Individualized Learning
MA, Education Alliant International University
BS, Elementary Education Northern Arizona University
AA, General Studies Palomar College
- Gredler, Gail**—Instructor, Horticulture
MAg, Entemology, Horticulture Extension Methods Oregon State University
BS, General Science University of Oregon

- Green, Nancy**—Director, Corrections Education
BS, Management & Communication Corban College
AAOT, Lower Division Transfer Chemeketa Community College
- Guerra, Manuel**—Director, Student Retention & College Life
AA, Social Sciences Mendocino College
- Hale, Elizabeth (Beth)**—Learning Technologies Facilitator
MA, Education-Curriculum & Instruction University of Washington
Cert., ESL Initial Teaching Certificate Seattle University
BS, Political Science University of Washington
- Hale, Karla**—Instructor, High School/GED Options
MEd, TESOL Western Oregon University
BS, Elementary Education Western Oregon University
- Hallett, David**—Executive Dean, General Education and Transfer Studies
JD, Law University of Akron
BA, English State University of New York
AAS, Communications Cayuga Community College
- Hammer, Peggy**—Instructor, Business Technology
M.Ed, Education University of Portland
BS, Liberal Studies Oregon State University
- Hardesty, David**—Instructor, Adult Basic Education/GED
MS, Education: Policy Foundation & Administration Portland State University
BA, Psychology Southern Methodist University
- Harris, Gregory**—Dean, Marketing & Student Recruitment/PIO
MBA, Business Administration University of Southern California
BA, Asian Studies University of Oregon
- Harvey, Jean**—Instructor, Alternative High School
MA, Teaching Program Willamette University
BA, History Oregon State University
- Hayes, Dan**—Counselor
MS, Education of Hearing Impaired Western Oregon University
BS, Pre-Med Loyola University
- Healey, Lisa**—Instructor, Mathematics
MAT, Teaching Program Willamette University
BS, Mathematics Willamette University
AB, Physics Bard College
- Heater, Kelsey**—Instructor, Mathematics
MEd, Curriculum & Instruction University of Phoenix
BS, Mathematics Portland State University
- Herrera, Herlinda (Linda)**—Coordinator, CAMP & HEP
BS, Liberal Studies Eastern Oregon University
AS, General Studies Clackamas Community College
- Heryford, Stella**—Instructor, Nursing
MSN, Nursing University of Phoenix
BSN, Nursing Point Loma Nazarene College
- Hibbeler, Duane**—Instructor, CAD/CAM
AS, Industrial Mechanical Technology Chemeketa Community College
- Hillis, David**—Instructor, Mathematics
MS, Mathematics Colorado School of Mines
BS, Engineer Physics Colorado School of Mines
- Hillyer, Rebecca**—Director, Legal Resources
JD, Law Willamette University
BS, Social Studies Education Oregon State University
- Hirt, Donna**—Instructor, Human Services
MSW, Social Work Portland State University
BS, Psychology Western Oregon University
- Hodgson, Traci**—Instructor, History
PhD, History Boston University
MA, History Boston University
BA, History University of Kansas Main Campus
- Hoelster, Peter**—Instructor, Visual Communications
BS, Psychology Oregon State University
- Hoffar, Abigail (Abby)**—Coordinator, High School Programs
BS, Social Sciences Western Oregon University
- Holler, Barbara**—Instructor, Business Technology
MS, Business Education Oregon State University
BS, Liberal Arts Oregon State University
- Hornibrook, Debra (Debbie)**—Instructor, Speech
EdD, Educational Leadership: Curriculum & Instruction Portland State University
MS, Speech Communication Portland State University
BS, Psychology Portland State University
- Houghton, Stanley (Stan)**—Instructor, Business Technology
MBA, Business Administration George Fox University
BA, Management & Organizational Leadership George Fox University
AA, General Studies Mt. Hood Community College
- Howard, Jeffrey**—Counselor
MS, Rehabilitation Counseling: Deafness Western Oregon University
BS, Interdisciplinary Studies Western Oregon University
AAS, Finishing Optical Technician Rochester Institute of Technology
- Huckestein, Julie**—Vice President/Chief Financial Officer
MS, Education: Policy Foundation & Administration Portland State University
BA, Management & Organizational Leadership George Fox University
AS, Business Administration Linn-Benton Community College
- Hughes, Moira**—Instructor, Nursing
MS, Gerontological Nursing Oregon Health Science University
BSN, Nursing Oregon Health Science University
AA, Nursing College of San Mateo
- Jabari, Imara**—Executive Director, Workforce Integration
MEd, Management Cambridge College-North Hampton
- Jabin, Tammy**—Instructor, English
MA, English Portland State University
BA, English Willamette University
AAOT, Lower Division Oregon Transfer Chemeketa Community College

- Jacobson, Lee**—Instructor, Ceramics/Sculpture/Art
MFA, Art University of Arizona
BA, Art Weber State University
- Jasper, Sally**—Instructor, Nursing
MSN, Parent-Child Nursing Vanderbilt University
BSN, Nursing Vanderbilt University
- Jensen, Erik**—Instructor, Physical Science
MS, Physics Oregon State University
BS, Physics Portland State University
- Johnson, Bradley (Brad)**—Instructor, Adult Basic Education
MMUS, Music University of Maryland College
BA, Music Oregon State University
- Jones, Jason**—Instructor, Business Law
JD, Law University of Oklahoma Norman
MA, History Oklahoma State University
BA, History Education University of Central Oklahoma
- Kapan, Teter**—Coordinator, International Education
BA, Spanish University of Oregon
AA, Speech Communication Clatsop Community College
- Karbginsky, Darrel**—Instructor, Computer Science
MSE, Information Technology Western Oregon University
BS, Computer Sciences Western Oregon University
AA, Lower Division—Oregon Transfer Chemeketa Community College
AS, Automotive Mira Costa College
AS, Retailing Careers Mira Costa College
- Kelly, Michael (Mike)**—Instructor, Architecture Drafting
AS, Drafting Chemeketa Community College
- Klein, William (Bill)**—Instructor, Fire Protection Technology
AAS, Fire Protection/Fire Suppression Chemeketa Community College
- Knowles, Wayne**—Instructor, Visual Communication
BA, Art Marylhurst College
AA, General Studies Miami Dade College
- Kohlmeier, William (Bill)**—Director, Public Safety
AA, Law Enforcement Chemeketa Community College
Certification, School of Staff and Command NW Traffic Institute
Certification, Executive Development OEDI
DPSST Certificates
- Kraus, Donald (Don)**—Instructor, Computer Science
MS, Education Western Oregon University
BS, Business Western Oregon University
BS, Computer Sciences Western Oregon University
AS, Business Administration: Management Portland Community College
- Kuhn, Gary**—Cooperative Work Experience Coordinator
MS, Teaching & Training Online Capella University
BS, Speech Communication Southern Oregon University
- Lander, Gregg**—Instructor, Emergency Medical Technology
BS, Liberal Studies Oregon State University
Cert, Paramedic Training Oregon Health Sciences University
- Lanning, Patrick**—Vice President, Instruction and Student Services/CAO
EDD, Education Oregon State University
MS, Interdisciplinary University of Oregon
BS, Psychology University of Oregon
- Larsen, Melissa (Raschel)**—Instructor, Health and Human Performance
MPH, Health Promotion & Education Oregon State University
BA, Health Education Linfield College
- LaVine, Philip (Phil)**—Instructor, Farm Business Management
MS, Agricultural Economics New Mexico State University
BS, Agricultural Business California State University Fresno
- Lazo, Omar**—Instructor, Automotive
BA, Practical Theology Advantage College
Cert., Automotive Technology Universal Technical Institute
- Lazzara, Edward**—Instructor, Spanish
MA, Romance Linguistics & Literature University of California—Los Angeles
BS, Mathematics Montclair State College
- Limbird, Marty**—Instructor, Health and Human Performance
MAT, Education University of Portland
BA, Athletic Training Linfield College
- Linder, Christine**—Instructor, Visual Communications
BAE, Art University of Wisconsin—Oshkosh
- Liss, Layli**—Instructor, Reading/Study Skills
M.Ed, Education University of St. Thomas
BA, International Studies DePaul University
- Lopez, Carlos**—Instructor, Sociology
MA, Sociology University of Georgia
BA, Sociology University of North Carolina
AA, General Studies Asheville-Buncombe Technical Community College
- Lyell, Kiva**—Instructor, Emergency Medical Technology
BS, Law Enforcement Western Oregon University
CERT, Emergency Medical Technician Chemeketa Community College
AAOT, General Studies Chemeketa Community College
- MacDonald, Al**—Instructor, Vineyard Management
MA, Psychology Central Michigan University
BS, Psychology Central Michigan University
BS, Sociology Central Michigan University
- Mack, Johnny**—Dean, Life Safety, Health, Human Performance and Athletics
AAOT, General Studies Chemeketa Community College
AAS, Fire Protection Technology Chemeketa Community College

