

2015–2016 Chemeketa
Community College Catalog



**Chemeketa Community College Catalog
2015–2016**



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	
Career Center.....	503.399.5026
careercenter@chemeketa.edu	
College Life	503.399.5116
collegelife@chemeketa.edu	
Community Education.....	503.399.4949
CEInfo@chemeketa.edu	
Cooperative Work Experience	503.399.5028
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Copy Center.....	503.399.5166
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Disability Services Voice and TTY Access.....	503.399.5192
disability@chemeketa.edu	
Distance Education.....	503.399.7873
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Financial Aid.....	503.399.5018
financialaid@chemeketa.edu	
Food Services.....	503.399.5180
Foundation	503.365.4747
foundation@chemeketa.edu	
Graduation Services	503.399.6588
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Human Resources.....	503.399.5009
humanresources@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 Center.....	503.399.5043
Testing Services	503.399.6556
testing@chemeketa.edu	
Transcript evaluation.....	503.399.6588
evaluation@chemeketa.edu	
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	
Yamhill Valley Campus Library and Tutoring	503.316.3238

Chemeketa Locations

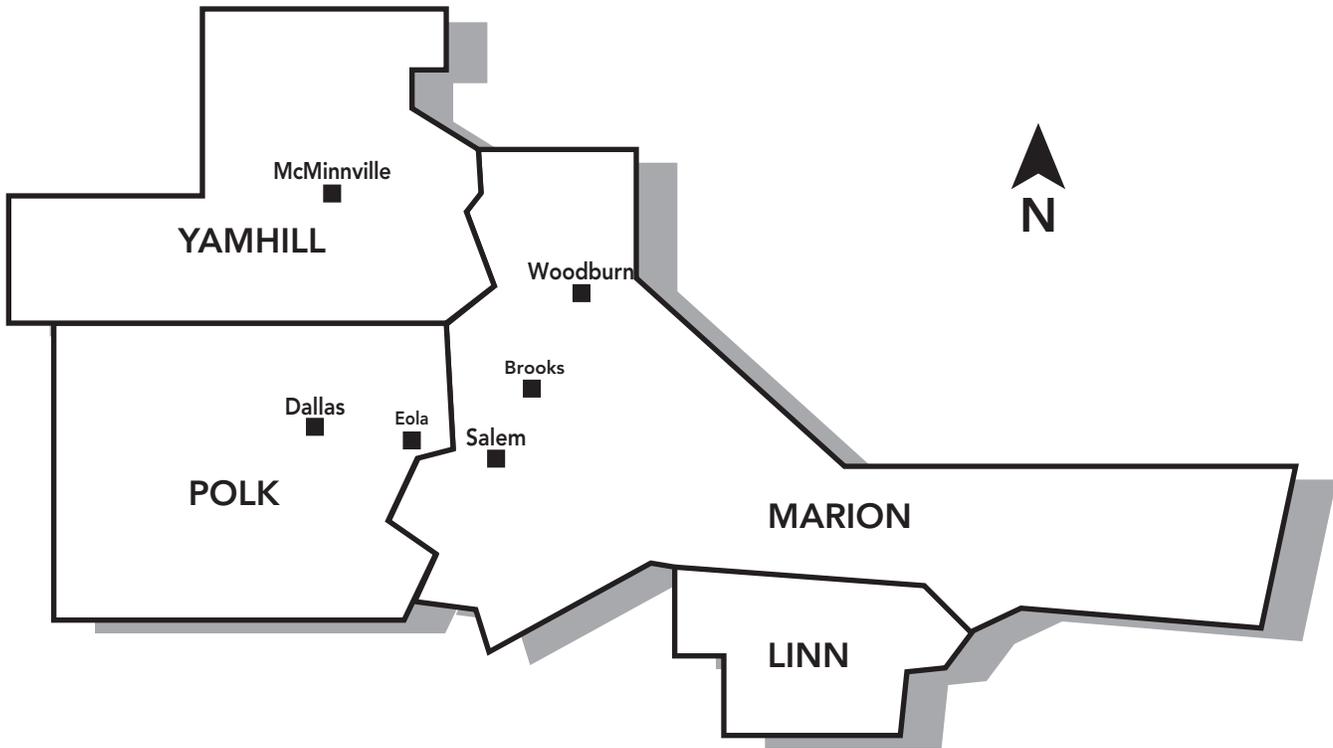
Salem Campus.....	503.399.5000
Chemeketa Brooks	503.485.2131
4910 Brooklake Rd. NE, Brooks	
Center for Business & Industry	503.399.5181
626 High Street NE	
Chemeketa Dallas	503.623.5567 or 503.399.5206
1340 SE Holman Avenue	
Chemeketa Eola	503.584.7272
215 Doaks Ferry Rd. NW	
Chemeketa Woodburn.....	503.981.8820
120 E. Lincoln St.	
Yamhill Valley Campus	503.472.9482 or 503.399.5219
288 NE Norton Lane	

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

Chemeketa Locations

Salem Campus

4000 Lancaster Dr. NE Salem, OR 97305-1453

Chemeketa Dallas

1340 SE Holman Ave. Dallas, OR 97338

Yamhill Valley Campus

288 NE Norton Lane McMinnville, OR 97128-9508

Chemeketa Woodburn

120 E Lincoln St. Woodburn, OR 97071-5024

Chemeketa Brooks

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

High School Partnerships

4071 Winema Place, Salem, OR 97305

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 or Yamhill campuses or at the college's Brooks, Dallas,

Eola, 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 or online 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 three areas of study:

Career and technical education Prepares you to qualify for work in specific fields. You can enroll in more than 30 career and technical training programs. In some of these, you may earn a Certificate of 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.

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.

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 48 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 50), 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 51 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.

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 employs 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, evening and weekend 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.

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

Accreditation

Chemeketa Community College is accredited by the Northwest Commission on Colleges and Universities. Accreditation of an institution of higher education by the Northwest Commission on Colleges and Universities indicates that it meets or exceeds criteria for the

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

Core themes/Promises

Core Theme/Promise: College Preparation

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

Core Theme/Promise: Transition and Transfer Studies

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

Core Theme/Promise: Workforce Education

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 2015			Fall 2015	Winter 2016	Spring 2016
	Intensive courses Five weeks Jun 22–Jul 25	Standard Eight weeks Jun 22–Aug 15	Specific programs* Ten weeks Jun 22–Aug 29	Sept 28–Dec 12	Jan 4–Mar 19	Mar 28–Jun 11
College-wide Inservice (College closed to public)				Sep 15		
Employee Inservice				Sep 14–18		
Student registration: Check registration status on My Chemeketa						
Beginning of Term	Jun 22	Jun 22	Jun 22	Sep 28	Jan 4	Mar 28
Academic Year and other Holidays	Jul 3	Jul 3	Jul 3	Sep 7 Nov 11 Nov 26–27 Dec 24–25 Dec 31–Jan 1	Jan 18 Feb 15 classified	May 30
College Closure				Dec 18, 23	Feb 15	
Summer Friday Closure	Closed Fridays, Jul 10–Aug 28					
Winter Break/Spring Break				Dec. 14–Jan. 2	Mar 21–26	
Review & Final Exams	Final exams given during last class period			Dec 7–11	Mar 14–18	Jun 6–10
End of Term	Jul 25	Aug 15	Aug 29	Dec 12	Mar 19	Jun 11
Graduation	Tuesday, June 14, 2016					
* 10-weeks for specific programs:	Brooks Facility: Fire and EMT Yamhill Valley Campus: Medical Assisting and Hemodialysis					

Note: Please check the term's *Schedule of Classes* for registration information. Schedules are available in Advising and Counseling Services in Bldg. 2 or online at chemeketa.edu.

assessment of institutional quality evaluated through a peer review process. An accredited college or university is one which has available the necessary resources to achieve its stated purposes through appropriate educational programs, is substantially doing so, and gives reasonable evidence that it will continue to do so in the foreseeable future. Institutional integrity is also addressed through accreditation.

Accreditation by the Northwest Commission on Colleges and Universities is not partial but applies to the institution as a whole. As such, it is not a guarantee of every course or program offered, or the competence of individual graduates. Rather, it provides reasonable assurance about the quality of opportunities available to students who attend the institution.

For more information on accreditation, contact the Accreditation Liaison Officer 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, and the newest campus, the Yamhill Valley campus, is located in McMinnville. College centers are sited in Dallas and Woodburn.

The Chemeketa district also includes three centers that provide more specialized services to employers and the community. Chemeketa's Center for Business and Industry in downtown Salem. The Brooks Regional Training Center in Brooks provides training for fire districts and law enforcement throughout the region and houses the Criminal Justice, Law Enforcement, Fire Science and EMT/Paramedic programs. The Northwest Wine Studies Center at Eola includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in the wine industry.

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.

Facilities

Chemeketa's Salem campus has 10 major buildings and a number of smaller buildings. Building 2 houses Advising and Counseling Services, Enrollment Services, Financial Aid, the Cashier's Office, Tutoring Services Center, Student Center, Public Safety, and Food Service.

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

Building 8 has 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, law enforcement 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 campuses and centers all include classrooms, meeting spaces, student resources and

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. Orientation	3. Placement testing	4. Academic Advising	5. Register for classes
Enrolling for most campus credit classes	Submit a free online Admission Application at go.chemeketa.edu/apply	View New Student Orientation in My Chemeketa.	Prepare for and take a Placement Test.	Attend a new student advising session. Sign up In My Chemeketa, Services, Advising, ChemekNET	Log in to My Chemeketa, my.chemeketa.edu : <ul style="list-style-type: none"> • Activate your Chemeketa e-mail account. • Check your registration status. • Register for classes
Enrolling for non-credit/Community Education classes	Submit a free online Admission Application at go.chemeketa.edu/apply . Select “take non-credit classes only” for your “Primary Reason for Attendance”.	None required.	None required.	None required.	Log in to My Chemeketa, my.chemeketa.edu : <ul style="list-style-type: none"> • Activate your Chemeketa e-mail account. • Check your registration status. • Register for classes. • For assistance with registration for Community Education classes please call 503.399.4949.
Earning a GED (Options) If you are age 16–20	Enrollment applications available at the Office of High School Partnerships (HSP), Building 50, Rm. 102, South Salem Campus or Woodburn Center, Rm. 101A	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn
Earning a high school diploma if you are age 16–20	Enrollment applications available at the Office of High School Partnerships (HSP), Building 50, Rm. 102, South Salem Campus or Woodburn Center, Rm. 101A	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn	Contact HSP at 503.399.5293, Salem or 503.589.7650, Woodburn
Earning a high school diploma if you are 21 years or older	Submit a free online Admissions Application at go.chemeketa.edu/apply	Contact HSP at 503.399.5293, Salem	Take a Placement Test	Contact HSP at 503.399.5293, Salem	Contact HSP at 503.399.5293, Salem
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 locations.	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college’s Dallas, Yamhill Valley or Woodburn locations.	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college’s Dallas, Yamhill Valley or Woodburn locations.	Contact the Developmental Education Office, Building 22, Rm. 100, Salem campus; or the college’s Dallas, Yamhill Valley or Woodburn locations.	Consult quarterly Schedule of Classes. Students must attend a program orientation before registering for classes.

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 Advising and Counseling Services in Building 2 on the Salem campus at 503.399.5120 or at your local Chemeketa outreach location. Talk with an advisor 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 High School Partnerships office for information about underage admission. See page 27.

New student orientation

503.399.5120 advising@chemeketa.edu

Orientation is required for all new degree- or certificate-seeking students. View the new student orientation through My Chemeketa in the Advising page on the Services tab.

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 classes that are right for you. Depending upon your scores on the reading or writing portion of the test you may be required to retest. Our Testing Advisor will assist you in determining what test is best suited for you.

Students who prepare in advance of taking the placement test have more accurate test results than students who take the test without preparation. Please visit the testing services website go.chemeketa.edu/testing for information about skill development workshops, testing locations and other information. To request disability-related accommodations, please call 503.399.5192.

Academic advising for new students

503.399.5120

newstudentadvisor@chemeketa.edu

Academic advising is required for all new, degree or certificate-seeking students until successful completion of 30 or more Chemeketa credits of 100 level or higher classes (excluding College Credit Now).

New students are required to attend an academic advising session that is followed by one-on-one advising. Please refer to “Students New to Chemeketa” in the *Schedule of Classes* for specific dates or call 503.399.5120.

Affirmative action/equal opportunity

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, protected veterans status, tobacco usage during non-working hours, 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 Discrimination Act; the Americans with Disabilities Act of 1990 and the Amendment of 2008; Oregon Civil Rights Law (ORS 659A); and their implementing regulations.

Non-harassment policies

College policy also prohibits sexual misconduct and harassment on the basis of any of the factors listed above. Harassment is any unwelcome behavior or display, verbal, physical, or visual in nature, which meets any of these criteria:

- *is reasonably perceived by the receiver as conduct so severe, pervasive and objectively offensive as to interfere with individuals work or academic performance.*
- *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, protected veterans status, or tobacco usage during non-working hours; 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 Alice Sprague, Affirmative Action Officer, 4000 Lancaster Dr NE, P.O. Box 14007, Salem, Oregon 97309, 503-399-5009.

Sexual misconduct statement

Chemeketa is also committed to preventing sexual assault, dating violence, domestic assault and stalking on college property. In addition to contacting the Public Safety Office and/or local law enforcement officials, students are encouraged to contact Alice Sprague, 503.399.2537 or Manuel Guerra, 503.365.4684.

Registration

503.399.5001 registrar@chemeketa.edu

For information, see "Steps to register" in the Schedule of Classes for step-by-step procedures for registering for classes. Chemeketa has a priority registration schedule based on earned Chemeketa credits. Log in to My Chemeketa each term and check your registration status for the specific day and time you are eligible to register for.

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.

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, use My Chemeketa. It is recommended that the changes be approved by an academic advisor or counselor. 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 65-147).

Many of Chemeketa's career and technical education programs have established entry requirements that you must complete prior to starting the program. You may still be admitted to the college as a certificate or degree seeking student while you are completing entry requirements for a career and technical education program. If you have questions about the program requirements, contact the academic department directly.

Dual Enrollment Programs

Chemeketa has partnered with four year universities to provide dual enrollment and admission programs that ease the transition from community college to university. These programs offer students the opportunity to complete one application process for both Chemeketa and the University. We offer programs with Oregon State University, Oregon Tech, Portland State University and Western Oregon University. Once accepted to the program, other benefits include access to academic advising, library services, student housing, flexible scheduling for classes, free transcripts and coordinated financial aid for eligible students. More information is available at go.chemeketa.edu/dualenrollment.

Política de acción afirmativa

Es la política de Chemeketa Community College que no existirá ninguna discriminación o acosamiento a base de raza, religión, color de piel, sexo, estado civil, origen nacional, origen étnico, estado de ciudadanía, edad, orientación sexual, identidad de género, discapacidad, embarazo y condiciones relacionadas, estado familiar, estado de veterano protegido, el uso de tabaco durante horas no laborables, denunciar a la compañía, víctima de violencia doméstica, información genética, existirá 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 Discapacidades de 1990; la Ley de Oregon de Derechos Civiles (ORS 659); y sus regulaciones correspondientes.

Contra el acosamiento

La política del colegio también prohíbe el acosamiento a base de todos los factores mencionados arriba. El acosamiento se define por cualquier comportamiento o demostración inoportuna, sea verbal, físico o visual, el cual se conforma con cualquiera del siguiente criterio:

- se percibe razonablemente por el receptor como una conducta tan severa, penetrante y objetivamente ofensiva como para interferir con el trabajo o rendimiento académico de la persona.
- se refiere de forma ofensiva a la raza, religión, color de piel, sexo, estado civil, origen nacional, origen étnico, estado de ciudadanía, edad, orientación sexual, identidad de género, discapacidad, embarazo y condiciones relacionadas, estado familiar, estado de veterano protegido, o el uso de tabaco durante horas no laborables; 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 Alice Sprague, Oficial de Acción Afirmativa, P.O. Box 14007, Salem, Oregon 97309-7070, 503.399.5009.

Declaración de mala conducta sexual

Chemeketa también está comprometida a prevenir el asalto sexual, violencia en el noviazgo, asalto doméstica y acecho en la propiedad del colegio. Además de contactar a la Oficina de Seguridad Pública y/o agentes locales de la ley, se anima a los estudiantes a ponerse en contacto con Alice Sprague, 503.399.2537 o Manuel Guerra, 503.365.4684

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.

Dropping or withdrawing from classes

503.399.5001

registrar@chemeketa.edu

Courses dropped by the deadline to receive a refund (generally the first two weeks of the term for full-term courses) will not result in a mark on your academic record. Your student account will be credited and you may receive a refund. Please see more information in the refunds policy section under Money Matters.

A "W" mark will appear on your student transcript for any class withdrawn after the refund deadline. Courses marked with a "W" are not reflected in grade point average (GPA) or total credits calculated. The last day to withdraw from classes without responsibility for a grade is typically at the end of the 6th week of each term for full-term courses.

Specific drop and withdrawal deadlines are listed in My Chemeketa under the course section details. Drop and withdrawal dates will vary for classes shorter than full-term.

If you decide to drop or withdraw from a course you should do so online using your My Chemeketa account. If

you are unable to drop or withdraw due to a hold on your account, please resolve the issue with the department that has placed your hold, you may view your holds in the "Account Holds" section of My Chemeketa.

If you stop attending your class(es) without following the drop or withdrawal procedures mentioned above. You are responsible for tuition and fees and the final grades you receive.

International students

503.428.0399; Fax 503.365.4768

internationaladmissions@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 receive 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.

The Chemeketa Creed

The Chemeketa Creed is part of the Student Rights and Responsibilities Document which can be found on pages 252 through 255 of this catalog. The creed lists standards of behavior expected of students as they become members of our educational community.

- 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.**
 - B. **Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.**
 - C. **Respect the diversity and dignity of all persons.**
 - D. **Respect the rights and property of all persons.**
 - E. **Bear the ultimate responsibility for the effects of their decisions and behavior.**
- III. **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, gender, religion, color, creed, disability, sexual orientation, political affiliation, national origin, ancestry or age. The college will:

US government regulations require that all full-time international students on an F-1 Visa have proof that you have the financial ability to pay for the length of your program. You will also need a health insurance plan that meets specific requirements. Do not purchase another medical insurance plans. Chemeketa has chosen a high quality, reasonably priced insurance policy that meets the requirements.

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 e-mail address listed above.

Money Matters

503.399.5011 businessservices@chemeketa.edu

Payment Information

Tuition and fees are charged to your student account when you register and payment is due before the first day of the term (to avoid a late fee). The college offers multiple payment options for tuition and fee charges including credit card, cash, check and automated payment plans. Please refer to the current term Schedule of Classes or to the college website at <http://www.chemeketa.edu/earncertdegree/tuition/paying/> for additional information.

Late Payment Fees

Late payment fees are assessed beginning the first day of each term and periodically throughout the term. See the term late fee schedule published in the current term Schedule of Classes or on the college website at: <http://www.chemeketa.edu/earncertdegree/tuition/paying/latefees.html>



Failure to Pay

A past due account may result in denial of future college services including registration, withholding of transcripts, denial of future credit, impairment of credit history, and additional assessment of collection charges and attorney fees.

By registering for any class at Chemeketa you acknowledge that tuition, fees, and other applicable charges incurred will be considered an educational loan between yourself and Chemeketa Community College

A. Provide access to education and campus facilities.

B. Assure the protection of confidential student records and information.

C. Provide opportunities for association and preserve freedom of expression.

1. Policy and procedures governing clubs and organizations shall be established by the college.
2. 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.

3. In the classroom, students may take exception to the information and may reserve judgment about matters of opinion, but they are responsible for learning the content of the course.

4. Chemeketa Community College, as publisher, bears in conjunction with the staff of student publications, the responsibility for the content of the publications. The publications shall adhere to all applicable Oregon statutes, such as those regarding mass communications.

5. Student publications shall be governed by the Student Newspaper Guidelines and shall follow the Canons of Journalism of the American Society of Newspaper Editors.

6. Student publications shall state that the opinions expressed are not necessarily those of the college or student body.

that is non-dischargeable under Section 523(a)(8) of the U.S. Bankruptcy Code. You further agree that, if you fail to make any payments as prescribed above, your student account may be submitted to a collection agency and applicable collection charges may be added to your account balance due. In case legal action is instituted to collect on your account, you agree 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 and charges due.

Tuition and fees

Credit courses

The College Board of Education approves the Tuition rate each year. Use the chart on this page to calculate the cost of your credit tuition. Some classes include additional fees.

Non-credit courses

Non-credit courses do not use the tuition rates established by the Board of Education and may vary from program to program. Non-credit courses are offered through a variety of programs and departments including Community Education, Adult Basic Education (ABE), General Educational Development (GED), Basic Skills Development (BSD) and English for Speakers of Other Languages (ESOL). Refer to the current term Schedule of Classes to identify the cost for these courses and other program specific costs.

Universal Fee

A Universal Fee applies to both credit and non-credit classes. The fee is \$14 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.

Residency for tuition purposes

Residency for tuition purposes is determined at the time of admission to Chemeketa. 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 enroll. Distance education students (taking only online courses) who reside within the United States or U.S. Territories are considered as in-state residents for tuition purposes. Veterans may be considered as a resident for tuition purposes, contact Veterans Services for more information. 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. You are an

Cost per credit academic year 2015–2016						
The rates listed below may be reduced based on State funding levels. Student accounts will be adjusted accordingly.						
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						
Oregon Resident Students				Out of State & International Students		
# of credits	Tuition	Universal Fee	Total Cost Per Credit	Tuition	Universal Fee	Total Cost Per Credit
1	\$82	\$14	\$96	\$244	\$14	\$258
2	\$164	\$28	\$192	\$488	\$28	\$516
3	\$246	\$42	\$288	\$732	\$42	\$774
4	\$328	\$56	\$384	\$976	\$56	\$1,032
5	\$410	\$70	\$480	\$1,220	\$70	\$1,290
6	\$492	\$84	\$576	\$1,464	\$84	\$1,548
7	\$574	\$98	\$672	\$1,708	\$98	\$1,806
8	\$656	\$112	\$768	\$1,952	\$112	\$2,064
9	\$738	\$126	\$864	\$2,196	\$126	\$2,322
10	\$820	\$140	\$960	\$2,440	\$140	\$2,580
11	\$902	\$154	\$1,056	\$2,684	\$154	\$2,838
12	\$984	\$168	\$1,152	\$2,928	\$168	\$3,096
13	\$1,066	\$182	\$1,248	\$3,172	\$182	\$3,354
14	\$1,148	\$196	\$1,344	\$3,416	\$196	\$3,612
15	\$1,230	\$210	\$1,440	\$3,660	\$210	\$3,870
16	\$1,312	\$224	\$1,536	\$3,904	\$224	\$4,128
17	\$1,394	\$238	\$1,632	\$4,148	\$238	\$4,386
18	\$1,476	\$252	\$1,728	\$4,392	\$252	\$4,644

Out-of-State and International Tuition total of \$244 per credit is comprised of the base tuition of \$82 per credit plus the out of state/international rate of \$162 per credit.

Note: 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.

international student if you are required to have an I-20 immigration document or are a student under a B, F, H or J visa. International students are not considered for permanent residence.

In order to be considered for a change in residency status, you must request an address update and "Application to Change Residence" form and supply documentation to show residency. Changes to residency status will be applied to the current or future terms only. Contact Enrollment Services at 503.399.5001 for more information.

CHOICE Act

"In accordance with Section 702, Public Law 113-146, the Veterans Access, Choice and Accountability Act of 2014, Chemeketa Community College will charge students receiving benefits under the Post 9/11 GI Bill

and Montgomery GI Bill-Active Duty, tuition and fees at a rate no greater than a resident student. This includes students receiving benefits under the Marine GySgt John David Fry Scholarship and a post 9/11 GI Bill Transfer of Entitlement and becomes effective for all terms beginning on or after July 1, 2015.”

Refund policy—how our refunds work

If the college cancels a class or you drop a class by the refund deadline, (for full-term classes that meet for the entire term) this is generally the Friday of the second week of the term, the full cost of the class will be credited to your student account and refunded in the order listed below.

Less than full-term classes have a shorter refund period. Review the specific course drop deadlines on-line in the searchable class schedule.

You will not receive a refund or credit toward another class for any classes dropped after the end of the refund period.

Refund credits from dropped courses will first apply to any outstanding amounts due on your student account. Refunds are processed beginning the third week of each term and are credited back to the original source of payment as follows:

- For classes paid by credit card - refunds are credited back to the credit card
- For classes paid by check or through the automated payment plan (InstaFacts) - refunds are issued as a check or direct deposit
- For classes paid by third party or agency payments - refunds are issued to the original payor
- For classes paid by financial aid resources - credits will be reviewed by the Financial Aid department and may be applied to offset financial aid resources. Any remaining refund authorized by Financial Aid will be issued as a refund check or direct deposit.

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 veteran’s benefits.

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 65–147.

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.

Foundation scholarships

503.365.4747

foundation@chemeketa.edu

If money is standing between you and your Chemeketa education, the college’s foundation has scholarships available. The Chemeketa Community College Foundation administers over 100 different scholarship programs for Chemeketa students. The foundation has a universal scholarship application form that will simplify the process for you. More information can be found at the college website under “Paying for college.”

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 the college’s 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. • Lifetime Pell eligibility limits of six years of full-time Pell. 	<ul style="list-style-type: none"> • Amounts are based on federal funding. • The highest award at Chemeketa for 2015–2016 is \$5,775. 	<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 2015–2016 is \$900. 	<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 2014–2015 is \$2,100 (full-time students or \$1,050 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 \$1,200 a term or \$4,800 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 2013–2014 was \$10.97 an hour. 	<ul style="list-style-type: none"> • No FAFSA is required. • Apply at the Career 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 2014–2015 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"> Subsidized Direct Loans are limited to 150% of published program length. First time borrowers can only receive Subsidized Direct Loans for their first academic program 	<ul style="list-style-type: none"> 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. Loan Counseling is required at Chemeketa for all first time borrowers Required fees will be deducted from your loan amount. 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. Annual Loan Counseling is required at Chemeketa
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.

Veterans' services-educational benefits

503.399.5004

veterans@chemeketa.edu

Our 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.

Our staff in the Veterans' Services Office will assist you in requesting an initial determination of eligibility for VA educational benefits and electronically submit your benefit request each term. Courses you receive benefits for must be required for your stated Chemeketa degree or program as outlined in the college's academic catalog. We monitor class registration, changes in enrollment status, applicability of classes taken toward degree completion and your grades. We will notify VA of any changes that impact benefit payment status and amounts. Any student receiving GI Bill benefits while attending Chemeketa is required to obtain transcripts from all previously attended schools and submit them to the school for review of prior credit. This requirement includes military training transcripts if applicable.

How to stay eligible

To continue to receive VA educational benefits, you are required to complete and pass all classes you receive benefits for and maintain a 2.00 grade point average (GPA).

Additional information

Your monthly benefit payment is based on the VA educational program you are using and the number of credits you register for each term. You may be required to repay some or all of the the GI Bill benefits you have received if you withdraw from a class after the term begins or you fail a class due to non-attendance. Questions on these policies can be directed to the Veterans' Services staff. Questions on these policies can be directed to the Veterans' Services staff.

Questions? Call for information.

Salem Campus Information Center

503.399.5000 Chemeketa's Information Center is located in Advising and Counseling 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 Information Center also distributes class schedules and catalogs.

Financial aid

503.399.5018 financialaid@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).
- 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 repeat a course if you earned lower than a grade of "C" in that course, you may repeat it until you pass it. You may also repeat a course successfully passed one time.
 - 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

Other Locations:

- **Brooks Area** • 503.485.2131
- **Center for Business and Industry (CCBI)**
503.399.5181
- **Chemeketa Online** • 503.399.7873
- **Dallas Area** • 503.623.5567 or 503.399.5206
- **High School Partnerships** • 503.399.5293
- **Community Education** • 503.399.4949
- **Woodburn Area** • 503.981.8820 or 503.399.5207
- **Yamhill Valley Area** • 503.472.9482 or 503.399.5219



- Part-time jobs

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

When to apply

Apply for financial aid at least two terms (six months) before you plan to enroll at Chemeketa. Applications are processed in the order the college receives them. Specific deadline dates are on the college website by term.

Students can apply in January for the summer or 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.

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 2.0 cumulative grade point average and to register and complete 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

All students on financial aid must also complete 67% of attempted credits (whether previously receiving aid or not). 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. All students applying for financial aid must have completed 67% of attempted credits.

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 and fee refunds applies to all students. See page 11 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, 503.623.5567
- Evening and Weekend Programs: Amanda Patrick, 503.399.5140
- Online: Bonnie Macey, or Kathy Saunders 503.399.7873
- Salem: Nette Abderhalden, 503.399.6559
- Yamhill Valley: Tracie Burger, 503.316.3288
- Woodburn: Irma Guzman, 503.316.3255 or Adrian Lutz, 503.316.3257

Academic Information

Student records and transcripts

503.399.5001 registrar@chemeketa.edu

Student academic records are maintained in Enrollment Services. These records may include admission applications, transfer credit evaluations, curriculum substitutions, degree evaluations and your academic transcript.

You may view your unofficial transcript or order an official transcript through your My Chemeketa account. If you owe a financial obligation to the college, your official transcript will be withheld until the debt is paid in full.

2015–2016 Chemeketa Community College Catalog

In order to help us keep your records updated, please notify Enrollment Services of any changes to your information.

Social Security Number disclosure statement

The college will use student social security numbers (SSN) for keeping records, complying with federal and state requirements, doing research, reporting, extending credit and collecting debts. You may be required to provide your SSN to the college for compliance with specific federal and state regulations such as applying for financial aid, loans, grant programs and tax reporting requirements. Providing your SSN means that you consent to the use of the number in the manner described. Your SSN will not be given to the general public. You will be issued a Chemeketa student identification (ID) number (K#) to be used as your primary ID.

Please note that per OAR 589-004-0400, if you choose not to provide your SSN, you will not be denied any rights as a student.

Family Educational Rights and Privacy Act (FERPA) notice

503.399.5001 registrar@chemeketa.edu

The Family Educational Rights and Privacy Act (FERPA) afford eligible students certain rights with respect to their education records. (An "eligible student" under FERPA is a student who is 18 years of age or older or who attends a postsecondary institution.) These rights include:

1. The right to inspect and review the student's education records within 45 days after the day the college receives a request for access. Students should submit written requests to the Registrar's Office that identifies the record(s) the student wishes to inspect. The Registrar will make arrangements for access and notify the student of the time and place where the records may be inspected. If the requested records are not maintained by the Registrar's Office, the student will be notified of the correct official to whom the request should be addressed.
2. The right to request the amendment of the student's education records that the student believes is inaccurate, misleading, or otherwise in violation of the student's privacy rights under FERPA. Students who wish to ask the school to amend a record should write the school official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the college decides not to amend the record as requested, the college will notify the student in writing of the decision and the student's right to a hearing re-garding the request for amendment. Additional information regarding the

hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to provide written consent before the college discloses personally identifiable information (PII) from the student's education records, except to the extent that FERPA authorizes disclosure without consent. The school discloses education records without a student's prior written consent under the FERPA exception for disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic, research, or support staff position; members of the Threat Assessment Team; a person serving on the Board of Education; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official also may include a volunteer or contractor outside of the college who performs an institutional service or function for which the school would otherwise use its own employees and who is under the direct control of the school with respect to the use and maintenance of PII from education records, such as an attorney, auditor, or collection agent. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the college. Upon request, the college may disclose education records without consent to officials of another school in which a student seeks or intends to enroll.
4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:
Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202

Directory Information at Chemeketa:

Directory information is defined as that information which would not generally be considered harmful or an invasion of privacy if disclosed. Designated directory information at Chemeketa Community College includes the following:

- Name
- Credit hour status (time status)
- Dates and terms of enrollment
- Certificate or degree earned and date earned (including GED certificate and Chemeketa high school diploma)

- Certificate or degree candidacy and anticipated graduation date (including GED certificate and Chemeketa high school diploma)
- Athletic statistics and honors

Students may withhold directory information by notifying the Enrollment Center in writing by filling out a Request for Non-Disclosure form; please note that such withholding requests are binding for all information to all parties other than for educational purposes. Students should consider all aspects of the decision to withhold directory information prior to filing such a request. Such designation will call for Chemeketa Community College not to release any or all of this directory information; any future requests for such information from non-institutional persons or organizations will be denied. Regardless of the effect upon you, Chemeketa Community College assumes no liability as a result of honoring your instructions that such information be withheld. Although the initial request may be filed at any time, requests for non-disclosure will be honored by the college until removed by the student. Chemeketa Community College will honor your request to withhold directory information, but cannot assume responsibility to contact you for subsequent permission to release them.

See the list below of the disclosures that postsecondary institutions may make without consent.