- Mack, Laura**—Instructor, Art
MFA, Fine Arts (Painting) Southeastern University of Massachusetts-Dartmouth
BFA, Art Studio Tufts University
- MacLean, Christopher**—Instructor, Psychology
MA, Education-Counseling University of Georgia
BS, Psychology University of Georgia
- Marrow, Taylor**—Instructor, History
MA, History Ball State University
BA, History Indiana University
BA, Telecommunications Indiana University
- Martin, Kimberly (Kim)**—Counselor
MS, Counseling: Rehabilitation Counseling with the Deaf Western Oregon University
BA, Education of Hearing Impaired University of Northern Colorado
- Martinez, Eduardo**—Instructor, Adult Basic Education
BA, Liberal Studies Loyola Marymount University
AA, General Studies Marymount College
- Martinez, Yolanda**—Instructor, Human Services
PhD, Education Oregon State University
MS, Counseling San Diego State University
BA, Psychology California State University—Fullerton
- Massey, TT (Teresa)**—Instructor, Reading and Study Skills
MA, Reading Education University of South Florida
BA, Elementary Education Stetson University
PMSC, Post Masters Coursework Georgia State University
- McCaffrey, Susan**—Coordinator, Talent Search & Upward Bound
MPA, Public Administration Portland State University
BS, Management & Communication Corban College
AA, Lower Division Transfer Chemeketa Community College
- McDonough, Thomas**—Instructor, Astronomy-Planetarium
MS, Atmospheric Sciences Oregon State University
BA, Physical Science San Francisco State University
AA, General Studies City College of San Francisco
- McGlynn, Maureen**—Director, Curriculum & Instruction
PhD, Education Capella University
MA, Human Development Pacific Oaks College
- McLaran, Diane**—Executive Director, Center for Business & Industry
BA, Management & Organizational Leadership Northwest Christian College
AS, Early Childhood Education Lane Community College
- McLaughlin, Suzanne**—Instructor, French/Spanish
MA, Romance Languages: Spanish University of Oregon
BA, French & Spanish Keuka College
- McLaughlin, Terrence (Terry)**—Instructor, Health and Human Performance
MS, Interdisciplinary Studies Western Oregon University
SSC, Sociology & Coaching University of California-Santa Barbara
BA, Sociology University of California—Santa Barbara
- McLearn, Brian**—Instructor, Automotive
AAS, Automotive: Ford Asset Mt Hood Community College
- Meiner, Karl**—Instructor, High School Programs
MAT, Teaching Lewis and Clark College
MA, English Portland State University
BA, English University of Arizona
- Merzenich, Timothy (Tim)**—Instructor, Mathematics-Learning Center
BS, Mathematics Oregon State University
- Messoline, Lindsay**—Instructor, Adult Basic Education
MAT, Teaching Program Willamette University
BA, Ethnic Studies University of Oregon
- Mickel, Rebecca**—Instructor, Nursing
MSN, Nursing University of Phoenix
BS, Nursing Oregon Health Sciences University
ADN, Nursing Linn-Benton Community College
- Milhausen, Michael**—Dean, Math, Science, & Technology
BS, Biology Le Moyne College
PhD, Biology Syracuse University
- Miller, Angela (Angie)**—Coordinator, Library Services
Course Work, Travel Operations Chemeketa Community College
- Miller, Glen A**—Dean, Applied Technologies
M.Ed, College Student Services Administration Oregon State University
BS, Psychology/Human Services Corban College
Cert, Career Development/Facilitator Training Chemeketa Community College
- Miller, Mark**—Instructor, Engineering & Mathematics
MS, Engineering: Mechanical Oregon State University
BS, Engineering: Mechanical Oregon State University
- Mitchell, Nolan**—Instructor, Mathematics
MA, Mathematics Oregon State University
BS, Mathematics Western Oregon University
- Mohn-Brown, Elaine**—Instructor, Nursing
EdD, Educational Administration Brigham Young University
MA, Health Education University of Northern Colorado
BA, Health Education University of Northern Colorado
BS, Nursing Metropolitan State College
DIPL, Nursing Akron General Hospital and School of Nursing
- Monson, Bryan**—Instructor, Business Technology
M.Ed, Education Oregon State University
BS, Secondary Education Eastern Oregon University
- Montgomery, Jennifer**—Instructor, Anthropology
MA, American Indian Studies University of Arizona
BS, Anthropology University of Oregon
- Monto, Cecelia**—Director of Evening & Weekend Programs
MS, Education Portland State University
BA, English Lewis and Clark College
- Moore, Dorothy**—Instructor, Curriculum/Instruction
PhD, Curriculum & Instruction University of Nevada-Reno
BS, Education University of Nevada-Reno