- FERPA permits the disclosure of personally identifiable information (PII) from students' education records, without consent of the student, if the disclosure meets certain conditions found in §99.31 of the FERPA regulations. Except for disclosures to school officials, disclosures related to some judicial orders or lawfully issued subpoenas, disclosures of directory information, and disclosures to the student, §99.32 of FERPA regulations requires the institution to record the disclosure. Eligible students have a right to inspect and review the record of disclosures. The college may disclose PII from the education records without obtaining prior written consent of the student -
- To other school officials, including instructors, within the college whom the school has determined to have legitimate educational interests. This includes contractors, consultants, volunteers, or other parties to whom the school has outsourced institutional services or functions, provided that the conditions listed in §99.31(a)(1)(i)(B)(1) - (a)(1)(i)(B)(2) are met. (§99.31(a)(1))
- To officials of another school where the student seeks or intends to enroll, or where the student is already enrolled if the disclosure is for purposes related to the student's enrollment or transfer, subject to the requirements of §99.34. (§99.31(a)(2))

- To authorized representatives of the U. S. Comptroller General, the U. S. Attorney General, the U.S. Secretary of Education, or State and local educational authorities, such as a State postsecondary authority that is responsible for supervising the college's State-supported education programs. Disclosures under this provision may be made, subject to the requirements of §99.35, in connection with an audit or evaluation of Federal- or State-supported education programs, or for the enforcement of or compliance with Federal legal requirements that relate to those programs. These entities may make further disclosures of PII to outside entities that are designated by them as their authorized representatives to conduct any audit, evaluation, or enforcement or compliance activity on their behalf. (§§99.31(a)(3) and 99.35)
- In connection with financial aid for which the student has applied or which the student has received, if the information is necessary to determine eligibility for the aid, determine the amount of the aid, determine the conditions of the aid, or enforce the terms and conditions of the aid. (§99.31(a)(4))
- To organizations conducting studies for, or on behalf of, the school, in order to: (a) develop, validate, or administer predictive tests; (b) administer student aid programs; or (c) improve instruction. (§99.31(a)(6))
- To accrediting organizations to carry out their accrediting functions. (§99.31(a)(7))
- To parents of an eligible student if the student is a dependent for IRS tax purposes. (§99.31(a)(8))
- To comply with a judicial order or lawfully issued subpoena. (§99.31(a)(9))
- To appropriate officials in connection with a health or safety emergency, subject to §99.36. (§99.31(a)(10))
- Information the school has designated as "directory information" under §99.37. (§99.31(a)(11))
- To a victim of an alleged perpetrator of a crime of violence or a non-forcible sex offense, subject to the requirements of §99.39. The disclosure may only include the final results of the disciplinary proceeding with respect to that alleged crime or offense, regardless of the finding. (§99.31(a)(13))
- To the general public, the final results of a disciplinary proceeding, subject to the requirements of §99.39, if the school determines the student is an alleged perpetrator of a crime of violence or non-forcible sex offense and the student has committed a violation of the school's rules or policies with respect to the allegation made against him or her. (§99.31(a)(14))
- To parents of a student regarding the student's violation of any Federal, State, or local law, or of

any rule or policy of the school, governing the use or possession of alcohol or a controlled substance if the school determines the student committed a disciplinary violation and the student is under the age of 21. (§99.31(a)(15))

- The disclosure concerns sex offenders and other individuals required to register under section 17010 of the Violent Crime Control and Law Enforcement Act of 1994.

FERPA Annual Notice Addendum

As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records – including your Social Security Number, grades, or other private information – may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your educational records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

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/0 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/0 No 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.

W Withdrawal. A "W" mark will appear on the student's transcript for any class dropped after the deadline to receive a refund. Courses marked with a "W" are not reflected in GPA or total credits calculated.

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.

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 consult your academic advisor before you repeat a course. Students cannot repeat a course beyond the maximum allowed number of attempts (generally 3). A student may appeal to register for a subsequent attempt through an academic appeals process based on extenuating circumstances and presentation of a plan to successfully complete the course. The appeal should be submitted to Enrollment Services no later than one week before the term in which you wish to register begins.

If you repeat a course and receive a higher grade you may request that the original grade be changed in your record and replaced with an "R" mark. Requirements for requesting your original grade be changed are:

- Both the original course and repeated course must have been taken at Chemeketa
- Both the original course and repeated course must be equivalent
- Only your original grade can be changed

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.

- The grade on the repeated course must be higher than the original
- If the original grade is an "N", "I", "IB, IC, ID, IF" or "W" it may not be changed

An "R" mark is not used in computing your grade point average (GPA) nor is it used 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.

If you qualify to pursue this option, make your request by completing and submitting a Student Grade Repeat Request form to the Enrollment Center at the Salem campus.

Credits from other colleges or universities

Credits from other institutions may be accepted toward degree requirements, if they were completed at any regionally accredited college or university.

You must be a current credit degree-seeking Chemeketa student to request a transfer credit evaluation. To request an evaluation, complete and submit the Request for Evaluation and Transfer of Previous Credit form (found on chemeketa.edu) to Enrollment Services. Submit this request after you have requested official transcripts from all schools where you have previous coursework. Transfer evaluations are performed in the order in which they are received.

All transcripts received by Enrollment Services become the property of Chemeketa. Enrollment Services will not provide copies of transcripts from other institutions. Enrollment Services is responsible for determining acceptance of transfer work to meet college requirements. Students should plan to meet with an advisor to review program requirements.

Transfer credit accepted by Chemeketa appears on the transcript 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

International Credit

In order to receive credit toward a Chemeketa certificate or degree, it is your responsibility if you have transcripts (credits) from international schools to have them translated (if necessary) and evaluated course-by-course by a service that is a member of the National Association

of Credential Evaluation Services. We recommend the Academic Credentials Evaluation Institute, Inc. (ACEI).

Academic Credentials Evaluation, Inc.
 280 South Beverly Drive, Suite 312
 Beverly Hills, CA 90212
 Telephone: 1.310.275.3530
 Fax: 1.310.275.3528
 www.acei1.com

Alternate approaches to credit

In addition to regular course work, students at the college may earn credit for college level work. Only 25% of a certificate or degree may be fulfilled by using alternate approaches to college credit. Any combination of alternate approaches to credit may be used. Please visit our website for more information about how to earn credit through these alternate approaches. Alternate approaches to college credit may include:

- Advanced Placement (AP)
- Challenge Examination
- College Level Examination (CLEP)
- Credit for Professional Certification (CPC)
- International Baccalaureate (IB)
- Military Credit
- Prior Learning Portfolio (PLP)

PL Prior Learning 0.0

EC Credit by Exam 0.0

Advanced Placement (AP)

If you have taken college level courses in high school under the Advanced Placement (AP) program you may be eligible to receive college credit pending official copies of test results. Request your official AP transcript to be sent to Enrollment Services and submit the Request for Evaluation and Transfer of Previous Credit form. Credit awarded will vary based on scores received. A list of AP exams accepted by Chemeketa and credit received is available on our public website.

Challenge Exam

503.399.6556

testing@chemeketa.edu

Challenge exams are prepared by the college department directly responsible for the instruction of the courses. There is a non-refundable fee for each exam. If you successfully complete the exam(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 exam or visit our public website.

College Level Entrance Examination Program (CLEP)
503.399.6556
testing@chemeketa.edu

If you have taken the College Level Entrance Examination Program (CLEP) you may be eligible to receive college credit pending official copies of test results. Request your official CLEP transcript to be sent to Enrollment Services and submit the Request for Evaluation and Transfer of Previous Credit form. Credit awarded will vary based on scores received. A list of CLEP exams accepted by Chemeketa and credit received is available on our public website.

If you wish to take a CLEP examination, schedule a testing time through Testing Services.

Credit for Professional Certification (CPC)

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. There is a fee for each course assessed. For more information, contact your program advisor or Advising and Counseling Services. (Note: Certified Paramedics certified nationally pursuing the Paramedic program may receive 50 credits through CPC, 40 credits for the paramedic certification and 10 credits for the EMT Basic.)

International Baccalaureate (IB)

If you have completed International Baccalaureate (IB) Exams you may be eligible to receive college credit based on the official exam scores. The official International Baccalaureate Certificate is required in order to receive credit. Request an official IB transcript be sent to Enrollment Services and submit the Request for Evaluation and Transfer of Previous Credit form. A list of IB exams accepted by Chemeketa and credit received is available on our public website.

Military Service Credit

Students using any type of Federal Veterans Administration (VA) Education Benefit, except Chapter 31 Voc Rehab, are required to have all prior credit history evaluated. Chemeketa awards college credit for military training and coursework based on ACE (American Council on Education) credit recommendations included in military transcripts. Chemeketa currently does not evaluate military experience. Request an official military transcript be sent to Enrollment Services and submit the Request for Evaluation and Transfer of Previous Credit form.

Prior Learning Portfolio (PLP)

In specific career and technical education programs and transfer subjects, Chemeketa may award credit 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. Students register for PLP121 and PLP122. For more information, call 503.399.5114.

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 that 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, contact the instructor before you register. Consent is based upon the instructor's assessment of your readiness to enroll in the course.

Cooperative Work Experience 503.399.5028 cwe@chemeketa.edu

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

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.

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.

See your program advisor to determine if CWE is a requirement for degree completion. The CWE office is located in the Career Center, 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*.

Occupational Skills Training 503.399.7398 ost@chemeketa.edu

You can earn college credit and a Certificate of Completion for work-based training with cooperating employees/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 132 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.

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 Chemeketa Online online.chemeketa.edu 503.399.7873

Chemeketa is a leader in online education in Oregon. We offer more than 300 credit and non-credit courses each term. You have the option to complete the Oregon Transfer Module, 10 online degrees, 12 certificate programs or take individual classes.

Degrees

Associate of General Studies, Associate of Applied Science (AAS) Accounting, AAS Fire Prevention,* AAS Fire Suppression,* AAS Hospitality Management, AAS Management, AAS Procurement and Supply Chain Management, AAS Speech-Language Pathology Assistant, AAS Tourism and Travel Management, and Associate of Science Transfer in Business.

*Fire Protection Technology Programs have significant required on-campus components.

Certificates

You can earn a certificate in Accounting, Business Software, Destination Marketing, Event Management, Fire Service Supervision and Management,* Hospitality

Management, Juvenile Corrections, Procurement Management, Retail Management, Speech-Language Pathology Assistant, Tax Preparation, Tourism and Travel Management.

Information about online courses is available at online.chemeketa.edu. A \$50 fee is charged for each online class in addition to tuition and applicable course fees.

Online courses allow you to work on assignments at your convenience. However, you will be expected to log in to the course website frequently each week, respond to online discussions, and use the Internet as a research tool. Some online courses may have required on-campus labs.

Interaction with the instructor and other students is facilitated through discussion posts and e-mail. A student e-mail address will be assigned to you through your My Chemeketa account. This college-assigned e-mail is to be used for all communication with Chemeketa instructors and staff.

Successful completion of online courses requires current technology. You will need access to a computer with required hardware and software. It will also be necessary to use a browser such as Google Chrome, Firefox, Safari, or Internet Explorer. We strongly recommend a high-speed broadband connection such as DSL or cable. Some courses with audio, video, or graphic components may not load properly if you are using a slower Internet connection.

A technical orientation and information outlining minimum requirements are available at online.chemeketa.edu.

If you have any questions regarding online classes or the schedule, please contact Chemeketa Online at 503.399.7873 or e-mail 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 Patrick, 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 and Service Learning Abroad

503.428.0399 international@chemeketa.edu

Chemeketa Community College provides opportunities to go abroad while earning Chemeketa Community College transfer credits. Courses are taught by Chemeketa and other Oregon faculty. For specific offerings, see our website go.chemeketa.edu/international

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

For questions about Study or Service Learning Abroad, contact Teter Kapan at the phone number or e-mail above.

Student Development Services

Tours of campus

503.399.5000

getstarted@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.

Tours of the Yamhill Valley Campus are conducted by student leaders. Please call to schedule a tour. 503.472.9482

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 Center

503.399.5043 (Salem Campus)

503.316.3238 (Yamhill Valley Campus)

go.chemeketa.edu/computerlab

Enrolled students are welcome to use this open computer center for Chemeketa-related coursework. Computers run the Windows operating system and many common software applications used in Chemeketa courses. Instructional technicians and tutors are available to help students with the software applications. Printing and photo copying are available for a small charge.

The Salem Campus center is located in the Library in Building 9, second floor. Student ID card required (available at the Bookstore).

The Yamhill Valley Campus computer center is located in Building 1, second floor.

Tutoring Services

503.399.5190 (Salem) 503.316.3238 (Yamhill Valley Campus) tutor@chemeketa.edu

Tutoring is a free service for all full-time and part-time students currently enrolled in core credit classes at Chemeketa (K# is required). You can access drop-in services –

Salem Campus Tutoring Center

Building 2, Room 210

Yamhill Valley Campus Library and Tutoring Center

Building 1, Room 200

Woodburn Center Commons Area

Dallas Center Lobby Area

Contact each location for their current hours. Students may also access online eTutoring in math, sciences, writing, accounting and other subjects. Additional information about tutoring is available in the studying tab of MyChemeketa and at go.chemeketa.edu/tutoring.

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 other, 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.

Chemeketa Language Center

503.399.5290

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 programs

503.315.4293

Chemeketa currently operates a variety of TRiO programs, each designed to provide support for low-income, first-generation students and students with disabilities wanting to pursue higher education.

Student Support Services offers academic support, advising, individual tutoring and mentoring to Chemeketa's TRiO students, including those with documented disabilities. Students may earn college credits through selected program-sponsored classes and are eligible to borrow some textbooks at no cost. Transfer assistance, scholarship information and college visits are available to students planning to transfer to a four-year college or university.

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, or visit go.chemeketa.edu/trio.

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) The College Assistance Migrant Program (CAMP) is a federally funded program that supports students from migrant and seasonal farmworker backgrounds during their first year in college. The program provides 55 students every year with both financial assistance and comprehensive support services with a goal of preparing them to obtain a technical/career degree or continue their education at a four-year college or university. Second year students will have access to follow-up services. If you are interested and want 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.

Office of High School

Partnerships

503.399.5293

Chemeketa has several programs offered at various locations to help you earn the high school credits needed for a high school diploma or its equivalent. Students must be 16–20 years old to participate. Certain 15 year olds may be accepted after completing specific requirements, including placement tests. For additional information on how to apply, please contact the Office of High School

Partnerships at 503.399.5293 or visit our website at www.chemeketa.edu/basicskills/highschoolpartnerships/.

Alternative High School Programs

Winema High School Completion Program is designed to provide a safe environment that promotes student respect, responsibility and success. Winema's closed campus and high expectation behavioral policies all contribute to providing you with safe surroundings where you are free to focus on your courses and goals. The greatest advantage of attending Winema is the fresh start you are offered both socially and academically.

The Winema program runs on an accelerated schedule. You will attend classes in blocks; at the end of each block you will have the opportunity to earn up to one high school credit. When you attend and complete the Winema High School completion program, you will receive your high school diploma.

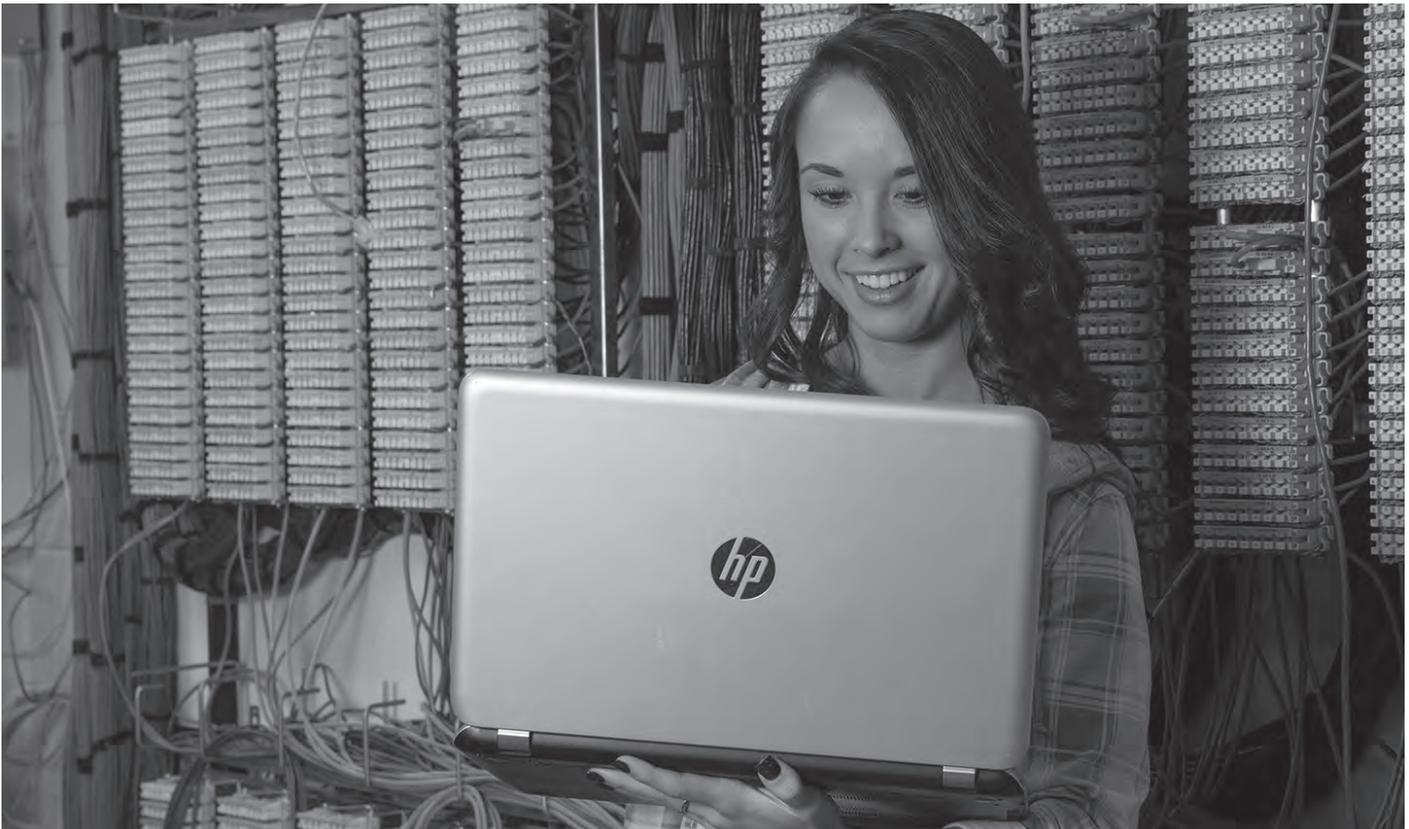
GED/High School Options Program is designed for students looking for an alternative path towards academic success. This program incorporates the high standards of a college environment while providing you a safe and supportive community. You will work closely with faculty and staff to build your skills in preparation for the GED exam and future possibilities. When you enroll in our GED/High School Options program you will attend classes regularly during one of our three class options.

PLAZA and Winema Options are offered through Chemeketa's Woodburn Center for high school students, aged 16–21, who need additional skill development in reading, writing, math and English Language (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 503.589.7650.

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 locations. 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.

Expanded Options In partnership with various school districts, full time high school students are able to take college courses to complete high school diploma requirements. 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 Chemeketa Community College, Winema Office, Building 50/102 on the Salem Campus. 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 for more information.

Concurrent credit opportunities

Estacada Early College Program allows you to earn high school and college credit simultaneously while attending college courses. This concurrent enrollment program provides you with the unique opportunity to work toward a high school diploma and a college certificate or degree at the same time. The early college program is open to students from all school districts and home schools.

Salem/Keizer Early College High School is a concurrent enrollment program providing students with high school and college credit opportunities. Students interested in this program must be currently enrolled and complete the admission requirements determined by Salem/Keizer school district. For more information call 503.399.7893.

Expanded Options (EOP)—SB300 The Expanded Options program allows students to be concurrently

enrolled in both their current high school and taking courses at the Chemeketa Campus. Your current school district determines your eligibility and guidelines. Please contact your school district for eligibility requirements.

Extended Campus Program provides an opportunity for Dallas and Falls City high school students to continue their education at Chemeketa Community College at no cost. If selected for this program, you must be enrolled in and meet the eligibility requirements determined by your school district.

College Credit Now You can earn college credit through College Credit Now at your local high school. This program gives you the opportunity to take college level classes in the comfort of your current high school. For more information contact your local school district or call 503.399.5239.

Other opportunities through your local high school Chemeketa contracts with many surrounding school districts to provide high school students with college credit options. Please contact your high school to determine eligibility and admission requirements.

Woodburn Center programs

Woodburn High School Early College Program is a partnership between the Woodburn School District and Chemeketa Community College. This Early College program is designed for Woodburn students who have completed high school graduation requirements and are interested in improving skill levels in math, writing,

reading, and technology. It is a supported environment designed to improve success within the college experience.

Woodburn Success Transition to Early College (TEC)

The TEC program is an opportunity for students from Woodburn Success that have completed the majority of their high school credits, prior to the end of the school year, to begin taking college courses in advance of the Woodburn Early College academic year. It is designed to support a seamless transition from high school to college level programs.

Woodburn Success High School Partnerships

Transitions Program is a high school credit recovery program. Students from Woodburn Success High School take high school credit courses, in a college environment, to earn credits towards their high school diploma. Students who are successful in the program are offered an opportunity to transition from high school to college courses.

Woodburn GED/High School Options Program is offered through High School Partnerships is available to students between the ages of 16 and 20. Students have an opportunity to attend classes during day or evening. There is no cost for tuition, books or testing.

Adult High School Diploma Chemeketa offers adult students ages 21 and over the opportunity to complete their high school credits and earn their high school diploma by completing college courses.

Academic Development 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.

Adult Basic Education (ABE) and General Educational Development (GED) Classes **503.399.6298**

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

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 four GED tests.

Chemeketa offers classes throughout the college district to help you prepare for these tests and for placement into college-level courses. Classes are held at the Dallas, Yamhill Valley, 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.

Classes are offered in:

- Reading and writing
- Social Studies
- Science
- Math
- Computer Basics
- Spanish GED.

GED Tests are given in Salem, Yamhill Valley and Woodburn. The fee is \$152. To request disability-related accommodations, please call 503.399.5192.

Basic Skills Development **503.399.6298**

The Basic Skills Development program offers non-credit classes to those college students who would like to improve college-placement scores. Students may take any of the classes offered in the ABE program listed above.

English for Speakers of other Languages (ESOL)— non-credit program **503.399.5224**

The ESOL program provides instruction designed to improve non-native English-speaking students' ability to read, write, listen and speak in English with additional classes in pronunciation, grammar and basic computer skills offered as needed 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.

English as a Non-Native Language (ENL)— credit program **503.399.3080**

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, 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
503.428.0399 Fax 503.365.4768
internationaladmissions@chemeketa.edu

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

The 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 academic reading and effective learning. 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, and study skills are also offered at the Dallas, Yamhill Valley and Woodburn locations.

Study Skills Center
503.399.5162

Bldg. 2, Room 212

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

The Study Skills Center serves students college-wide by 1) providing needed assistance with academic reading and effective learning strategies; 2) providing resources for students currently taking reading and study skills courses including specialized computer applications and

course textbooks available for check out; and 3) offering free, weekly study skills workshops presented by the Study Skills consultant. The study skills workshops may also be accessed online. The Study Skills Center hosts free book exchange for students looking for leisure reading materials as well.

Writing Center
503.399.7179 cwc@chemeketa.edu
go.chemeketa.edu/write

The Chemeketa Writing Center (CWC) and Chemeketa Online Writing Center (COWC) will help any Chemeketa student with any writing assignment or project. Both writing centers are free courses Chemeketa students can register for using MyChemeketa. We can help at any stage of the writing process from brainstorming to revising and editing, offering one-on-one, group, and online consultations with highly-qualified instructors. In some academic terms, customized mini-courses on writing basics are also available. Contact the CWC by calling 503.399.7179 or stopping in the library in Building 9. Instructions for using the COWC can be found online at online.chemeketa.edu/writingcenter.

Career Center
503.399.5026 careercenter@chemeketa.edu
go.chemeketa.edu/careercenter
Building 2, Room 115

The Career Center is here to connect you with potential employers for jobs while you are in school and after you graduate. We provide job listings for part-time and full-time employment, along with resumé and cover letter assistance, interview practice, and other tips for job seekers. We also hold workshops and career fairs throughout the year to assist you in achieving your career goals.

Student Services

Alcohol and drug support groups
503.399.6154 wanda.urban@chemeketa.edu

Support groups for addiction related issues are coordinated through the Human Services Program and staffed by student facilitators. Times and locations of meetings vary each term. For more information, contact Wanda Urban, Human Services Program or visit go.chemeketa.edu/humanservices

Bookstore
503.399.5131
bookstore.chemeketa.edu

You may purchase books and supplies at the College Bookstore in Building 1 on the Salem campus and at the Yamhill Valley campus (1st two weeks of the term).

Software, electronics, reference books, imprinted clothing and gifts are also available.

Services—The Bookstore offers many services to students, staff and the community. Shipping, USPS, UPS and Fed EX, postage stamps, a free phone charging station, faxing, bus passes (Cherriots and CARTS), discounted movie tickets to Regal Theaters, Kodak picture kiosk. Maps credit union is also located in the bookstore.

Rentals and ebooks—Textbook rentals and ebooks are available on limited titles. Save up to 60% off the new book prices. Ask at the bookstore for more information or check the website.

Book buyback—Each term during finals week, the Salem and Yamhill Valley bookstores pay cash (up to 50% of the purchase price) for textbooks that are needed for the next term. You may check our website during finals week to find the value of your textbooks.

Computers and software—Chemeketa students are eligible to purchase software at special prices. Some restrictions may apply. Visit our electronics department for details.

Regular Bookstore hours—7:30am-5pm, Monday-Friday and extended hours the first two weeks of fall, winter and spring terms and the first week of summer term. Check our website for current information.

The Book Exchange

503.399.5116

collegelife@chemeketa.edu

Chemeketa's Book Exchange offers a non-profit free service to Chemeketa students as an alternative to purchasing new textbooks for their classes. Operated by the Student Retention and College Life, this exchange allows students to sell textbooks they no longer need to other students who may need them at a reduced price. Students can also sell or buy calculators and any other items required for use in their classes. Because this is a free service to students, we can only take cash (exact change). Only textbooks being used the following term will be accepted.

The Book Exchange is located in the Office of Student Retention and College Life in Building 2, Room 176. Drop off your textbooks starting finals week and in-between terms of fall term and winter term. Buy your textbooks the first and second week of winter term and spring 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 minor first aid services on the Salem campus, call Public Safety at 503.399.5023. For medical emergencies, call 911. If you are at another college location and need assistance, please contact one of their staff. There are also emergency 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.

Chemeketa Food Pantry

503.399.5116 collegelife@chemeketa.edu

The Chemeketa Food Pantry is a resource for our campus community. It helps students in need focus on their studies rather than how they are going to feed themselves. The Chemeketa Food Pantry is coordinated by the office of Student Retention & College Life. With donations from students, staff, and the community we are able to help students in need. We ask for non-perishable, unopened, and unexpired items such as: baby food or formula, beans, canned vegetables or fruits, crackers, chips, nuts; oatmeal, pudding or Jell-O, soups, canned tuna or chicken, boxed meals, cereal, drinks, pasta, rice, canned spaghetti sauce, or canned tomatoes.

If you need food or would like to donate to the Chemeketa Food Pantry, you can stop by Building 2, Room 176 Monday–Friday from 8 am–5 pm. Chemeketa ID is required to pick up food.

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 (Salem campus)

503.316.3238 (Yamhill Valley campus)

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. 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. Items are donated or purged at the end of each term.

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 may be purchased through My Chemeketa or at Public Safety, Building 2, Room 173. Students and employees may purchase an annual parking permit (fall term through summer term). After initial purchase of an annual permit, additional annual permits may be purchased for a reduced fee for any vehicle registered to the original annual permit purchaser. Individual term permits may also be purchased. 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.

The Oregon Motor Vehicle Code is enforceable on campus by Chemeketa Public Safety Officers. 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 provide transportation to the campus from Woodburn, Silverton and Dallas. If you are attending classes at one of the other Chemeketa location, 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 and Carts, contact Salem Area Transit Information Office (Cherriots) at 503.588.2877 or visit their website: www.cherriots.org

Cherriots and Carts passes are available for purchase at the Bookstore in Building 1 on the Salem campus.

Student leadership opportunities

Are you looking for ways to meet educational and living expenses, or a valuable experience as part of your education? Chemeketa offers numerous student leadership opportunities to get involved, enhance your education, and gain experience in a real-world work setting. In addition, you will benefit from the following:

- Additional financial resources
- Valuable work experience for your resumé
- Reduced necessity for student loans
- Networking with professionals
- Practical career-related experiences
- Enhanced fundamental work skills
- Development of a sense of community and involvement

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. The following is a list of programs and student leadership opportunities in the Office of Student Retention and College Life and across the college that you can get involved in. For more information, please visit collegelife.chemeketa.edu.

Associated Students of Chemeketa (ASC)
503.399.5185 or 503.365.4764
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, political action, voter registration and voter education. As a member of this team, you can assist in organizing the Council of Clubs, Club Fairs, and assist with various civic engagement projects. 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.

Student representatives along with Chemeketa employees serve on campus-wide committees including Academic Standards, Curriculum 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.

Building 45
<http://www.building45.com>

Building 45 is the college's online literary/arts publication. 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, including submissions and to view past issues, please visit <http://building45.com>

Multicultural Student Services Team (MSS)
503.399.5143

The Multicultural Student Services Team plans events, which increase cultural awareness throughout the campus community. Team members are dedicated to supporting and honoring the many cultures on campus. In addition, to event planning, MSS team members are responsible for maintaining the Multicultural Center facilities and coordinating ongoing projects with the assistance of Student Retention & College Life staff.

Along the way team members develop pride in their cultural heritage with the global community, learn leadership and professional skills, and effect change on issues currently impacting the campus community. For more information, contact Linda Ringo-Reyna at 503.399.5143 or linda.ringo.reyna@chemeketa.edu

Evening Study Nights
503.315.4262

Evening Study Nights is a service provided to students who may need extra care and assistance with lower division classes such as: CIS 101, MTH 020-095, RD 080-090, and WR 080-091. Multicultural Student Services supports and staffs the Evening Study Nights on Mondays, Tuesdays, and Wednesdays, from 5–9 pm, in the Multicultural Center, Building 2, Room 177. For more information contact Linda Ringo-Reyna at 503.399.5143 or linda.ringo.reyna@chemeketa.edu

Intercollegiate athletics
503.399.5082

Chemeketa is a member of the Northwest Athletic Conference (NWAC), which includes community colleges in Oregon and Washington. This highly-organized athletic program provides quality, competitive opportunities for student-athletes. In keeping with the standards of the program, emphasis is put on academic progress, completion and 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.

Multimedia Team

503.315.4293

The Multimedia Team members work on retention projects by putting into practice skills they are learning in the Visual Communications program through graphic design and/or interactive media. Simultaneously, they learn how to manage a small business, work with a team of graphic designers, critique and consult with each other, project management processes and skills, consult with clients to assist clients with their design needs, and hands-on training which helps students be successful in their program as well as successful in the graphic design industries as business leaders.

Peer Assistants

503.399.5120

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 Advising and Counseling Services department, Career Center and Information Center.

Peer Assistants are paid on an hourly rate, tuition grant or through Federal Workstudy.

Student Ambassadors

503.399.5000

getstarted@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 visitations, 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 or 503.365.4764

asc@chemeketa.edu

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

Student Retention Assistants

503.399.5116

collegelife@chemeketa.edu

The Student Retention Assistants learn clerical skills on the job and work on the retention related activities to improve student success outcomes. They assist in the Office of Student Retention and College Life's reception area with delivering exceptional customer service, scheduling, answering phones, replying to e-mails, postings, Textbook Lending Library, Chemeketa Food Pantry, and the Book Exchange. Members of this team also help with traditional fundraisers and contribute ideas for new fundraisers to bring in donations for the Chemeketa Food Pantry. Other various duties include conducting campus tours and presentations.

Textbook Lending Library

503.399.5116

collegelife@chemeketa.edu

The Textbook Lending Library is a service to students as an incentive for students to be successful in their classes. Textbooks may be checked out for an entire term starting the first day of the term on a first-come-first-served basis. Textbooks must be returned prior to the end of the term. Due to the success and the high demand of our program and in efforts to promote student success, priority will be given to students who obtain a 2.75 term GPA or higher for their last term completed. They must also have a current Education Plan to be eligible to checkout textbooks. Stop by the Office of Student Retention & College Life located in Building 2, Room 176 to learn more about eligibility requirements.

Conversation Tables

503.365.4686 international@chemeketa.edu

Conversation Tables are facilitated by international and local leaders. Conversation Tables are held weekly beginning the second week of each term in Building 2, Student Programming Center. Chemeketa students

may learn about new cultures and new languages such as: Arabic, Chinese, English, French, German, Korean and Spanish. Please note the languages vary from term to term based on the availability of facilitators. Please contact us if you are interested in becoming a student leader and facilitating a Conversation Table.

Leadership through Mentoring Program **503.365.4764**

adam.holden@chemeketa.edu

The Peer Mentor Program aims to improve retention and academic advancement rates of high school and middle school students who may be at risk of dropping out of school. Students are provided with a college student mentor and service learning opportunities. Through participation in CG121B Leadership Through Mentoring, a two-credit academic course, Mentors will be trained and assisted by faculty and staff members to develop meaningful relationships with local high school and middle school students. Training occurs both in the high school and middle school classroom and in after-school settings.

Leadership Development courses **503.399.5116 or 503.365.4764**

collegelife@chemeketa.edu

The Office of Student Retention & College Life offers several leadership development courses through the Counseling & Guidance department (CG) for students who want to grow and develop their leadership skills. Leadership classes are a great way to get connected to Student Life on campus, learn how to become further involved in student life programming and more. These classes include Community Service Leadership, Leadership Development, Intercultural Leadership Development through Film, and Leadership through Mentoring.

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.

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.

Advising and Counseling Services

Dallas Center 503.623.5567

Salem Campus 503.399.5120

Woodburn Center 503.981.8820

Yamhill Valley Campus 503.472.9482

advising@chemeketa.edu

Advising and Counseling Services assist students with academic, career and life transitions, including career planning, education plans, and personal support to navigate barriers to academic success.

Academic advising

Chemeketa has academic advisors throughout the district. Academic advisors assist with interpreting placement test results, transitioning to a four-year university or college, developing educational plans, selecting and registering for classes, and understanding college procedures.