- Moore, Eugene (Gene)**—Instructor, Electronics
 MS, Engineering Purdue University Main Campus
 BS, Engineering Harvey Mudd College
- Morrelli, Michael**—Director, Physical Plant Operations
 General Studies Chaffey Community College
 General Studies Riverside Community College
- Moxley, Doug**—Manager of Web Services
 BS, Psychology Western Oregon University
 AA, General Studies Chemeketa Community College
 AS, Food Sciences & Technologies
 Chemeketa Community College
- Munson, Clifford (Cliff)**—Instructor, Fire Protection
 Technology
 BEd, Vocational Education
 California State University-Long Beach
 AS, Fire Science Long Beach City College
- Murfin, Christine**—Supervisor, SOAR Program
 AS, Human Services Chemeketa Community College
- Murray, Susan**—Dean, Office of High School Programs
 EdD, Education Oregon State University
 BA, English Willamette University
 CERT, Teaching Program Portland State University
- Myers, Michael**—Instructor, Welding/Fabrication
 AS, Welding Chemeketa Community College
- Naas, Fauzi**—Coordinator, Institutional Research and
 Planning
 Graduate Course Work, Education Technology
 Leadership George Washington University
 BS, Computer Sciences Western Oregon University
 AS, Mathematics Chemeketa Community College
- Nelson, Christopher**—Instructor, Physical Science
 MS, Chemistry: Organic University of Illinois Urbana
 BA, Chemistry Central University of Iowa
- Nelson, Holly**—Associate Dean, CTE Programs-Yamhill
 Valley Campus
 MAT, Health Education Western Oregon University
 BA, Health Education Western Oregon University
- Newton, Kristi**—Instructor, Business Management
 MBA, Business Administration University of Portland
 BS, Business Administration Oregon State University
- Noah, Mark**—Coordinator, Occupational Skills Training
 BS, Biology University of Oregon
 Cert., Vocational Counselor & Career Development
 Facilitator
 Oregon Dept. of Consumer and Business Services
- Nord, Christopher**—Instructor, Mathematics
 MS, Mathematics Oregon State University
 BA, Mathematics Goshen College
- Northam, Ashley**—Instructor, Speech Language
 Pathology Assistant Program
 MS, Speech Communication: Speech & Hearing Science
 Portland State University
 BS, Speech & Hearing Science Portland State University
 AA, General Studies Sierra College
- O'Hara, Richard (Rick)**—Instructor, Life Science
 PhD, Zoology Oregon State University
 MS, Zoology Michigan State University
 BS, Zoology Michigan State University
- Ottaway, Carol**—Instructor, Business Technology
 M.Ed, Business Education Oregon State University
 BS, Business & Technology Oregon State University
- Park, Joyce**—Instructor, Nursing—Clinical
 MBC, Business George Fox University
 MIM, Human Resources Management
 University of Phoenix
 BS, Nursing Idaho State University
- Park, Russell (Russ)**—Instructor, Building Inspection
 AAS, Building Inspection Technology
 Chemeketa Community College
- Patterson, Steven**—Director, Community Education
 M.Ed, Recreation & Leisure Studies
 University of Minnesota
 BS, Park & Recreation Resources
 Michigan State University
- Payne, Eva**—Instructor, Communication Skills
 MA, English Oregon State University
 BA, English Oregon State University
- Peters, Julie**—Instructor, Drafting-Structural
 AS, Drafting Technology—Mechanical Design
 Chemeketa Community College
- Pierce, Samuel (Sam)**—Instructor, Psychology
 PsyD, Psychology George Fox University
 MA, Psychology: Clinical George Fox University
 BS, General Studies Oregon State University
- Pillette-Stephens, Debra**—Instructor, Criminal Justice
 MS, Corrections Western Oregon University
 BS, Physical Education & Health
 Western Oregon University
 BS, Secondary Education Western Oregon University
- Pintler, Michael (Mike)**—Instructor, Welding/Fabrication
 AS, Welding Fabrication
 Chemeketa Community College
- Plett, John**—Dean, Yamhill Valley Campus
 EdD, Ed Leadership: Curriculum & Instruction
 Northern Arizona University
 MS, Physics United States Naval Academy
 MBA, Business Administration
 Long Island University, C.W. Post Center
 BS, General Studies United States Naval Academy
- Portmann, Mark**—Instructor, GED Options/HS Programs
 M.Ed, Elementary Education Western Oregon University
 BA, Elementary Education Portland State University
 BA, Art Central Washington University
 AA, Education Grays Harbor College
- Powers, Kristina (Kris)**—Instructor, Hospitality & Tourism
 Management
 MA, Counseling Psychology Lewis and Clark College
 BS, Business Administration Oregon State University

- Prange, Teresa**—Instructor, Accounting
MBA, Business Administration
Maharishi International University
BA, Interdisciplinary Studies
Maharishi International University
Cert., Secretarial Studies
Chemeketa Community College
- Premo, Elaine**—Instructor, Criminal Justice
BS, Corrections
Western Oregon University
BS, Psychology
Western Oregon University
AAS, Criminal Justice—Corrections
Chemeketa Community College
AA, Lower Division—Oregon Transfer
Chemeketa Community College
- Prentice-Craver, Cynthia**—Instructor, Life Science
MS, Education Curriculum & Instruction
Portland State University
BS, Physical Education
Oregon State University
- Prothero, Marilyn**—Instructor, English as a Second Language
M.Ed, Adult Education
Oregon State University
BA, Foreign Languages
University of Oregon
- Protiva, Karen**—Instructor, Life Science
PhD, Human Performance
Oregon State University
MS, Physical Education
George Mason University
BS, Kinesiological Sciences
University of Maryland College
- Rasmussen, Douglas (Doug)**—Instructor, Mathematics
M.Ed, Education
Linfield College
MS, Mathematics: Teacher's Program
University of Oregon
BA, Mathematics
Linfield College
- Reed, Eric**—Instructor, American Sign Language
M.Ed, Early Childhood Education
Lewis and Clark College
BA, Education of Hearing Impaired
University of Tulsa
- Reed, Marilyn Hart**—Coordinator, Apprenticeship and Community Education
BS, Humanities
Oregon State University
- Reeves, David**—Instructor, English as a Second Language
MA, Sociology
University of California—Los Angeles
MA, Linguistics
California State University—Northridge
BS, Economics
University of London
- Regan, Valerie**—Instructor, Speech-Language Pathology Assistant Program
MS, Speech & Hearing Sciences
University of Oregon
BA, Psychology
Southern Connecticut State College
- Reininger, Mandy**—Instructor, Computer Science
MSM, Information Systems Management
Keller Graduate School of Management
BA, Communications
Sunny college at Genesco
CED, Networking Systems
University of Phoenix
- Reyna, Lupe**—Coordinator, Financial Aid
BBA, Business Administration
Gonzaga University
- Richardson, Steven (Steve)**—Instructor, Composition & Literature
MFA, Literature: Creative Writing
University of Oregon
BA, Literature: Creative Writing
University of California—Santa Cruz
- Roberts, Cheryl**—President/CEO, Chemeketa Community College
EdD, Educational Leadership
Seattle University
MA, Education: Special Services
Ohio State University
BA, Psychology
Seattle University
- Rogers, Timothy**—Chief Operations Officer
BS, Administration of Justice
Portland State University
- Rollins, Bryan**—Instructor, Adult Basic Education
MA, TESOL
Portland State University
BA, Spanish
Western Oregon University
- Rozin, Miriam**—Director, Business Services
MA, Education: Policy Foundation & Administration
Portland State University
BS, Business
Western Oregon University
- Rupert, Jill**—Instructor, English
PhD, English
Tulane University of Louisiana
MA, English
Tulane University of Louisiana
BA, English
Whitman College
- Sadouk, Jennifer**—Instructor, Learning Center-Dallas Campus
MA, Continuing and College Education
Western Washington University
TESOL Certificate
Western Washington University
BA, History
University of Texas at Tyler
AA, Transfer Degree
Trinity Valley Community College
- Salinas-Oliveros, Rebecca**—Cooperative Work Experience Coordinator
MS, Education: Policy Foundation & Administration
Portland State University
BS, Human Development & Family Science
Oregon State University
- Sathrum, Malia**—Dean, Social Science, Business and Human Services
EdD, Education
Oregon State University
M.Ed, Master Teacher
Central Washington University
BA, Special Education
Central Washington University
AA, Liberal Arts
Clark College
- Schellenberg, Kellie**—Supervisor, Distance Education
BA, Psychology
University of Regina
- Schmitt, Loraine**—Dean, Distance Learning and Academic Technology
M.Ed, Adult Education
Oregon State University
BS, Journalism/News: Editorial
University of Kansas Main Campus
BS, Journalism/Photo Journalism
University of Kansas Main Campus
- Schmitz, Diane**—Coordinator, Grants Development
MA, English Composition and Rhetoric
Washington State University
BA, English
Washington State University