All new, degree- or certificate-seeking students are required to meet with an academic advisor until they successfully complete 30 or more Chemeketa credits, (100 level or higher) excluding College Credit Now, and have an educational plan on file. Academic advisors are assigned to students based upon their program interest. Counselors work with undecided students to assist in determining a student's academic program of study.

Career counseling and career planning classes

Career counselors and career planning courses assist students in choosing or changing careers by helping students gain a better understanding of their interests,

values and skills, relating those characteristics to a wide variety of careers, finding accurate information about occupations and labor market trends, and developing a personal plan of action.

Counseling services

Counselors are available to currently enrolled Chemeketa students for personal support and identifying barriers to success, and to make referrals to off-campus resources.

Services to the Community

Agribusiness Management Programs 503.399.5139

The AgriBusiness Management Program at Chemeketa Community College focuses on the basic principles of agricultural recordkeeping and financial management. These non-credit courses provide agricultural business education for owners, family members and key personnel, including:

- Use of recordkeeping software
- Use of spreadsheet software
- Setting goals
- Staying informed about business and farming regulations
- Understanding cost of production
- Market fluctuations
- Interpreting and learning agricultural policy
- Succession planning and resolving family transition issues
- Payroll and employee issues
- Emerging and advancing technology.

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 agricultural business management decisions. The program is designed for a minimum commitment of three years, but because of ever-changing technology, policies and practices and changes in key personnel, an agricultural business may choose to enroll for numerous years.

For more information, call 503.399.5089 or 503.589.7759.

These classes are ideally suited for agricultural businesses of all sizes including but not limited to:

- Grass Seed/Seeds/Grains
- Nursery and Horticulture
- Vineyard and Wineries
- Orchard Crops
- Livestock/Dairies
- Value Added/Community Ag
- Vegetable Producers
- Bee Keepers

XAGR9800C,D,E Agribusiness Management 1

Emphasizes setting agricultural 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 agricultural business based upon records and analysis obtained in Agribusiness Management 1. Explores computerized accounting and income tax management.

XAGR9800J,K,L Agribusiness Management 3

Focuses on reorganizing the agricultural 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 businesses. Uses records in business dealings with off-campus agencies and individuals.

XAGR9800T Agricultural Educational Tour

International and domestic tours "to someplace in the world". These tours showcase the world as our classroom on agricultural marketing, innovation, technology, sustainability, history and research. The program has been conducting annual Agricultural Educational Tours for over 35 years, including successful tours to Thailand, Italy, Spain, Ireland, England, Australia, and many more countries. We have also visited a dozen states to advance participants understanding of technology, marketing research and sustainability. For more information contact the program instructors at: agribusiness@chemeketa.edu

XAGR9801T Agribusiness Management Workshop

Selected topics of current importance to the agricultural community.

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. For more information visit sbdc.chemeketa.edu or call the Small Business Development Center at 503.399.5088. 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. MERIT offers several courses to help potential entrepreneurs develop their business skills and learn the skills and tools needed to run a business. MERIT classes cover 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 classes 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.
- 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.
- Our 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.
- Our Business Accelerator assists your business to grow and prosper within a supportive environment. Eight 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 statewide and regional networks, the Chemeketa Center for Business & Industry has access to hundreds of trainers. See page 66 Business and Industry Certification.

Services include:

- **Employee Skill Development**—A wide variety of employee and organizational development trainings are available, including customer service, business, writing, inter-personal communications, problem solving, Six Sigma, English as a Second Language, leadership and supervision. Courses are tailored to meet employer needs.
- **Computer Training**—A wide variety of trainings are available in our state-of-the art computer lab, including Microsoft Office Programs. QuickBooks 2014 and Microsoft Project. Classes are customized to meet the needs of specific employee groups.

Chemeketa Cooperative Regional Library Service

503.399.5043 • www.ccrls.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 support to member libraries and 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 material delivery between libraries.

An automated, online catalog listing over 725,000 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.ccrls.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.

Community education classes

503.399.4949

Chemeketa offers a variety of community education classes throughout the district. These non-credit, personal enrichment and professional development 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 [go.chemeketa.edu/community ed](http://go.chemeketa.edu/community%20ed). To have a Community Education Class publication mailed to you, call 503.399.4949.

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 503.399.4949, or e-mail CEInfo@chemeketa.edu.

Community locations

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, the community locations above 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.

The Gretchen Schuette Art Gallery

503.399.2533

The Gretchen Schuette Art Gallery is located on the Salem Campus, Building 3, Room 122. The charge of the gallery is to introduce contemporary art to our students and community. The gallery presents free, regularly changing, juried shows that feature professional artists working in a wide range of subject and media. A special exhibit of student work is presented at the end of each academic year and a faculty show is mounted biennially. In the summer the gallery hosts an artist in residence program, with an associated gallery show later in the year. The beautiful and welcoming space of the gallery is also home to readings and round tables organized within the college community. To learn about the current exhibit, check gallery hours or survey the upcoming season, go to go.chemeketa.edu/art or call 503.399.2533.

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 coordinated 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.

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 special rates for students. Call to arrange group showings at other times for schools, clubs, and organizations.

Degrees, 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 Science-Business transfer degree, an Associate of Science-Computer Science 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 is comprised of one year of coursework exclusively in general education, which can lead to 1) an AAOT, AS/OT-BUS, or AS/OT-CS transfer degree from Chemeketa or to 2) a baccalaureate degree from any 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 the list of approved courses on page 50. 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 curriculum 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 Oregon's public four-year universities. 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 page 51) that are consistent across all of Oregon's 17 community colleges. Students must complete at least one course meeting the state criteria for:

- **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, cultural literacy is called Difference, Power, and Responsibility and courses that address this content area are available in the arts and letters and social science areas (see the AAOT guide on page 51 for Cultural Literacy courses).
- Also note that in most areas, courses—not credits are required to meet the degree (90 credit hours total). Contact a college advisor for more information.

See the program guide on pages 44 to 47 for a complete list of our transfer programs. Information and curriculum guidelines begin on page 68.

Associate of Science/Oregon Transfer—Business degree

Associate of Science/Oregon Transfer—Computer Science degree

The Associate of Science/Oregon Transfer-Business degree and the Associate of Science/Oregon Transfer-Computer Science degree are focused academic programs that provide you with marketable degrees and keep open your options for transfer to a baccalaureate program. By earning either of these degrees from Chemeketa, you will have fulfilled the lower division

general education requirements at any of Oregon's public four-year universities 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/computer science school/program of choice; that is ultimately up to the institution to which you apply. These statewide degrees must be taken as designed; that is, courses or sequence requirements may not be added or removed. To qualify for either of these degrees, you must meet the requirements listed on page 52 and 53.

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 55.

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 44 to 47 for a complete list of Associate of Applied Science degree programs. Information and curriculum outlines for these programs begin on page 68.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on page 54.

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 56.

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 44 to 47 for a complete list of Certificate of Completion programs. Information and curriculum outlines for these programs begin on page 68.

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.

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/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.

Second degree

To earn a second degree, certificate or diploma, students must meet any additional requirements stated in the catalog. Courses previously taken may qualify to meet a second degree or certificate.

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 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 27.

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.

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 general education requirements for

a bachelor's degree 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 lower level courses for many of the colleges and universities in the area that offer bachelor's and master's degrees in Salem. Most classes are held during evenings, on weekends or via distance education. For more information on these programs, contact advisors at the colleges or universities below:

Linfield College

800.452.4176

George Fox University

888.888.0178

Corban University

503.589.8195

Western Oregon University

877.877.1593

Curriculum requirements

General education requirements for Oregon's four-year colleges and universities are listed on pages 57–63. Advising and Counseling 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 George Fox University, Linfield College, Oregon Health and Sciences University, Pacific University, University of Portland, Corban College, University of Western States, Willamette University, and the University of Portland.

Certificates, two-year degrees and transfer guide

Below is a quick-reference listing of the programs of study and transfer course categories 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—Courses that transfer to four-year institutions

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/ AGS	Transfer	Limited	Addl Qual	Page
Oregon Transfer Module (OTM)			✓			50
Associate of Arts Oregon Transfer (AAOT)			✓			51
Associate of Science / Oregon Transfer in Business (ASOT-Bus)			✓			52
Associate of Science / Oregon Transfer in Computer Science (ASOT-CS)			✓			53
Associate of Applied Science (AAS)		✓				54
Associate of Science (AS)			✓			55
Associate of General Studies (AGS)		✓				56
Transfer Course Disciplines						
For specific information about baccalaureate degrees at Oregon's public universities, see the OUS Viewbook at http://ous.edu/sites/default/files/stucoun/prospstu/files/ousviewbook2015final4.7website.pdf	Certificate	AAS	Transfer	Limited	Addl Qual	Page
American Sign Language			✓			158
Art			✓			75
Anthropology			✓			71
Biology			✓			78
Business Administration			✓			79
Chemistry			✓			85
Chicano/Latino Studies			✓			182
Communication			✓			85
Computer Science			✓			89
Counseling and Guidance			✓			169
Economics			✓			101
Engineering			✓			109
English			✓			109
Entrepreneurship			✓			199
Film Arts			✓			199
French			✓			200
General Engineering			✓			203
General Science			✓			78
Geography			✓			113
Geology			✓			114
Health, Health Education			✓			114
History			✓			117
Humanities			✓			215

Japanese	✓	216
Journalism	✓	216
Mathematics	✓	130
Music	✓	220
Nutrition and Food Management	✓	133
Oceanography	✓	223
Philosophy	✓	226
Physical Education and Human Performance	✓	135
Physics	✓	136
Political Science	✓	136
Psychology	✓	137
Religious Studies	✓	229
Russian	✓	230
Sociology	✓	137
Spanish	✓	232
Social Science	✓	233
Writing	✓	238
Women's Studies	✓	239

Agriculture, Food, and Natural Resources

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Horticulture Program		✓				117
Vineyard Management Programs		✓				144
• Vineyard Operations	✓					145
Winemaking Program		✓				147

Arts, Information, and Communication

Visual Communications Programs						140
• Graphic Design		✓		✓		141
• Interactive Media		✓		✓		141

Business and Management

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Accounting Programs	✓	✓				68
• Accounting Baccalaureate Preparation	✓					69
• Payroll	✓					69
• Tax Preparation	✓					70
Business Technology Programs	✓					79
• Accounting Administrative Assistant		✓				82
• Administrative Office Professional		✓				82
• Business Software	✓					80
• Medical Administrative Assistant		✓				83
• Office Fundamentals	✓					81
• Virtual Office Assistant	✓	✓				81
Hospitality Management Programs	✓	✓				118
• Event Management	✓					119
Management Programs		✓				127
• Procurement and Supply Chain Management		✓				129
• Procurement Management	✓					129
• Retail Management	✓					130
• Sustainability in Management	✓					128
Tourism and Travel Management Programs	✓	✓				139
• Destination Marketing	✓					139
Wine Business Program		✓				146

Health Services

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Dental Assisting Program	✓			✓	✓	95
Dental Hygiene Program			✓	✓	✓	96
Paramedicine Program		✓		✓	✓	107
Health Information Management Programs		✓		✓		114
• Basic Health Care	✓					115
Hemodialysis Technician Program	✓			✓		116
Medical Assisting Program	✓			✓		130
Nursing Programs	✓	✓	✓	✓	✓	131
Pharmacy Programs						134
• Pharmacy Technician	✓			✓	✓	135
• Pharmacy Management		✓		✓	✓	135

Human Resources

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Criminal Justice, Law Enforcement, and Corrections Programs			✓		✓	89
• Basic Corrections	✓				✓	93
• Basic Law Enforcement	✓				✓	94
• Corrections		✓		✓	✓	93
• Criminal Justice		✓			✓	91
• Juvenile Corrections	✓				✓	91
• Juvenile Justice		✓			✓	92
• Law Enforcement		✓		✓	✓	94
Early Childhood Education Programs	✓	✓			✓	98
• Infant/Toddler	✓					99
• Preschool	✓					100
Fire Protection Technology Programs						110
• Fire Prevention		✓				110
• Fire Service Supervision and Management	✓			✓	✓	111
• Fire Suppression		✓	✓	✓	✓	112
Human Services Programs						120
• Addiction Counselor Certification Preparation	✓			✓	✓	121
• Addiction Studies		✓		✓	✓	122
• Human and Social Services Traditional Health Worker	✓			✓		122
• Social Services		✓		✓	✓	123
Speech-Language Pathology Assistant Programs	✓	✓		✓		137

Industrial and Engineering Systems

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Apprenticeship Programs						71
• Construction Trades, General (Specializations in HVAC/R, Plumbing, and Sheet Metal)	✓	✓	✓		✓	73
• Electrician Apprenticeship Technologies: Inside Electrician	✓	✓	✓		✓	74
Automotive Technology Programs						75
• Automotive Body Repair	✓					77
• Automotive Entry Level Technician	✓					77
• Automotive Machining	✓					77
• Automotive Technology		✓		✓		78
Computer Information Systems Programs						85
• Computer Systems and Information Technology		✓				88

• Computer Programming	✓					86
• Computer Support Specialist	✓					87
• Computer Systems Administration	✓					87
• Network Management and Systems Security	✓					87
• Web Developer	✓					87
Drafting Technology–CAD Programs	✓	✓				96
• Architectural Drafting	✓					97
Electronics Technologies Programs						102
• Computer Electronics		✓				103
• Electronic Engineering Technician		✓	✓			104
• Electronics	✓					103
• Industrial Electronics		✓	✓			105
• Process Control	✓					103
• Process Control Technology		✓				106
• Renewable Energy Management		✓				107
Machining Technology Programs						124
• Basic Manufacturing Technician	✓					125
• Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)			✓			126
• Computer-Aided Manufacturing (CAM) Fundamentals	✓					125
• Computer Numerically Controlled (CNC) Operator	✓					126
• Manual Machine Operator	✓					126
Welding Programs	✓	✓			✓	142

Other Programs

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Adult Basic Education						29
Adult High School Diploma						29
College Assistance Migrant Program (CAMP)				✓		27
Early College High School						28
Employment Skills Training	✓	✓				107
English as a Non-Native Language						30
English for Speakers of Other Languages						29
General Educational Development (GED)						29
GED Options	✓					27
High School Equivalency Program (HEP)				✓		27
Occupational Skills Training	✓					24
Winema						27

Personal Enrichment

Non-degree seeking for 18 years and older



General Education

Purpose

When you are in college, it can be difficult to see the value of taking classes in disciplines other than your program of study. The purpose of general education requirements is to ensure that every Chemeketa graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. These requirements provide for breadth across the humanities and arts, social studies, and natural sciences; competence in communication and critical thinking; analytical skills to enhance and promote problem solving; and investigation of the issues raised by living in a culturally diverse society. Your Chemeketa educational experience includes a core of intellectual and practical skills, basic knowledge of human cultures and the physical world (and, importantly, the strategies used to understand these topics), and tools intended to contribute to a sense of personal and social responsibility. The work you do in your program and to complete your degree also helps you to learn what you need to know not just for making a living, but also for making a life.

Outcomes

Outcomes in general education communicate the knowledge, skills and abilities required to equip students to make responsible contributions to society. Outcomes and criteria were adopted throughout Oregon colleges and universities to guide the purposes 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. General education courses are transferable to any of Oregon's public colleges and universities.

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; and
- 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 51 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 WR121, 122 and/or 227, 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 238 for descriptions of the writing courses.

Oregon Transfer Module

General Education Requirements

Requirements	Amount	Courses which satisfy requirements
Complete a minimum of 45 credits. All courses must be passed with a grade of "C-" or better. These must include the following:		
Writing <i>Two courses of college transfer composition</i>	2 courses	WR121* and either WR122* or WR227*
Oral Communication <i>One course in the fundamentals of speech or communication</i>	1 course	COMM100** , 105**, 111, 112, 115**, 130, 212, 218, 219**, 227**, 237**, 260**, 285
Mathematics <i>One course of college-level mathematics for which MTH095 is a prerequisite</i>	1 course	MTH105 or above
Arts and Letters <i>Three courses</i> <i>The second year of a foreign language may be included, but not the first year. American Sign Language (ASL) is considered a foreign language.</i> <i>The course taken to meet the Oral Communication requirement above may not be used to meet the Arts and Letters requirement.</i>	3 courses	ART101** , 115, 116, 117, 120, 131, 154, 155, 201, 204, 205, 206, 207**, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 247, 261, 265, 266, 270, 271, 272, 273, 281**, 284, 289**, 291; ASL211 , 212, 213; COMM100** , 105**, 111, 112, 115**, 130, 212, 218, 219**, 227**, 237**, 260**, 285; ENG100 , 104, 105, 106, 107**, 108**, 109**, 201, 202, 204**, 205**, 206**, 216, 220**, 221, 232**, 250, 253**, 254**, 256**, 257**, 258**, 260, 261, 269**, 275; FA255 , 256, 257; FR201 , 202, 203; HUM106 , 120**, 220**, 225**; JNL 224, 225, 227, 228; JPN120 , 201, 202, 203; MUS111 , 112, 113, 161, 201, 202, 203; PHL201 , 203, 205**, 206**, REL160** , 201, 202, 203**; RUS201 , 202, 203; SPN201 , 202, 203, 214, 215, 216, 250, 251; WR240 , 241, 242, 243, 244, 245, 250, 262, 263
Science/Math/Computer Science <i>Three courses, including at least one biological or physical science with a lab</i> Note: <i>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.</i>	3 courses	BI101 , 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH104 , 105, 106, 110, 114, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; 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
Social Sciences <i>Three courses</i>	3 courses	ATH101** , 102**, 103**, 212, 214, 215, 231; CLA201 , 202, 203; EC200 , 201, 202; GEG105 , 106**, 107**, 140, 190, 201, 202, 206, 207, 220; HST104 , 105, 106, 157, 158, 201**, 202**, 203**, 228, 237, 257**, 258**, 262**, 269**, 270, 279; PS201 , 202, 203, 205; PSY101 , 201, 202**, 213, 218**, 234**, 237, 239, 280**, SOC204** , 205**, 206**, 210**, 213**, 221, 223**, 224**, 232**, WS101** , 102**
Electives As required to bring the total credits to 45. Courses must be from the Arts and Letters, Social Science, or Science/Math/Computer Science subject areas.		
Notes:		
1. Each course must be worth at least three credits (quarter system).		
2. Courses that are designed to prepare students for college-level work are not applicable to the transfer module.		
3. 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.		
4. 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. A minimum of one course fulfills this requirement.		
** These courses fulfill the Cultural Literacy requirement of the AAOT. A minimum of one course fulfills this requirement.		