- Schnider, Sheldon**—Instructor, CAD/CAM
AA, Manufacturing Engineering Technologies
Chemeketa Community College
- Schramm, Jennifer**—Instructor, Life Science
PhD, Biology: Plant University of California—Berkeley
BA, Biology Knox College
- Sekafetz, Charles (Chuck)**—Instructor, Electronics
AAS, Electronic Engineering
Chemeketa Community College
- Sessions, Patricia (Patti)**—Instructor, Business
Technology
PMSC, Computers in Education University of Oregon
MS, Business Education Montana State University
BS, Business Montana State University
- Skirvin, Charles (Chuck)**—Counselor
MED, Education Oregon State University
BS, General Science Oregon State University
- Slemenda, Steven (Steve)**—Instructor, Composition/
Literature
MA, English Portland State University
BA, English Portland State University
- Smith, Craig**—College Support Officer
MBA, Management Willamette University
JD, Law Willamette University
BA, Business Administration
Northwest Nazarene College
- Smith, Paul**—Instructor, Nursing
MN, Nursing Washington State University
BSN, Nursing University of Phoenix
AAS, Nursing Southern Union State Junior College
- Solario, Christopher (Chris)**—Counselor
MS, Sociology Portland State University
BA, Sociology Western Oregon University
AA, Liberal Studies Rio Hondo College
- Sprague, Alice**—Assistant Director, Human Resources
MPA, Master of Public Administration
Portland State University
BS, Social Sciences Portland State University
AA, Lower Division Transfer
Chemeketa Community College
- Steiner, Marcia**—Instructor, GED Options
M.Ed, Education University of Portland
BA, Secondary Teaching Credential
Pepperdine University
BA, Home Economics Chapman University
CERT, Oregon Teacher's Certificate
Western Oregon University
- Stevens, Karen**—Counselor
MSW, Social Work Portland State University
BS, Psychology Western Oregon University
AAOT, Lower Division Transfer
Chemeketa Community College
- Stoops, Lynn (Renee)**—Instructor, Phytotechnology
MS, Plant Science University of Rhode Island
BA, Biology Brown University
- Sullivan, Geraldene**—Instructor, Nursing
MED, Early Childhood Education Linfield College
MSN/ED, Nursing University of Phoenix
AS, Nursing Thornton Community College
BS, Early Childhood Education Linfield College
- Sunderland, David**—Instructor, Farm Business
Management
MS, Agriculture Economics New Mexico State University
BS, Animal Science Brigham Young University
- Tardiff, Bryan**—Instructor, Mathematics
MS, Mathematics Oregon State University
BS, Mathematics Oregon State University
- Taylor, R**—Instructor, Early Childhood Education
PhDc, Education Leadership, Curriculum & Instruction
Portland State University
MA, Early Childhood Education Concordia College
BS, Psychology-Family Studies Corban College
AAS, Early Childhood Education
Chemeketa Community College
- Teixeira, Denise**—Instructor, Accounting Programs
MBA, Business Administration University of Hartford
BS, Business Management University of Maryland
AAS, Accounting Northern Virginia Community College
- TenEyck, Lorna**—Instructor, Mathematics
MS, Education Suny College at New Paltz
BA, Anthropology Suny College at Albany
- Terpin, Mark**—Instructor, English as a Second Language
BA, Linguistics University of Oregon
- Thomas, Reine**—Dean, Dallas Center
EdDC, Community College Leadership
Oregon State University
MEd, Education Eastern Oregon University
BS, Education Oregon State University
- Topping, Robert**—Coordinating Director,
Workforce Development
EDD, Doctor of Education Oregon State University
M.Ed, Adult Education Oregon State University
BS, Social Sciences Portland State University
AAS, Vocational Education Portland Community College
- Trabue, Jeremy**—Instructor, English
MA, Psychology State University of West Georgia
MA, English State University of West Georgia
BA, Humanities New College of California
- Trattner, Tamara**—Instructor, Early Childhood Education
MA, Human Development Pacific Oaks College
BA, Human Development Pacific Oaks College
AA, Early Childhood Education
Chemeketa Community College
- Troupe, Count**—Instructor, Adult Basic Education
MA, Educational Administration
California State University-Los Angeles
BA, Speech Communication
California State University-Long Beach
AA, Humanities Cerritos College
- Trousdale, Deborah**—Instructor, Art History
MA, Art History University of Oregon
BA, Dramatic Art University of California

- Tuss, Lana**—Instructor, Accounting
 MM, Management Southern Oregon University
 BS, Business Administration-Accounting Portland State University
- Urban, Wanda**—Instructor, Human Services
 MS, Counseling University of Oregon
 BA, Special Education University of Oregon
- Ure, Douglas**—Instructor, Life Science
 MS, Zoology Oregon State University
 BA, Botany University of Montana
 BA, Zoology University of Montana
- Valdivia, Armandina (Dina)**—Instructor/Coordinator,
 English as a Second Language/Adult Basic Education
 M.Ed, Adult Education Oregon State University
 BA, Art Oregon State University
- VanHouten, Debra**—Instructor, Life Science
 MS, Physiology University of California-San Francisco
 BS, Animal Science California Polytechnic State University
- VanSlyke, Timothy**—Instructor, Multi-Media Language
 Center
 MSE, Information Technology Western Oregon University
 BA, Arts & Letters Portland State University
 CERT., Teaching English as a Second Language Portland State University
- VanStavern, Jan**—Instructor, Composition/Literature
 PhD, English University of California-Davis
 MA, English University of California-Davis
 BA, Creative Writing Oberlin College
- Veldhuisen, Kathleen**—Reference Librarian
 MLS, Library Science Rutgers-The State University
 BA, English Rutgers-The State University
- Villegas, Elias**—Dean, Woodburn Center
 MPA, Public Administration California State University-Chico
 BS, International Business California State University-Chico
 BS, Spanish California State University-Chico
 AA, Accounting Butte College
- Villwock, Cynthia**—Instructor, Physical Science
 MS, Chemistry Oregon State University
 BS, Engineering: Civil Oregon State University
- Vollmar, Lorene**—Associate Dean, Health Sciences
 MS, Community Health Administration & Wellness California College for Health Sciences
 BS, Social & Behavioral Sciences Linfield College
 Cert., Dental Assisting Chemeketa Community College
- Ward, HJ (Jill)**—Dean, Student Services
 MS, Education: Counseling Western Oregon University
 BA, Oral Communications: Speech Pathology & Audiology Baylor University
- Watkins, Carmen**—Instructor, Mechanical Design
 BS, Mechanical Engineering University of Alaska Fairbanks
- Watson, Barney**—Instructor, Enology
 Ph.D Candidate, Food Sciences and Technologies Oregon State University
 MS, Food Sciences and Technologies University of California-Davis
 BA, Biochemistry University of California
- Wenzig, Theresa (Terri)**—Instructor, Nursing
 MSN, Nursing University of Phoenix
 BSN, Nursing Lewis-Clark State College
 AS, Nursing North Idaho College
- White, Roger**—Instructor, Electronics
 AS, Electronic Engineering Chemeketa Community College
- Whitney, John**—Instructor, English as a Second Language
 MA, English Northern Arizona University
 BS, English Northern Arizona University
- Whitton, Louanne**—Instructor, Reading and Study Skills
 M.Ed, Reading Specialist Eastern Washington University
 BA, Psychology Gonzaga University
- Williams, B. Patrick**—Instructor, Philosophy/Religion
 MAIS, Interdisciplinary Studies Oregon State University
 BS, History Oregon State University
 BS, Philosophy Oregon State University
- Willis, Monica**—Instructor, Adult Basic Education
 M.Ed, Education University of Portland
 BA, International Studies Willamette University
 BA, Spanish Willamette University
- Wolfe, Steven (Steve)**—Instructor, Geography
 MA, Geography University of Missouri—Columbia
 BS, Geography Oregon State University
 AA, Geography Central Oregon Community College
- Wood, Josie**—Instructor, Speech
 MAIS, Interdisciplinary Studies Oregon State University
 BA, Speech Communication Western Oregon University
 AA, Transfer Coursework Central Oregon Community College
- Wood, Rhonda**—Instructor, Emergency Medical
 Technology
 BS, Nursing California State University
 AA, Nursing: Registered Fullerton College
- Wu, Jack**—Instructor, Accounting/Business Management
 MBA, Business Administration-Finance University of Connecticut
- Yancey, Theresa**—Reference Librarian
 MLIF, Library Science University of Washington

Student Rights and Responsibilities

The Student Rights and Responsibilities is reviewed and revised as needed each summer. For the most current version of this document, please visit: <http://www.chemeketa.edu/aboutchemeketa/collegelife/studentrights/rights.html>

Students are advised to read and understand this document. By accepting admission to Chemeketa Community College, students enjoy the rights and privileges as outlined here. To help ensure a positive learning environment, students have the responsibility to conduct themselves in accordance with standards as set forth in this policy.