Associate of Arts Oregon Transfer Degree Requirements

Requirements	Amount	Courses which 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:		
• Foundational Requirements		
Health/Wellness/Fitness <i>One or more courses totaling three or more credits</i>	3 credits	Any PE185 course (one credit each); any HE or HPE course (three credits each)
Mathematics <i>One course in college-level mathematics, designated by the college as meeting statewide criteria for mathematics.</i>	1 course	MTH105 or above
Oral Communication <i>One course</i>	1 course	COMM100** , 105** , 111 , 112 , 115** , 130 , 212 , 218 , 219** , 227** , 237** , 260** , 285
Writing <i>Eight credits of college-transfer writing courses</i>	8 credits	WR121* and either WR122,* or WR227*
• Discipline Studies Courses used to meet the Foundational Requirements (above) in the Mathematics and Oral Communication categories may not be used to meet the Discipline Studies Requirements (below).		
Arts and Letters <i>Three courses chosen from two or more disciplines. (All foreign languages are considered one discipline; ASL is considered a foreign language.)</i>	3 courses	ART101** , 115 , 116 , 117 , 120 , 131 , 154 , 155 , 201 , 204 , 205 , 206 , 207** , 221 , 222 , 223 , 224 , 225 , 234 , 237 , 238 , 239 , 240 , 247 , 261 , 265 , 266 , 270 , 271 , 272 , 273 , 281** , 284 , 289** , 291 ; ASL211 , 212 , 213 ; COMM100** , 105** , 111 , 112 , 115** , 130 , 212 , 218 , 219** , 227** , 237** , 260** , 285 ; ENG100 , 104 , 105 , 106 , 107** , 108** , 109** , 201 , 202 , 204** , 205** , 206** , 216 , 220** , 221 , 232** , 250 , 253** , 254** , 256** , 257** , 258** , 260 , 261 , 269** , 275 ; FA255 , 256 , 257 ; FR201 , 202 , 203 ; HUM106 , 120** , 220** , 225** ; JNL , 224 , 225 , 227 , 228 ; JPN120 , 201 , 202 , 203 ; MUS111 , 112 , 113 , 161 , 201 , 202 , 203 ; PHL201 , 203 , 205** , 206** ; REL160** , 201 , 202 , 203** ; RUS201 , 202 , 203 ; SPN201 , 202 , 203 , 214 , 215 , 216 , 250 , 251 ; WR240 , 241 , 242 , 243 , 244 , 245 , 250 , 262 , 263
Sciences/Math/Computer Science <i>Four courses chosen from two or more disciplines, including at least three laboratory courses in biological or physical science</i>	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 , 114 , 115 , 116 , 117 , 121 , 122 , 123 , 201 , 202 , 221 , 222 , 223 ; 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 , 260 , 271 ; MTH105 or above
Social Sciences <i>Four courses chosen from two or more disciplines</i>	4 courses	ATH101** , 102** , 103** , 212 , 214 , 215 , 231 ; CLA201 , 202 , 203 ; EC200 , 201 , 202 ; GEG105 , 106** , 107** , 140 , 190 , 201 , 202 , 206 , 207 , 220 ; HST104 , 105 , 106 , 157 , 158 , 201** , 202** , 203** , 228 , 237 , 257** , 258** , 262** , 269** , 270 , 279 ; PS201 , 202 , 203 , 205 ; PSY101 , 201 , 202** , 213 , 218** , 234** , 237 , 239 , 280** ; SOC204** , 205** , 206** , 210** , 213** , 221 , 223** , 224** , 232** ; WS101** , 102**
• Electives Complete any college-level courses to bring the total number of credits to 90		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: BT104 , 105 ; MTH052-095 ; RD080 , 085 , 090 ; SSP050A , B , C , 051 ; WR080 , 088 , 089 , 090 , 091
Notes:		
1. Earn a cumulative grade point average (GPA) of 2.00 or above in all courses to be applied toward the degree.		
2. Complete a minimum of 24 credits at Chemeketa.		
3. Two terms of the same college-level foreign language, with a grade of "C" or better, are required for admission to Oregon University System schools. 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.		
4. Any student having the AAOT degree recognized on an official college transcript will have met the lower division General Education requirements of baccalaureate degree programs at any institution in the Oregon University System.		
5. Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an AAOT degree.		
6. GPA admission requirements for the OUS schools are not necessarily satisfied with an AAOT degree. Please contact your school of choice for specific requirements.		
7. To learn more about general education courses and their outcomes, see page 48.		
* These courses fulfill the Information Literacy requirement of the AAOT. A minimum of one course fulfills this requirement.		
** These courses fulfill the Cultural Literacy requirement of the AAOT. A minimum of one course fulfills this requirement.		

Associate of Science/Oregon Transfer Degree in Business

Requirements	Amount	Courses which satisfy requirements
Complete a minimum of 90 credit hours. Business-specific courses must be completed with a grade of C or better; all other courses must be completed with a grade of "C-" or better. These must include the following:		
• Foundational Requirements		
Computer Applications <i>A minimum of three credits. Proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of applicable courses</i>	3 credits	Computer Information Science: CIS101, CIS125A, CIS125E Computer Applications: CA208
Mathematics <i>A minimum of three courses for which MTH095 is a prerequisite, including one course in statistics</i>	3 courses	MTH105 or above, MTH243 , and one additional math course: MTH244 for PSU MTH244 or MTH241 for EOU, SOU MTH241 for OSU, WOU, UO
Oral Communication <i>One course in the fundamentals of speech or communication</i>	1 course	COMM100** , 105** , 111 , 112 , 115** , 130 , 212 , 218 , 219** , 227** , 237** , 260** , 285
Writing: <i>A minimum of eight credits of college-transfer writing courses</i>	8 credits	WR121* and either WR122* or WR227*
• Discipline Studies Courses used to meet these requirements must be at least three credits each		
Arts and Letters <i>Three courses chosen from two or more disciplines. (All foreign languages are considered one discipline. ASL is considered a foreign language.) The course used to meet the Oral Communication requirement above may not be used to fulfill this requirement.</i>	3 courses	ART101** , 102** , 115 , 116 , 117 , 120 , 131 , 132 , 154 , 155 , 201 , 202 , 203** , 204 , 205 , 206 , 207** , 221 , 222 , 223 , 224 , 225 , 234 , 237 , 238 , 239 , 240 , 243 , 247 , 247B , 247C , 254 , 256 , 261 , 262 , 263 , 265 , 266 , 270 , 271 , 272 , 273 , 274 , 275 , 281** , 281B** , 281C** , 282 , 284 , 285 , 286 , 289** , 291 , 292 , 293 ; ASL211 , 212 , 213 ; COMM100** , 105** , 111 , 112 , 115** , 130 , 212 , 218 , 219** , 227** , 237** , 260** , 285 ; ENG100 , 104 , 105 , 106 , 107** , 108** , 109** , 201 , 202 , 204** , 205** , 206** , 105 , 106 , 220** , 221 , 232** , 250 , 253** , 254** , 256** , 257** , 258** , 260 , 261 , 269** , 275 ; FA255 , 256 , 257 ; FR201 , 202 , 203 ; HUM106 , 120** , 220** , 225** ; JNL216 , 217 , 224 , 225 , 226 , 227 , 228 ; JPN120 , 201 , 202 , 203 ; MUS111 , 112 , 113 , 161 , 201 , 202 , 203 ; PHL201 , 203 , 205** , 206** ; REL160** , 201 , 202 , 203 ; RUS201 , 202 , 203 ; SPN201 , 202 , 203 , 214 , 215 , 216 , 250 , 251 ; WR240 , 241 , 242 , 243 , 244 , 245 , 250 , 262 , 263
Sciences/Math/Computer Science <i>Four courses chosen from two or more disciplines, including at least three laboratory courses in biological or physical science</i>	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 , 114 , 115 , 116 , 117 , 121 , 122 , 123 , 201 , 202 , 221 , 222 , 223 ; 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 , 260 , 271 ; MTH105 or above
Social Sciences <i>Four courses chosen from two or more disciplines, with a minimum of two courses in "principles of economics" (to include microeconomics and macroeconomics) at the 200 level (EC201, EC202)</i>	4 courses	ATH101** , 102** , 103** , 180 , 212 , 214 , 215 , 231 ; CLA201 , 202 , 203 ; EC200 , 201 , 202 , 203 ; GEG105 , 106** , 107** , 140 , 190 , 201 , 202 , 206 , 207 , 220 ; HST104 , 105 , 106 , 157 , 158 , 201** , 202** , 203** , 228 , 237 , 257** , 258** , 262** , 269** , 270 , 279 ; PS201 , 202 , 203 , 205 ; PSY101 , 104** , 201 , 202** , 213 , 218** , 234** , 237 , 239 , 280** , 282 ; SOC204** , 205** , 206** , 210** , 213** , 221 , 223** , 224** , 232** ; WS101** , 102**
• Business-Specific Requirements Each course in this section must be completed with a grade of C or better		
BA101 Introduction to Business <i>A minimum of three credits.</i>	4	BA101
BA211 Financial Accounting 1 and BA213 Managerial Accounting (or BA211 , BA212 Financial Accounting 2, and BA213) <i>A minimum of eight credits.</i>	8–12	BA211 , BA212 , and BA213
BA226 Business Law 1 (or other advisor-approved Business elective) <i>A minimum of three credits</i>	4	
• Electives and/or University-Specific Prerequisites	8–14 credits	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: BT104 , 105 ; MTH052 through 095 ; RD080 , 085 , 090 ; SSP050A , B , C ; 051 ; WR080 , 088 , 089 , 090 , 091 EOU— WR227 OIT— BA206 , BA223 , and PSY201 OSU— BA275 or MTH244 and COMM111 PSU— BA214 and COMM111 UO— MTH244

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 satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.
 - Students must have a minimum cumulative GPA of 2.0 at the time the ASOT-Business is awarded.
 - Any student having the ASOT-Business degree recognized on an official college transcript will have met the lower division General Education requirements of baccalaureate degree programs at any institution in the Oregon University System.
 - Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-Business degree.
 - Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance.
 - Complete a minimum of 24 credits at Chemeketa.
- * These courses fulfill the Information Literacy requirement of the ASOT-Business. A minimum of one course fulfills this requirement.
** These courses fulfill the Cultural Literacy requirement of the ASOT-Business. A minimum of one course fulfills this requirement.

Associate of Science/Oregon Transfer Degree in Computer Science

Requirements	Amount	Courses which satisfy requirements
Complete a minimum of 90 credit hours. Computer Science-specific courses must be completed with a grade of C or better; all other courses must be completed with a grade of "C-" or better. These must include the following:		
• Foundational Requirements		
Health/Wellness/Fitness <i>One or more courses totaling three credits</i>	3 credits	Any PE 185 courses (one credit each), or any HE or HPE course (three credits each)
Mathematics <i>Most universities will expect additional math courses. Consult with an advisor to confirm you are taking the appropriate math courses.</i>	2 courses	MTH 251 and MTH 252
Oral Communication <i>One course in the fundamentals of speech or communication</i>	1 course	COMM 100**, 105**, 111, 112, 115**, 130, 212, 218, 219**, 227**, 237**, 260**, 285
Writing: <i>A minimum of eight credits of college-transfer writing courses</i>	8 credits	WR 121* and either WR 122* or WR 227*
• Discipline Studies Courses used to meet these requirements must be at least three credits each		
Arts and Letters <i>Three courses chosen from two or more disciplines. (All foreign languages are considered one discipline. ASL is considered a foreign language.) The course used to meet the Oral Communication requirement above may not be used to fulfill this requirement.</i>	3 courses	ART 101**, 115, 116, 117, 120, 131, 154, 155, 201, 204, 205, 206, 207**, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 247, 261, 265, 266, 270, 271, 272, 273, 281**, 284, 289**, 291; ASL 211, 212, 213; COMM 100**, 105**, 111, 112, 115**, 130, 212, 218, 219**, 227**, 237**, 260**, 285; ENG 100, 104, 105, 106, 107**, 108**, 109**, 201, 202, 204**, 205**, 206**, 216, 220**, 221, 232**, 250, 253**, 254**, 256**, 257**, 258**, 260, 261, 269**, 275; FA 255, 256, 257; FR 201, 202, 203; HUM 106, 120**, 220**, 225**, JNL 224, 225, 227, 228; JPN 120, 201, 202, 203; MUS 111, 112, 113, 161, 201, 202, 203; PHL 201, 203, 205**, 206**, REL 160**, 201, 202, 203**, RUS 201, 202, 203; SPN 201, 202, 203, 214, 215, 216, 250, 251; WR 240, 241, 242, 243, 244, 245, 250, 262, 263
Sciences/Math/Computer Science <i>Four courses from at least two disciplines including at least three laboratory courses in biological and/or physical science. (One of the required computer science courses from below may be used to satisfy the fourth course from in this group; however, credits from a course used to satisfy both requirements will only count once toward the required total credits for this degree.)</i>	4 courses	Choose three courses from: BI 101, 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH 104, 105, 106, 110, 114, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; 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 Choose one course from: CIS 233J, 234J; CS 160, 161, 162, 233U, 260, 271; MTH 105, 111, 112, 211, 212, 213, 231, 232, 241, 243, 244, 253, 254, 255, 256
Social Sciences <i>Four courses chosen from at least two disciplines</i>	4 courses	ATH 101**, 102**, 103**, 212, 214, 215, 231; CLA 201, 202, 203; EC 200, 201, 202; GEG 105, 106**, 107**, 140, 190, 201, 202, 206, 207, 220; HST 104, 105, 106, 157, 158, 201**, 202**, 203**, 228, 237, 257**, 258**, 262**, 269**, 270, 279; PS 201, 202, 203, 205; PSY 101, 201, 202**, 213, 218**, 234**, 237, 239, 280**, SOC 204**, 205**, 206**, 210**, 213**, 221, 223**, 224**, 232**, WS 101**, 102**
• Computer Science-Specific Requirements Each course in this section must be completed with a grade of C or better		
<i>Most universities will expect additional computer science courses. Consult with an advisor to confirm you are taking the appropriate courses.</i>	4 courses	CS 160, CS 161, CS 162, and CS 260
• Electives and/or University-Specific Prerequisites <i>Electives should be taken to meet the requirements of the transfer institution. Contact computer science faculty or Advising and Counseling staff for university-specific details.</i>	As required to bring total credits to 90	Depends on choice of transfer institution. You are strongly encouraged to work with an advisor when choosing courses. A maximum of 12 credit hours in Career and Technical Education courses numbered 050 or higher may be included with the exception of the following: BT 104,105; MTH 052 through 095; RD 080, 085, 090; SSP 050A, B, C, 051; WR 080, 088, 089, 090, 091

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 satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.
 - Any student having the ASOT-Computer Science degree recognized on an official college transcript will have met the lower division General Education requirements of baccalaureate degree programs at any institution in the Oregon University System.
 - Students transferring under this agreement will have junior status for registration purposes. Course, class standing, or GPA requirements for specific majors, departments, or schools are not necessarily satisfied by an ASOT-Computer Science degree.
 - Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance.
 - Complete a minimum of 24 credits at Chemeketa.
- * These courses fulfill the Information Literacy requirement of the ASOT-Computer Science. A minimum of one course fulfills this requirement.
 ** These courses fulfill the Cultural Literacy requirement of the ASOT-Computer Science. A minimum of one course fulfills this requirement.