I. **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.

II. **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:

A. Practice personal and educational integrity.

1. Students shall practice academic honesty by not cheating, plagiarizing, or misrepresenting their coursework in any way.
2. Students shall not misuse college documents, library or computer resources, student records, or identification cards.

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

1. Students shall participate in classroom assignments and discussions, and attend classes regularly.
2. Students shall not disrupt the teaching/learning process.

C. Discourage bigotry and respect the diversity and dignity of all persons.

1. Students shall not participate in physical or verbal abuse of any individual.
2. Students are encouraged to demonstrate respect for all persons.

D. Respect the rights and property of all persons.

1. Students shall do nothing to impede another's right to move about freely, express him/herself, or enjoy privacy.
2. Students shall not destroy, deface or misuse property belonging to an individual or the college

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

1. Students have an ethical obligation to confront, challenge or report destructive or abusive behavior.
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.
3. Students shall not abuse alcohol or other drugs.
4. Students shall abide by federal, state, and local laws.

III. **Student Rights** Each student in the college community has certain rights that accompany his/her responsibili-

ties. Those rights are to be protected by both students and staff regardless of an individual's race, gender, religion, color, creed, disability, sexual orientation, political affiliation, national origin, ancestry or age. The college will:

A. Provide access to education and campus facilities.

1. The college shall be open to applicants who are qualified according to current admission requirements within the limits of its resources and facilities.
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. Students have the right to participate in evaluations of programs, course content and educational objectives.

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. (See Student Records Policy and Guidelines.)

4. Students, official clubs and organizations may use available college facilities according to college policy and procedures.

B. Assure the protection of confidential student records and information.

1. Student records and information are protected and governed by federal and state laws and the college's Student Records Policy and Guidelines.
2. Information about student views, beliefs, private activities, and political associations that is acquired or learned by college employees in the course of work is to be treated with professional judgment and confidentiality.
3. Professional evaluations and references about the ability and character of students may be provided under appropriate circumstances.

C. Provide opportunities for association and preserve freedom of expression.

1. Policy and procedures governing clubs and organizations shall be established by the college. Students may express their views on college policy or matters of general interest, and may support causes by any orderly means that do not disrupt the operation of the college.
2. 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. 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.
4. 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.

5. Student publications shall state that the opinions expressed are not necessarily those of the college or student body.

IV. Conflict Resolution Process If a student has a complaint about a staff member or another student, the steps outlined in this section will summarize the process. Members of the Chemeketa Community College community involved in a dispute are encouraged to first seek resolution with the individual with whom the conflict exists. Chemeketa Community College emphasizes the importance of direct, courteous, and respectful communication to informally resolve concerns and complaints. However, if resolution through person-to-person communication is not possible, there are several informal and, if necessary, formal processes to assist with conflict resolution.

Please note: *If the conflict involves alleged discrimination or harassment by a student or staff member, a different reporting process than what is listed in this section is followed. If you suspect discrimination or harassment, the College's Affirmative Action Officer or the Dean of Students should be contacted immediately. Please refer to section 8.0 in this document for more information.*

Each of the dispute types listed here in sections 4.1-4.5, shall be subject to a specific conflict resolution process:

A. Grade Appeals. Students are encouraged to maintain frank and open communication concerning their progress and performance throughout the duration of the course.

1. When a student believes that he or she has been given an inappropriate grade, the student will speak directly with the instructor no later than four (4) weeks after the end of the academic term of the disputed grade.
2. If satisfaction is not received with the instructor, the student may appeal no later than six (6) weeks after the end of the academic term of the dispute.
 - a. The student will submit a "Grade Appeal" form. These forms are available in the Dean of Students office and online at: <http://www.chemeketa.edu/shared/forms/gradeappeal.pdf>.
 - b. The form should be submitted to the Dean of Students office, where it will be forwarded to the appropriate supervisor.
 - c. The supervisor will review both the instructor's and student's facts related to the grade appeal (tests, papers, reports, participation, etc).
 - d. At the end of the review, the supervisor will contact the student with their decision. The supervisor's decision shall be final and will be forwarded in writing to the instructor and student within thirty (30) calendar days of the receipt of the "Grade Appeal" form.
 - e. The supervisor will keep a copy of the appeal for one year.

B. Academic Honesty. When an apparent violation of academic honesty occurs, the faculty member works directly with the student according to the Chemeketa Community College Academic Honesty Policy and Procedure 5020. The faculty member may resolve the matter by determining an appropriate course of action.

1. If the student contests the faculty member's decision, a meeting with the faculty member's supervisor may be requested.
2. The purpose of the meeting is for the student to hear the charges and present his/her side of the case.
3. The supervisor determines if the action recommended by the faculty member is appropriate.
4. If the student contests the supervisor's decision, the student may submit a written appeal to the Dean of Instruction.
5. The Dean of Instruction considers the appeal and responds. The decision of the dean is final.
6. Further consequences may be imposed by the Dean of Students in cases of grievous violations of academic honesty or for a continued pattern of violations.
7. Consequences for violations of academic dishonesty:
 - a. If a student is found guilty of violating academic dishonesty, any one or a combination of the following consequences may be imposed by the faculty member.
 - 1) Oral or written disciplinary admonition and warning.
 - 2) Temporary exclusion from class, lab, or clinical, not to exceed one class session.
 - 3) A grade of "F" or a zero for the assignment, project, or examination
 - b. The following consequence may be imposed by the faculty member after an inquiry conducted by their supervisor:
 - 1) Program-based academic probation.
 - 2) A lower grade or a grade of "F" or "No Pass" for the course, overriding a student's ability to withdraw from the course (in some programs, this may result in a student's removal from the program).
 - 3) Requirement to attend an Academic Honesty seminar.
 - c. The following consequences may be imposed by the Dean of Students in cases of grievous acts of dishonesty or for a continued pattern of dishonesty:
 - 1) Disciplinary admonition and warning.
 - 2) Disciplinary probation with or without the loss of privileges for a definite period of time. The violation of the terms of the disciplinary probation or the breaking of any college rule during the probation period may be grounds for suspension or expulsion from the college.
 - 3) Suspension from Chemeketa Community College for a definite period of time.
 - 4) Expulsion from Chemeketa Community College.

8. Some professional-technical areas have program-specific student handbooks, and in these handbooks there may be further explanation of their unique policies and consequences.

C. Charges of Student Misconduct by Staff or Student.

These complaints would include any violation of section 2.0, Code of Behavior of this document (except for issues involving Academic Honesty, which are covered in section 4.2). Students and staff are encouraged to deal with student misconduct on an informal basis whenever possible. However, when the misconduct rises to a level that informal resolution cannot be reached, the appropriate staff or student may file a complaint.

1. The appropriate staff or student will file a "Student Misconduct Complaint" form with the Dean of Students. These forms are available in the Dean of Students office and online at: <http://www.chemeketa.edu/shared/forms/studentmisconduct.pdf>.
2. The student whom the complaint is filed against will be notified in writing of the charges and the maximum penalty which might result from consideration of the complaint. (See Section 5.0, #2 Types of Disciplinary Action)
3. The student has ten (10) working days from the notification date of the complaint to respond.
 - a. If the student fails to respond, the dean will decide next steps and the student forfeits the right to appeal the decision.
4. After review of the evidence and interviewing of appropriate persons, the Dean of Students or designee may take one of the following actions:
 - a. Terminate the proceedings, thereby exonerating the student;
 - b. Dismiss the complaint after appropriate counseling and advice to the student;
 - c. Impose an appropriate sanction in accordance with section 5.0
5. The student will be notified in writing of the decision within thirty (30) calendar days of the student's response to the complaint.
6. The decision of the Dean of Students or designee shall be final and not subject to further appeal except in the case of expulsion.
 - a. When expulsion is recommended by the Dean of Students, the student may appeal to the college's Ombudsperson/Executive Dean.
 - b. The Ombudsperson/Executive Dean may convene the College Appeals Committee for assistance in arriving at a final decision.
 - c. The Ombudsperson/Executive Dean will issue a written decision to the student within thirty (30) calendar days of the hearing. A copy of the decision will be given to the Dean of Students.
 - d. The decision of the Ombudsperson/Executive Dean will be final and not subject to further appeal.

D. Charges of Staff Misconduct. Complaints in this dispute type refer to perceived violation of law or college policy or section 3.0, Student Rights, of this document. These complaints, made by a student, do not include grade issues. Except for sexual harassment and discrimination complaints, the faculty and staff members of the College are subject to collective bargaining agreements and formal disciplinary rules, which are beyond the scope of this document. By law, certain procedures must be followed before discipline can be imposed. For this reason, complaints concerning the conduct of a faculty or staff member shall be made to the faculty and/or staff member's supervisor and shall be subject to dispute resolution procedures as the supervisor determines appropriate. If the student believes that the supervisor has not resolved the issue, the student may meet with the supervisor's dean.

E. Student Complaints Alleging Violation of a College Rule, Policy, or Procedure. This type of complaint is used when a student believes that the college, as a matter of practice, is violating its own rules, policies, or procedures.

1. The student will submit a complaint in writing to the Dean of Students.

The complaint will include:

 - a. The student's name
 - b. The nature of the complaint along with all documents, policies, procedures and related material that may be necessary for college review of the complaint.
2. Upon receipt of the complaint, the Dean of Students will schedule a meeting with the student filing the complaint. At that meeting, the Dean of Students shall attempt a resolution of the complaint.
3. In the event that the resolution proposed by the Dean of Students is not acceptable to the student, the student may make a secondary appeal to the Ombudsperson/Executive Dean. Upon receipt of the student's complaint, the Ombudsperson/Executive Dean shall meet with the student to discuss the complaint.
 - a. The Ombudsperson/Executive Dean may convene the College Appeals Committee for assistance in arriving at a final decision.
 - b. The Ombudsperson/Executive Dean will issue a written decision to the student within thirty (30) calendar days of the hearing. A copy of the decision will be given to the Dean of Students.
 - c. The decision of the Ombudsperson/Executive Dean will be final and not subject to further appeal.

4. If a student needs further information regarding the conflict resolution process, they are encouraged to contact the Assistant to the Dean of Students.

V. Student Discipline. Disciplinary action may be imposed upon a student by college staff for misconduct or for violation of law and/or college rules and policies.

- A. Disciplinary action may be imposed upon a student by college staff for misconduct or for violation of law and/or college rules and policies.
- B. Types of disciplinary action that 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 the function. If an employee deems that the language, manner, or physical behavior of a student violates an atmosphere conducive to learning, safety, the orderly administration of the college, or the rights of the members of the college community, the employee may request the student to leave. Reinstatement may be sought in accordance with the Student Rights and Responsibilities document. (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 Students may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.
- C. The Dean of Students may take any disciplinary action deemed appropriate for student behaviors which are considered destructive to the educational environment of the college.

VI. College Appeals Process

- A. The Ombudsperson/Executive Dean may decide, at his/her discretion, to take any issue involving student misconduct to a hearing before the College Appeals Committee. A hearing before the College Appeals Committee occurs in situations that may require a summary decision on an unresolved conflict or may result in the permanent expulsion of a student.
- B. The college Ombudsperson/Executive Dean, in consultation with the Dean of Students, 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.

- C. 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 Students and is available for examination by any student upon request.
- D. A hearing shall be held not less than three nor more than twenty (20) working days after the filing of the statement of violation with the Dean of Students. For reasonable cause, the College Appeals Committee may grant a postponement.
- E. The student may be accompanied by counsel for advising purposes only; however, counsel will not participate directly in the hearing.
- F. 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 Committee shall review the evidence and prescribe the appropriate action.

VII. Definitions

- A. **College** shall mean Chemeketa Community College.
- B. **College Board** shall mean the Board of Education.
- C. **Staff** shall mean any employee of the college, both full-time and part-time, management, faculty, and classified. Staff rights and responsibilities shall be provided by college policy, procedure and collective bargaining agreements. Staff is expected to intervene and facilitate adherence to the Student Rights and Responsibilities document.
- D. **Student** shall mean any person currently enrolled in a college class.
- E. **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 Executive Dean for clarification of their rights and responsibilities.
- F. **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.

VIII. Harassment Issues. Chemeketa is committed to providing everyone with an environment focused on learning and growth, free of discrimination or harassment. Such behaviors will not be tolerated and are against college policies.

- A. Every member of the college community, students and employees, is expected to keep Chemeketa's work and educational environment free of any conduct that causes intimidation, hostility or discrimination.
- B. Given these goals, the college is making every effort to notify students and employees of their rights and responsibilities under the college's Harassment/Discrimination, Sexual Harassment, Respectful Workplace, and Consensual Relationships Policies and Procedures.

C. Definition of harassment: Harassment is any verbal, visual or physical behavior reasonably perceived by the receiver as unwelcome or offensive and refers in a demeaning way to a person's race, religion, color, gender, marital status, national origin, age, sexual orientation, disability, pregnancy and related conditions, family relationship, veterans status, or cigarette usage; creates a hostile or adverse work or educational environment; and subjects employees or students to different terms or conditions based on the characteristics listed above.

D. Examples of harassment: May include, but are not limited to, comments, slurs, jokes, symbols, innuendoes, cartoons, pranks, touch or other forms of physical harassment. An occurrence does not have to be considered "derogatory" for harassment to have happened.

E. Types of Harassment:

1. **Sexual Harassment:** sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature. The courts have defined two principle types of sexual harassment:
 - a. when a person in a position of power misuses his or her authority, and
 - b. when a hostile environment is created.
2. **Gender-Based Harassment:** behavior that degrades, denigrates, ridicules, or is verbally or physically abusive to an employee or student because of his or her gender.
3. **Racial Harassment:** behavior that degrades, denigrates, ridicules or is verbally or physically abusive to an employee or student because of his or her perceived race.
4. **Harassment Based on National Origin:** behavior that degrades, denigrates, ridicules or is verbally or physically abusive to an employee or student because of his or her perceived ancestry, heritage or cultural identification.
5. **Sexual Orientation Harassment:** behavior that degrades, denigrates, ridicules, or is verbally or physically abusive to an employee or student because of his or her sexual orientation.