Associate of Applied Science Degree Requirements

Requirements	Credit Hours	Courses which satisfy requirements												
<ul style="list-style-type: none"> Career and Technical Education Requirements Complete the required courses and credits listed for each career and technical education program. See pages 68 to 147 in this catalog for career and technical education programs. You will meet the degree requirements if you follow the curriculum listed for your program. Additionally, the courses listed below meet the college's AAS degree requirements 														
<ul style="list-style-type: none"> Related Instruction and Digital Literacy Requirements 														
Communication/Writing <i>A minimum of 3 credits</i>	3/4	Choose from WR088 , 115, 121, or higher writing course, or approved program substitute												
Computation/Mathematics <i>A minimum of 3 credits</i>	3/4	One course of MTH052 or higher numbered math course, or approved program substitute												
Human Relations/Psychology/Sociology <i>A minimum of 3 credits</i>	3/4	PSY101 , 104, 201, 202, 206, 237, 239, 282; SOC204 , 205, 206, 210, 213; or approved program substitute												
Digital Literacy <i>As demonstrated by course completion or competency testing</i>	3/4	Any CS or CIS course or any of the following program-approved courses. Check with your program advisor if you have any questions related to this requirement. <table border="0"> <tr> <td>CIS101*</td> <td>Intro to Microcomputer Applications</td> <td>3 cr</td> </tr> <tr> <td>CIS120*</td> <td>Digital Literacy</td> <td>4 cr</td> </tr> <tr> <td>DRF165*</td> <td>CAD System Administration</td> <td>3 cr</td> </tr> <tr> <td>CAM160*</td> <td>Intermediate CNC Mill Operation and Programming</td> <td>4 cr</td> </tr> </table>	CIS101*	Intro to Microcomputer Applications	3 cr	CIS120*	Digital Literacy	4 cr	DRF165*	CAD System Administration	3 cr	CAM160*	Intermediate CNC Mill Operation and Programming	4 cr
CIS101*	Intro to Microcomputer Applications	3 cr												
CIS120*	Digital Literacy	4 cr												
DRF165*	CAD System Administration	3 cr												
CAM160*	Intermediate CNC Mill Operation and Programming	4 cr												
<ul style="list-style-type: none"> General Education Electives <i>A minimum of three credits chosen from one of these three disciplines</i> 	3/4	Arts and Letters American Sign Language, Art, Communication, English, Film Arts, Foreign Language, Humanities, Journalism, Music, Philosophy, Religious Studies Science/Applied Science Approved program-related instruction may satisfy this requirement, or courses in Biology, Chemistry, Computer Science, General Engineering, General Science, Geology, Horticulture, Nutrition and Food Management, Oceanography, Physics Social Science Anthropology, Chicano/Latino Studies, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies												
<ul style="list-style-type: none"> A minimum of three additional credits from any of these areas 	3/4	Arts and Letters American Sign Language, Art, Communication, English, Film Arts, Foreign Language, Humanities, Journalism, Music, Philosophy, Religious Studies English as a Non-Native Language** Any course with an ENL prefix Health and Human Performance/Physical Education Any course with an HE , HPE , or PE prefix Mathematics Any course with a MTH prefix Reading** Any course with an RD prefix Science/Applied Science Approved program-related instruction may satisfy this requirement, or courses in Biology, Chemistry, Computer Science, General Engineering, General Science, Geology, Horticulture, Nutrition and Food Management, Oceanography, Physics Social Science Anthropology, Chicano/Latino Studies, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies Study Skills** Any course with an SSP prefix Writing** Any course with a WR prefix												

Notes:

- Complete a minimum of 24 credits at Chemeketa.
 - Earn a cumulative grade point average (GPA) of 2.00 or above in all courses to be applied toward the degree.
 - We recommend that you see an advisor for guidance before you enroll.
 - Only courses numbered 050 or higher—unless otherwise indicated—apply toward the degree.
 - 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 42.
 - Some of Oregon's four-year institutions accept certain career and technical education courses as college transfer courses. If you are interested in continuing your education after completing a Chemeketa program, please contact your school of choice for additional information.
- * Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or college advisor.
 ** Courses must be 100 level or higher

Associate of Science Degree Requirements

Requirements	Credit Hours	Courses which satisfy requirements
Complete a minimum of 90 credits. All courses must be completed with a grade of "C-" or better. These must include the following:		
<ul style="list-style-type: none"> General Education Requirements 		
Arts and Letters <i>Minimum of nine credits chosen from two or more disciplines</i>	9	ART 101, 115, 116, 117, 120, 131, 154, 155, 201, 204, 205, 206, 207, 221, 222, 223, 224, 225, 234, 237, 238, 239, 240, 247, 261, 265, 266, 270, 271, 272, 273, 281, 284, 289, 291; ASL 211, 212, 213; COMM 100, 105, 111, 112, 115, 130, 212, 218, 219, 227, 237, 260, 285; ENG 100, 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 206, 216, 220, 221, 232, 250, 253, 254, 256, 257, 258, 260, 261, 269, 275; FA 255, 256, 257; FR 201, 202, 203; HUM 106, 120, 220, 225; JNL 224, 225, 227, 228; JPN 120, 201, 202, 203; MUS 111, 112, 113, 161, 201, 202, 203; PHL 201, 203, 205, 206; REL 160, 201, 202, 203; RUS 201, 202, 203; SPN 201, 202, 203, 214, 215, 216, 250, 251; WR 240, 241, 242, 243, 244, 245, 250, 262, 263
Digital Literacy <i>As demonstrated by course completion or competency testing</i>	3/4	Choose three credits from: CIS 101, 102A, 120, 120A, 121, 125A, 125E, 125G, 133J, 133JS, 133SC, 133VB, 135AE, 140B, 140U, 145, 178I, 178W, 179, 186, 195, 233J, 234J, 244, 276A, 276B, 276C, 277A, 277B, 278, 279, 288, 289, 295; CS 133U, 160, 161, 162, 260, 271, 275
Mathematics	4	MTH 111 or higher
Oral Communication	3/4	COMM 100, 105, 111, 112, 115, 130, 212, 218, 219, 227, 237, 260, 285
Physical Education or Health	3	Any PE 185 course (one credit each) or any Health and Human Performance course (three credits each)
Science <i>Courses must include a laboratory</i>	12	BI 101, 102, 103, 131, 132, 133, 143, 153, 211, 212, 213, 230, 231, 232, 233, 234; CH 104, 105, 106, 110, 114, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; 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
Social Science <i>Nine credits chosen from two or more disciplines</i>	9	ATH 101, 102, 103, 212, 214, 215, 231; CLA 201, 202, 203; EC 200, 201, 202; GEG 105, 106, 107, 140, 190, 201, 202, 206, 207, 220; HST 104, 105, 106, 157, 158, 201, 202, 203, 228, 237, 257, 258, 262, 269, 270, 279; PS 201, 202, 203, 205; PSY 101, 201, 202, 213, 218, 234, 237, 239, 280; SOC 204, 205, 206, 210, 213, 221, 223, 224, 232; WS 101, 102
Writing	6	WR 121 and one additional writing course for which WR 121 is a prerequisite
<ul style="list-style-type: none"> Electives All elective credits must be numbered 100 or above and be lower division collegiate courses 		Complete additional courses to bring the total number of credits to 90

Notes:

- Complete a minimum of 24 credits at Chemeketa.
- Two terms of the same college-level foreign language, with a grade of "C" or better, are required for admission to Oregon University System schools. 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, general education, and major requirements for the OUS schools are not necessarily satisfied with an AS degree. Please contact your school of choice for specific requirements.

Associate of General Studies Degree Requirements

Requirements	Credits	Courses which satisfy requirements
Complete a minimum of 90 credits. These must include the following:		
• General Education Requirements		
Digital Literacy <i>As demonstrated by course completion or competency testing</i>	3/4	Any CS or CIS course or any of the following program-approved courses listed below. Check with your program advisor if you have any questions related to this requirement. CIS101* (or higher) Introduction to Microcomputer Applications 3 cr CIS120* Digital Literacy 4 cr DRF165* CAD System Administration 3 cr CAM160* Programming CNC Mills 4 cr
Health and Human Performance/Physical Education <i>A maximum of 12 credits of physical education (PE185) may be applied toward the degree</i>	3	Any PE185 course (one credit each), or any HE or HPE course (three credits each)
Mathematics <i>A minimum of four credits with a grade of C- or better</i>	4	MTH095 or above
Oral Communication <i>A minimum of three credits</i>	3/4	COMM100 or above
Writing <i>A minimum of six credits with a grade of C- or better</i>	6	WR121 and one additional course from WR122, 227, 240, 241, 242, 243, 244, 245, 262 ; or BA214
• Distribution Requirements Each course must be a minimum of three credits and numbered 100 or above		
Arts and Letters <i>Each course must be a minimum of three credits</i>	9	Art, American Sign Language, Communication, English, Film Arts, French, Humanities, Journalism, Japanese, Music, Philosophy, Religious Studies, Russian, Spanish, Writing
Science <i>Eight credits of biological or physical science courses which include a laboratory</i>	8	Biology, Chemistry, Geology, General Science, Physics
Social Science <i>Twelve credits chosen from at least two disciplines. Each course must be a minimum of three credits</i>	12	Anthropology, Chicano/Latino Studies, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, Women's Studies
• Electives: Complete additional courses to bring the total number of credits to 90		Developmental courses numbered less than 050 do not meet the requirements of this degree. 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 150 for how courses are numbered. All collegiate-level courses must be numbered 100 or above.

Note:

1. Earn a cumulative grade point average (GPA) of 2.00 or above in all courses to be applied toward the degree.
 2. Complete a minimum of 24 credits at Chemeketa.
 3. A maximum of 12 credit hours of cooperative work experience may be applied toward the degree.
- * Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or a college advisor.

Eastern Oregon University General Education Requirements (Core Curriculum)

Requirements	EOU Credit hours	Chemeketa courses which 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. A maximum of 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; ENG 104*, 105*, 106*, 107, 108, 109*, 201, 202, 204, 205, 206, 253*, 254*; JPN 101, 102, 103; MUS 105*, 161*, 201, 202, 203; PHL 201*, 203*, 206; SPN 101, 102, 103, 201, 202, 203
Difference, Power, and Discrimination	5 credits	HST 201; PHL 203; PS 201, 202, 205; SOC 204
Natural, Mathematical, and Information Sciences: Courses must be in at least two different disciplines.	6–20 credits	BI 101*, 102*, 103*; CH 110, 121, 122; FRP 157, 171, 172, 174, 266; GEG 105, GEO 142, 143, 144, 201, 202, 203; GS 104*, 105*, 106*, 107*, 141, 142*, 143*; MTH 105, 211, 212, 241, 243, 244, 251; PH 111, 207, 208, 209
Social Science Courses must be in at least two different disciplines.	6–20 credit	ATH 101, 102*, 103*; EC 200, 201*, 202*; GEG 106, 107, 206; HST 104*, 105*, 106*, 201*, 202*, 203*; JNL 224; PS 201*, 202*, 205; PSY 201, 202*; SOC 204*, 205*, 206*
Artistic Process and Creation: Courses must be in at least two different disciplines.	6–20 credit	ART 115, 116, 117, 131, 154, 155, 221, 261, 281; MUS 197; WR 240, 241, 242, 243, 262
Gateway	Up to 15 credits	WR 121, 122

*Indicates courses offered through distance education.

Students entering EOU who have earned an Oregon Associate of Arts Transfer degree or an Associate of Science In Business Oregon 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. Additional options for general education completion can be found at www.eou.edu/registrar/transfer/.
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 better 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. Career-Technical Coursework: 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 credits toward graduation.
8. 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.
9. This guide is subject to change without notice and should not be regarded as a contract between Eastern and students attending Chemeketa.

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

Oregon Tech (OIT) General Education Requirements

Requirements	OIT Credit hours	Chemeketa courses which satisfy requirements
Communication SPE111 Fundamentals of Speech WRI121 English Composition WRI122 English Composition Nine additional credits from speech/writing courses specified by the major department from the following: COM205, 225, 320, 347, 401, 402, WRI123, 214, 227; SPE321, WRI321, 322, 323, 327, 328, 350, 410.	3 3 3 9	COMM111 WR121 WR122 Nine additional credits from speech/writing courses having WR122 or COMM111 as a prerequisite from the following: BA214; COMM115, 218, 219, 227
Humanities Nine credits selected by student or specified by a major department from the following: ART —Art; ENG —Literature; HUM —Humanities; MUS —Music; PHL —Philosophy; Language (second year). Other transfer courses defined as “Humanities” by the Registrar’s Office may be used in this category. *No more than three credits of studio-based, activity, or performance-based courses may be used in this category.	9	Choose from: ART101, 115*, 116*, 117*, 118*, 131*, 132*, 142*, 154*, 155*, 156*, 201, 204, 205, 206, 207, 221*, 222*, 223*, 224*, 234*, 235*, 238*, 239*, 254*, 261*, 262*, 263*, 266*, 267, 268*, 270*, 271*, 272*, 273*, 274*, 275*, 284*, 285*, 286*, 289, 291*, 292*, 293*; COMM212; ENG104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 216, 250, 253, 254, 275; FA255, 256, 257; FLM265, 266, 267; FR100, 201, 202, 203; HUM106, 120, 225; JPN201, 202, 203; MUS100, 105, 111, 112, 113, 161, 197*, 201, 202, 203; PHL201, 203, 205; REL160, 201, 202, 203; RUS201, 202, 203; SPN201, 202, 203, 250, 251
Social Sciences Twelve credits selected by student or specified by major department from the following: ANTH —Anthropology; ECO —Economics; GEOG —Geography; HIST —History; PSCI —Political Science; PSY —Psychology; SOC —Sociology. Other transfer courses defined as “Social Science” by the Registrar’s Office may be used in this category. ANTH101 may not be used to satisfy both Social Science and Science credits. GEOG105 and GEOG115 may not be used to satisfy Social Science credits.	12	Twelve credits selected by student or specified by major department from the following: ATH101, 102, 103, 212, 214 231; CLA201, 202, 203; CJ101, 229; EC200, 201, 202, 203; GEG106, 107, 201, 202, 206, 207, 220; HST104, 105, 106, 157, 158, 201, 202, 203, 228, 237, 257, 258, 262, 269, 270, 279; PS201, 202, 203, 205; PSY101, 104, 201, 202, 213, 218, 234, 237, 239, 280, 282; SOC204, 205, 206, 210, 213, 221, 232; WS101, 102
Science/Mathematics One four-credit college-level mathematics course for which at least intermediate algebra (MTH095) is a prerequisite. Plus 12 credits selected by student or specified by major department from biological sciences, mathematics, or physical sciences. At least four credits must be completed from laboratory-based science courses in BIO, CHE, GEOG, GEOL, or PHY.	4 12	MTH105, 111, 211, 212, 213 Plus 12 hours selected from: BI101, 102, 103, 131, 132, 133, 143, 153, 200, 211, 212, 213; (must take all 3 courses), 231, 232, 233, 234; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; GEO142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; MTH105, 112, 231, 243, 251, 252, 253, 254, 255, 256; OC133; PH121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213

Students entering Oregon Institute of Technology 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.

*These courses transfer as “Human Performance” and OIT will only accept three 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 which satisfy requirements
Writing I (Must pass with a grade of C- or above)	3	WR121 (must be completed before transferring)
Writing II	3	BA214; WR122, 227, 240, 241, 242, 243, 244, 245, 262, 263
Writing III/Speech	3	COMM111, 112, 218, 219
Mathematics (Must pass with a grade of C- or above)	3	MTH105 or 111, 112, 211, 241, 251 (must be completed before transferring)
Fitness	3	HPE295
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, 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, 211, 212, 213, 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, 275; FA255; GEG106, 207; HST104, 105, 106, 201, 202, 203, 228; PHL201, 203; REL202, 203
Cultural Diversity*	3	ART201; ATH212, 214, 231; CLA201, 202, 203; ENG257; GEG201, 202, 220; HST104, 105, 106, 157, 257, 258, 270; HUM220, REL160, 201, 202; SSC100
Literature and the Arts*	3	ART101, 201, 204, 205, 206; ENG100, 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 250, 253, 254, 256, 257, 258, 260, 269, 275; FA255, 256; MUS105, 161, 201, 202, 203
Social Processes and Institutions*	3	ATH103; EC201, 202; HE209; HM210, PS201, 202, 205; PSY100, 201, 202; SOC204, 205
Difference, Power and Discrimination*	3	HST201, 202, 203; SOC206, 210, 213
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 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 career and 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. Career and technical courses include those with prefixes of: **AH, AUM, BLD, BT, CA, CAM, CJ, CVL, DEN, DRF, ECE, ED, ELT, EMT, ES, FE, FRP, FT, HD, HDF, HEM, HM, HOR, HS, HTM, MED, MFG, MT, NET, NUR, PHM, PLP, RD, SLP, SSP, ST, VC, VMW, WFB, and WLD.**
3. Students with career and 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

Requirements	PSU Credit hours	Chemeketa courses which satisfy requirements
Freshman Inquiry Three five-credit courses. (This sequence is required of all transfer students who have earned less than 30 quarter hours at the time of transfer.) Electives or Major Requirements	15 30	Complete 45 credit hours from courses, including WR121 (C- or higher), listed for the Associate of Arts Oregon Transfer (AAOT) degree. The Oregon Transfer Module (OTM) is a guarantee of 45 credits completion of freshman year general education requirements. Courses should include writing, speech/oral communication, and computer science. It is also important to learn appropriate uses of information technology resources of the library
Sophomore Level Three four-credit courses selected from different interdisciplinary programs or general education clusters. Students who have earned 30 to 89 quarter hours at the time of transfer must complete sophomore inquiry at PSU Electives or major requirements	12 33	Complete an additional 45 credit hours from courses listed for the AAOT and courses required for major to waive Sophomore level general education and enter PSU with Junior standing. Students planning on attending Chemeketa for two years should complete the Associate of Arts Oregon Transfer degree.