F. Consensual Relationships Statement. The college has a responsibility to promote an atmosphere of professionalism, respect, and trust and to prevent any appearance of impropriety. The decision-making processes must be seen by employees and students as fair and without favoritism. A consensual relationship is a close personal relationship of a romantic or sexual nature between willing participants who both are of legal age and possess legal capacity. College Policy and Procedure 1753 addresses consensual relationships between students and college employees and supervisors and employees. Employees involved in a consensual relationship with another employee or student are prohibited from supervising or making grading decisions related to that person. In consensual relationships involving employees, or employees and students, it is the responsibility of the person with the most power to make explicit arrangements to assure that the decision-making processes will be fair and without favoritism. Employees will work with their supervisor in making arrangements to comply with this policy

G. Non-retaliation Statement. It is critical that everyone feel free to come forward with complaints or concerns regarding inappropriate conduct. Retaliation against any person for making a complaint or for providing information concerning a complaint is prohibited. Examples of retaliation may include, but are not limited to, such actions as expulsion, suspension or termination.

G. Complaint Process for Harassment Issues

Step 1: Informal Complaint Procedure. If appropriate and safe, anyone alleging a violation should meet with the person and ask them to stop the offensive behavior. You might also write to the person, stating that you view the behavior as unlawful harassment and that you will report these actions if to continue. Be sure to keep a copy.

OR

Consult with a member of the Harassment Network to explore your options and begin to keep a record of the harassment: track dates, times, places and statements. See list of Harassment Network members below.

OR

If the harassment involves a Chemeketa employee, students should contact the college's Human Resources Director/Affirmative Action Officer for assistance. If the harassment involves another student, students should contact the Dean of Students.

Step 2: Formal Complaint Procedure. You may file a complaint with:

1. Human Resources Director/Affirmative Action Officer;
2. The Executive Dean;
3. The Dean of Students;
4. The Director of College Safety & Risk Management.

Formal complaints should be made within 180 days of the action, but you may file a complaint at any time.

If warranted, the Human Resources Director/Affirmative Action Officer or their designee will conduct an investigation or may use an outside investigator to do so.

Please Note: If you feel your personal safety is at risk or a crime is being committed, contact Public Safety immediately, 503.399.5023.

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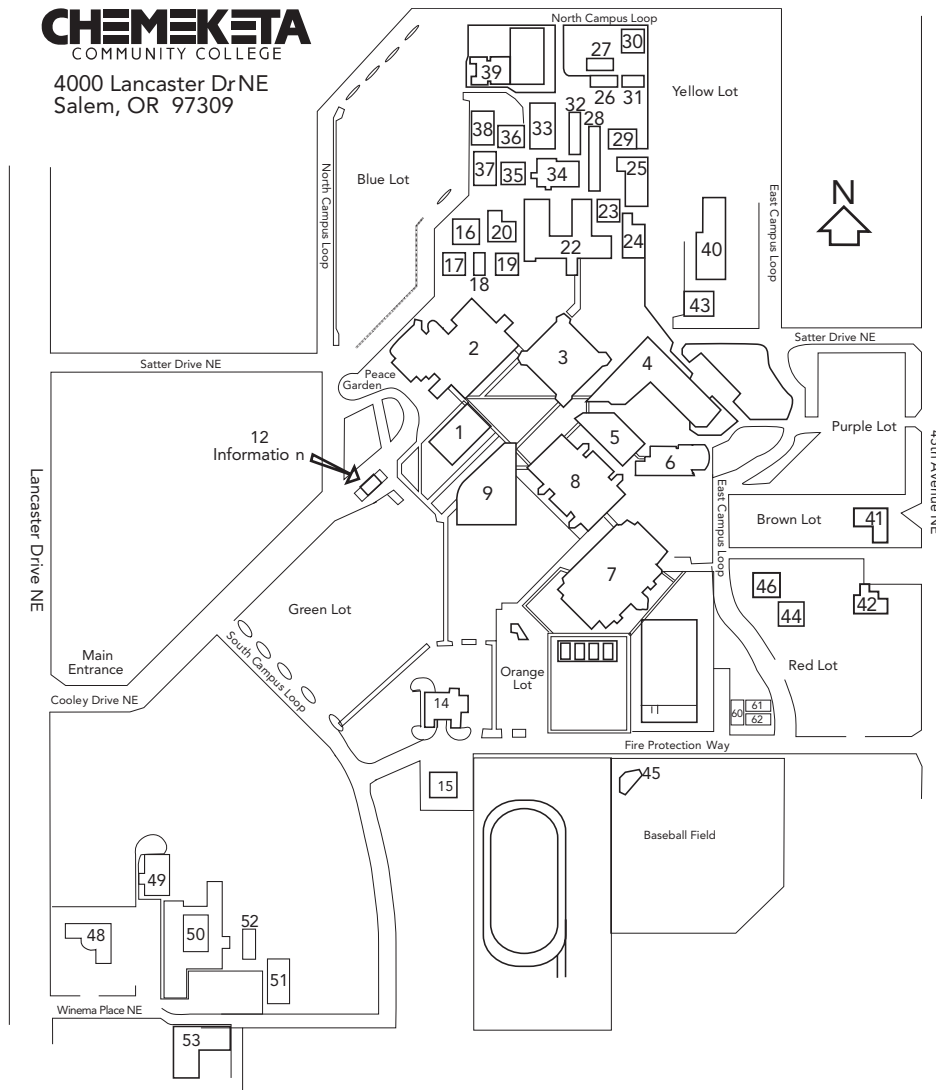
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Campus Map Legend

- | | | | | | |
|---|--|-------|---|----|--|
| 1 | Bookstore; Faculty Offices | 9 | Student Services: Library; Writing Center; Distance Education & Academic Technology. Other Offices/Services: Television Studio; Teleconferencing Facilities; Opportunity Center; Curriculum Resource Center; Regional Library Service; Instructional Offices; Classrooms; Evening & Weekend Programs. | 33 | Employee Training Facility; Northwest Innovations; Facilities Capital Projects |
| 2 | Student Services: Advising & Counseling; Enrollment Center, Business Office; Financial Aid; Tutoring Center; Testing Services; Food Court; Convenience Store; Student Retention and College Life; Disability Services; Occupational Skills Training; TRiO, Upward Bound, CAMP and Talent Search. Other Offices/Services: Public Safety; President's Office; Human Resources; College Support Services; Public Information, Marketing, & Student Recruitment; Grants; Planetarium; Welcome Center | 12 | Information Booth | 34 | Meeting Rooms and Catering Kitchen |
| 3 | Student Services: Art Gallery; Math Learning Center; Classrooms. Offices: Academic Services; Community Education; Extended Learning | 14/15 | Fire Station; Burn Tower | 35 | Classrooms |
| 4 | Crossroads Café; Professional-Technical Classrooms & Labs; Visual Communications | 16 | High School Equivalency Program (HEP) | 36 | Classrooms |
| 5 | Art Classrooms; Professional-Technical Classrooms & Labs | 19 | Classrooms | 37 | Faculty Offices |
| 6 | Student Computer Labs; Auditorium | 20 | Workforce Integration Department | 38 | Faculty Offices |
| 7 | Gymnasium, Physical Education; Classrooms | 20A | Jobs Program | 39 | Child Development Center |
| 8 | Classrooms & Labs | 22 | Developmental Education Classrooms & Labs; Transition Center; Information Technology | 40 | Physical Plant Operations |
| | | 23 | Classrooms | 41 | Classrooms |
| | | 24 | Machine Shop | 42 | Paint Shop |
| | | 25 | Welding Shop | 43 | Copy Center; Mail Room; Recycling |
| | | 26 | Classrooms A & B | 45 | Activity Field |
| | | 27 | Classrooms A & B | 46 | Greenhouse |
| | | 28 | Classrooms A-F | 48 | MaPS Credit Union; Winema Market & Deli; Meeting Rooms |
| | | 29 | Hospitality & Tourism Management; Classrooms | 49 | Mid-Willamette Education Consortium, Youth GED Options |
| | | 30 | Classrooms | 50 | Early College High School |
| | | 31 | Classrooms | 51 | Winema High School; Apprenticeship Programs |
| | | 32 | Classrooms A-F | 52 | Classrooms |
| | | | | 53 | Department of Human Services |
| | | | | 60 | Natural Resources |
| | | | | 61 | Classrooms |
| | | | | 62 | Classrooms |

Program Choices

Select one of the following programs of study:

Students younger than 18 who do not have a high school diploma or GED must complete the Underage Consent Form. Contact the Admissions office at 503.399.5006 for information.

Personal Enrichment (non-degree seeking)

PER1 Students 18 or older with a high school diploma or GED certificate

Career and 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.

Associate of Applied Science (AAS)

PRAC (AAS) Accounting	PRCS (CERT) Computer Systems and Information Technology—Database Developer	PRHS (AAS) Human Services—Addiction Studies
PRAC (CERT) Accounting	PRCS (CERT) Computer Systems and Information Technology—Web Developer	PRHS (AAS) Human Services—Social Services
PRAC (CERT) Accounting—Tax Preparation	PRCJ (AAS) Criminal Justice	PRJJ (CERT) Juvenile Corrections
*APR (AAS) Apprenticeship—Construction Trades, General: HVAC/R	PRCJ (CERT) Criminal Justice—Basic Corrections	PRJJ (AAS) Juvenile Justice
*APR (CERT) Apprenticeship—Construction Trades, General: HVAC/R	PRCJ (CERT) Criminal Justice—Basic Law Enforcement	PRMC (AAS) Machining Tech—CAD/CAM
*APR (AAS) Apprenticeship—Construction Trades, General: Plumber	PRCJ (CERT) Criminal Justice—Basic Law Enforcement	PRMC (CERT) Machining Tech—CAM Fundamentals
*APR (CERT) Apprenticeship—Construction Trades, General: Plumber	PRDA (CERT) Dental Assisting	PRMC (CERT) Machining Tech—CNC Operator
*APR (AAS) Apprenticeship—Construction Trades, General: Sheet Metal	PRDT (CERT) Drafting Technology—Architectural Drafting	PRMC (CERT) Machining Tech—Manual Machine Operator
*APR (CERT) Apprenticeship—Construction Trades, General: Sheet Metal	PRDT (AAS) Drafting Technology—CAD	PRBM (AAS) Management
*APR (CERT) Apprenticeship—Construction Trades, General: Sheet Metal	PRDT (CERT) Drafting Technology—CAD	(CERT) Management—Procurement Management
*APR (AAS) Apprenticeship—Electrician Apprenticeship Technologies: General Electrician (Inside Electrician)	PRDT (CERT) Drafting Technology—Mechanical Drafting	OC01 (CERT) Occupational Skills Training
*APR (CERT) Apprenticeship—Electrician Apprenticeship Technologies: General Electrician (Inside Electrician)	PREC (AAS) Early Childhood Education	PRPH (AAS) Pharmacy Management
*APR (CERT) Apprenticeship—Electrician Apprenticeship Technologies: General Electrician (Inside Electrician)	PREC (CERT) Early Childhood Education	PRPH (CERT) Pharmacy Technician
PRAT (AAS) Automotive Technology	*PREC (CERT) Early Childhood Education—Infant/Toddler Career Pathway	PRNU Pre-Nursing
PRAT (CERT) Automotive Technology—Body Repair	*PREC (CERT) Early Childhood Education—Preschool Career Pathway	PRRM (CERT) Retail Management
*PRAT (CERT) Automotive Technology—Entry Level Tech	PREE (AAS) Electronics Technologies—Computer Electronics	PRSL (AAS) Speech-Language Pathology Assistant
PRAT (CERT) Automotive Technology—Machining	PREE (AAS) Electronics Technologies—Electronic Engineering Technician	PRSP (CERT) Speech-Language Pathology Assistant
PRMT (CERT) Basic Manufacturing Technician Statewide	PRIE (AAS) Electronics Technologies—Industrial Electronics	PRTM (AAS) Tourism and Travel Systems Management
LD03 (AAS) Building Inspection Technology	(AAS) Electronics Technologies—Process Control Technology	PRTM (CERT) Tourism and Travel Systems Management
PRBT (AAS) Business Technology—Accounting Administrative Assistant	(AAS) Electronics Technologies—Renewable Energy Management	PRTM (CERT) Tourism and Travel Systems Management—Destination Marketing
PRBT (AAS) Business Technology—Administrative Office Professional	(CERT) Electronics Technologies—Electronics	PRVC (AAS) Graphic Design
PRBT (CERT) Business Technology—Business Software	(CERT) Electronics Technologies—Process Control	(AASO) Graphic Design—Interactive Media
PRBT (CERT) Business Technology—Business Technology	ES03 (AAS) Emergency Medical Technology—Paramedic	PRVM (AAS) Vineyard Management
PRBT (AAS) Business Technology—Medical Administrative Assistant	*EST1 (CERT) Employment Skills Training	PRVO (CERT) Vineyard Operations
PRBT (CERT) Business Technology—Office Fundamentals	FP06 (AAS) Fire Protection Tech.—Fire Prevention	WD05 (CERT) Welding Technology—Welding
PRCV (CERT) Geomatics and Engineering Technology—Survey Technology	LD03 (AAS) Fire Protection Tech.—Fire Suppression	WD04 (AAS) Welding technology—Welding Fabrication
(AAS) Computer Information Systems—Health Informatics	FP08 (CERT) Fire Protection Tech.—Fire Services Supervisor & Mgmt.	PRWM (AAS) Winemaking
PRCS (AAS) Computer Systems and Information Technology	PRHM (AAS) Health Services Management	PRWM (AAS) Wine Marketing
PRCS (CERT) Computer Systems and Information Technology—Computer Programming	(CERT) Health Services Management—Health Information Technology	
PRCS (CERT) Computer Systems and Information Technology—Network Management and Systems Security	(CERT) Health Services Management—Medical Coding and Insurance Billing	
PRCS (CERT) Computer Systems and Information Technology—Computer Support Specialist	HS06 (17 or under) High School Completion	
PRCS (CERT) Computer Systems and Information Technology—Computer Systems Administration	HS07 (18 or older) High School Completion	
	(CERT) Hemodialysis Technician	
	PRHR (AAS) Horticulture	
	(AAS) Horticulture—Phytotechnology	
	PRHO (AAS) Hospitality Management	
	PRHO (CERT) Hospitality Management	
	PRHO (CERT) Hospitality Management—Event Management	
	PRHS (CERT) Human Services—Addiction Counselor Certificate Preparation	

Lower division transfer

LDC-BUSINESS

LD18 (ASOT-Business) Associate of Science Oregon Transfer-Business

LDC-GENERAL STUDIES

LD03 (AGS) Associate of General Studies Exploratory

LD02 (AAOT) Associate of Arts Oregon Transfer Undecided Majors Transfer

LD18 (AS) Associate of Science

***OTM** Oregon Transfer Module (OTM)

*These programs are not eligible for financial aid assistance. If applying for financial aid and you need help selecting a program please contact the Admissions office at 503.399.5006. For other financial aid inquiries please contact the Financial Aid office at 503.399.5018.

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Chemeketa Community College values access and diversity which is affirmed by how we care, collaborate, and innovate with each other and the community.