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

Notes:

1. Students (resident, non-residents, and international) must have achieved a 2.25 cumulative GPA with 30 transferable credit hours to be considered as a transfer student for admissions purposes.
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 an Oregon high school spring 1997 or later. Students may complete this requirement at PSU prior to graduation.
7. Students planning to earn a BA must show competence of two years of college foreign language studies by either completing two years of any foreign language numbered 203 or higher, or by passing CLEP or other competency exam.
8. Beginning Fall 2012, students transferring to PSU with 90 or more transfer credits should consider taking a second writing composition course (WR122, 227). The second writing course is not required for admission but is a requirement for PSU graduation.

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 503.725.5000 or 800.547.8887

Southern Oregon University General Education Requirements (Core Curriculum)

SOU requirements	SOU Credit hours	Chemeketa courses which satisfy requirements
Writing (Complete all three classes)	9	WR121 and 122; and COMM111, 218, or 219 ("C-" or better in each course.)
Mathematics	4-5	MTH105, 111, 112, 211+ 212, 241, 243, 244, 245, 251, 252, 253
Humanities (Each course must be a minimum of three credits)	9-12	Complete at least three courses from the following: ART101, 201, 204, 205, 206, 207; ASL211, 212, 213; COMM100, 115, 227, 237, 260; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 216, 221, 222, 232, 250, 253, 254, 256, 257, 258, 269, 275; FA255, 256, 257; FR201, 202, 203; HUM106; JNL224; JPN201, 202, 203; MUS105, 161, 201, 202, 203; PHL201, 203, 205, 206; REL160, 201, 202, 203; RUS201, 202, 203; SPN201, 202, 203, 212; WR241, 242, 243
Social Science	9-12	Complete at least three courses from the following: ATH101,103, 180, 212, 214, 215, 231; BA101; CJ100, 101; CLA201, 202, 203; EC200, 201, 202, 203; GEG106, 107, 201, 202, 206, 207, 220; HE250; HPE295; HST104, 105, 106, 157, 158, 201, 202, 203, 228, 257, 258, 262, 269, 270, 279; PS201,202, 203, 205; PSY101, 104, 201, 202, 218, 234, 237, 239, 280, 282; SOC204, 205, 206, 210, 213, 221, 232; WS101, 102
Science	11-12	Complete at least three courses from the following. At least two courses must have labs: BI101, 102, 103, 131, 132, 133, 143, 171, 172, 200, 211, 212, 213, 230, 231, 232, 233, 234, 251; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; GEO142, 143, 144, 201, 202, 203; GS104, 105, 106, 107, 141, 142, 143; PH111, 121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213 Non-lab courses: GEG105, 190; GS120

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

General education notes:

Students must complete 36 transferable credits before transferring. Those who transfer with fewer than 36 credits must meet SOU's freshman admission requirements. **Contact the Academic Support Programs for information and prospective student advising: 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 are 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 career and technical courses are accepted as electives towards the 124 credit transfer limit. SOU will accept AAS degrees (except in Business or Accounting) for the Bachelor's in Applied Science (BAS) program. Up to 60 career and technical credits may be applied to the BAS program.
4. Courses in which "D-" grades have been earned (except WR and COMM) 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: ART201, 204, 205, 206, 207, 289; ASL211, 212, 213; COMM111, 115, 218; ENG100, 104, 105, 106, 107, 108, 109, 201, 202, 204, 205, 216, 250, 253, 254, 256, 257, 258, 275; FA255, 256, 257; FR201, 202, 203; HUM120; JPN201, 202, 203; MUS201, 202, 203, PHL201, 203, 206; REL160, 202; RUS201, 202, 203; SPN201, 202, 203, 214, 215, 216, 250, 251
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, 232; BA101; CLA201, 202, 203; COMM212; EC200, 201, 202, 203; GEG106, 107, 201, 202, 206, 207, 220; HST104, 105, 106, 157, 158, 159, 201, 202, 203, 228, 237, 257, 258, 262, 269, 279; JNL224; PS201, 202, 203, 205; PSY202, 234, 237, 239; REL201, 203; SOC204, 205, 206, 210, 213, 221 232; 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; BI100, 101, 102, 103, 131, 132, 133, 143, 153, 171, 172, 200, 211, 212, 213, 230, 231, 232, 233, 234, 251; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; 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; OC133; PH121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213; PSY201, 213
Multicultural Requirement You must complete two courses chosen from two of the following three areas: Area 1—American Culture (AC) Area 2—Identity, Pluralism and Tolerance (IP) Area 3—International Cultures (IC) (Same courses may be chosen to meet this requirement and one of the requirements listed above.)	2 courses, at least 3 credits each.	Area 1: ATH231, 233; CLA201, 202, 203; ENG257; GEG207; HST257, 258; MUS105; SSC100; SOC205, 206 Area 2: ENG256, 260; HE213; HS213; HST262; REL202; SOC213; WS101, 102 Area 3: ART201, 289; ATH103, 212, 214, 215; ENG107, 108, 109, 258; GEG106, 201, 202, 220; HST104, 105, 106, 157, 158, 270, 279; HUM120, 220; REL160, 201

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

Students entering U of O who have earned an Associate of Arts Oregon 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.

Students graduating from high school in 1997 or after must have completed two years of a high school-level second language or two terms of a college-level second language, or demonstrate proficiency to be admitted to U of O.

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 career and technical courses are accepted as electives.
4. The following course 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. A 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. A 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) degree 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 a 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 six credit hours WR121 & WR122 (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.

Western Oregon University General Education Requirements (Core Curriculum)

Requirements	WOU Credit hours	Chemeketa courses which satisfy requirements
English Composition (WR135)	4	WR122 (Must be passed with a C- or better.)
Communication Studies (COM111)	3	COMM111, 112
Health and Physical Education	4	Activity courses selected from PE185 and HPE295, 296. Classes should include different activities. (Prefer HPE295 and a one-hour activity class.)
Creative Arts (Art, Dance, Music, Theater Arts)	9	Choose from ART101, 115, 116, 117, 131, 142, 204, 205, 206; MUS100, 105, 111, 112, 113, 161, 197, 201, 202, 203. In addition, dance courses at WOU meet requirement. Note: A maximum of three hours of music performance courses is allowed. Prefer nine hours in a combination of three different areas
Humanities (Literature, Modern Language*, Philosophy or Religion)	12	A sequence of at least six 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, 221, 232, 253, 254, 256, 257, 258, 260, 261, 269, 275, and one philosophy or religion course: PHL201, 203, 205, 206 or REL160, 201, 202, 203.
Laboratory Science	12	At least eight hours in the same discipline are required. Choose lab science courses from BI101, 102, 103, 131, 153, 171, 211, 212, 213; CH104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 221, 222, 223; GEO142, 143, 144, 201, 202, 203, GS104, 105, 106, 107, 141, 142, 143; PH121, 122, 201, 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 eight hours in the same discipline is required. Choose ATH101, 102, 103, 180; GEG105, 106, 107, 140; HST104, 105, 106, 201, 202, 203, 228, 270, 279; PS201, 202, 203, 205, SOC204, 205, 206, 210; EC200, 201, 202, 203. The remaining three hours may be in any social science area, including psychology and criminal justice.
Degree Requirements		
Bachelor of Arts (B.A.) or	4	(1) MTH105 or higher math. (Early Childhood/Elementary/Middle level education majors should take MTH211, 212, 213) and
	3	(2) CIS101; and
Bachelor of Science (B.S.)	4	(3) Third term of a second-year foreign language
	12	(1) A combined total of 12 credit hours in Mathematics, Computer Science, and/or designated Quantitative Literacy courses. A minimum of one math course (at the level of MTH111 or above) and one Computer Science course is required. Early Childhood/Elementary/Middle School Education majors should take MTH211, 212, 213.

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

Students transferring without the AAOT degree must have completed 36 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; conversation courses do not apply.

**PE185JA,B,C–Dance, Jazz; PE185DJ,K,L–Dance, Modern

Notes:

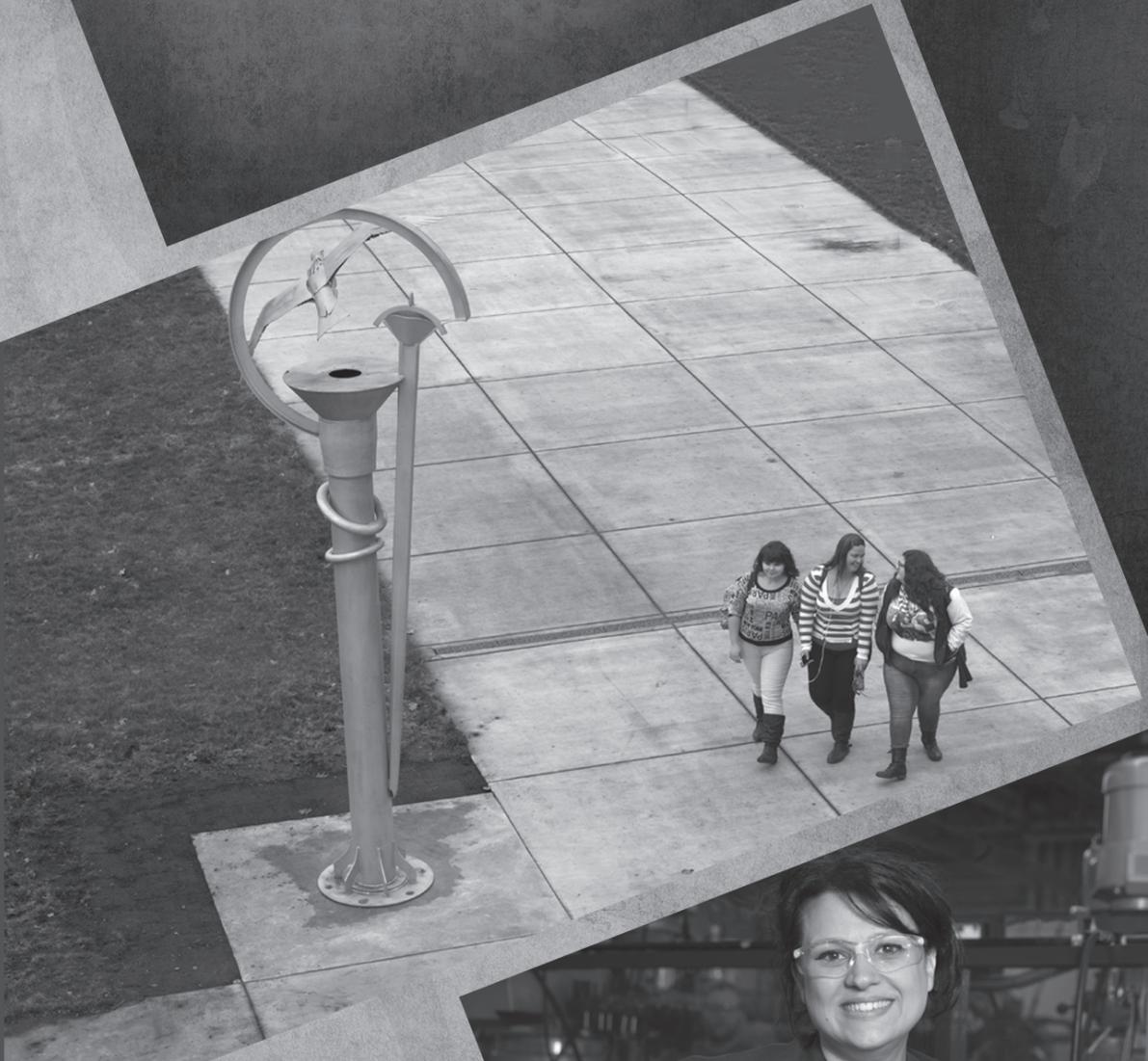
1. A maximum of 124 hours taken at a community college can be transferred to WOU.
2. In general, only courses at the baccalaureate level with a letter prefix and a number of 100 or higher are considered transferable.
3. Up to 24 hours of career/technical credits can be transferred as free electives.
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, American Sign Language, and Fire Services Administration programs require completion of prerequisite curricula 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 503.838.8000 or 877.877.1593

Career Choices and Programs of Study



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
Industrial/Organizational Psychologist	See Associate of Arts Oregon Transfer/Psychology Major	page 51
Personal Care Aide/Home Health Aide	See Practical Nursing	page 132
Occupational Therapist	See Associate of Arts Oregon Transfer	page 51
Diagnostic Medical Sonographer	Contact Linn-Benton Community College	541.451.6438
Physical Therapist Assistant	Contact Mt. Hood Community College	503.491.4765
Physician Assistant	See Associate of Arts Oregon Transfer/Biology Major	page 51
Information Security Analyst	See Network Management and Systems Security	page 87
Medical Secretaries	See Business Technology, Medical Administrative Assistant	page 83
Physical Therapist	See Associate of Arts Oregon Transfer	page 51
Audiologist	See Associate of Arts Oregon Transfer/Speech Major	page 51
Dental Hygienist	See Dental Hygiene Transfer Guidelines	page 96
Meeting, Convention, and Event Planner	See Hospitality Management	Page 118
Substance Abuse and Behavioral Disorder Counselors	See Addiction Studies	page 121

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
Medical Records and Health Information Technicians	Jane Ellis	503.589.7848	See Health Information Management, page 114
Emergency Medical Technicians/Paramedics	Gregg Lander	503.399.2664	See Paramedicine, page 107
Dental Assistants	Lynn George	503.399.5265	See Dental Assisting, page 95
Medical Assistants	Holly Nelson	503.584.7542	See Medical Assisting, page 130
Computer Programmers	Mandy Reininger	503.365.4822	See Computer Systems and Information Technology, page 85
Landscaping/Groundskeepers	Joleen Schilling	503.399.5150	See Horticulture, page 117
Machinists	Sheldon Schnider	503.589.7875	See Machining Technology, page 124

Source: Oregon Employment Department

Career Pathways Certificates, Short-term Training Awards, and Business and Industry Certification

You may not need to complete a two-year degree to prepare for some of the jobs that are of interest to you. Many programs offer Career Pathways Certificates of Completion. Career pathways courses will apply to a Certificate or Associate of Applied Science (AAS) degree in the same field. These certificates can help you get started on a career 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.

Industry 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.

Contact the departments or individuals listed below or check the pages indicated for more information.

Career Pathways Certificates of Completion (Credit)

Certificate	Contact	Credits	Page
Accounting	Denise Teixeira, 503.584.7111	43	68
Automotive Entry-Level	Steve Agee, 503.399.6521	28	75
Basic Corrections	Marshall Roache, 503.589.7768	36	93
Basic Health Care	Bruce Scanlon, 503.399.3696	16	115
Basic Law Enforcement	Marshall Roache, 503.589.7768	38	94
Basic Manufacturing Technician	Sheldon Schnider, 503.589.7875	16	125
Business Software	Patti Sessions, 503.399.6094	20	80
Computer Programming	Mandy Reininger, 503.365.4822	31	86
Computer Support Specialist	Mandy Reininger, 503.365.48223	34	87
Computer Systems Administration	Mandy Reininger, 503.365.4822	37	87
Computer-Aided Manufacturing (CAM) Fundamentals	Sheldon Schnider, 503.589.7875	26	125
Computer Numerically Controlled (CNC) Operator	Sheldon Schnider, 503.589.7875	41	126
Destination Marketing	Paul Davis, 503.584.7553	27	139
Electronics	Chuck Sekafetz, 503.399.6254	43	102
Event Management	Paul Davis, 503.584.7553	30	119
Early Childhood Education: Infant/Toddler	Pam Ditterick, 503.399.6076	15	99
Early Childhood Education: Preschool	Pam Ditterick, 503.399.6076	14	100
Human and Social Services Traditional Health Worker	Yolanda Martinez 503.399.6236	36	122
Manual Machine Operator	Sheldon Schnider, 503.589.7875	41	126
Network Management and Systems Security	Mandy Reininger, 503.365.4822	36	87
Office Fundamentals	Barbara Holler, 503.399.5048	37	81
Payroll	Denise Teixeira, 503.584.7111	20	69
Process Control	Chuck Sekafetz, 503.399.6254	37	103
Sustainability in Management	Karen Edwards, 503.399.3996	12	128
Tax Preparation	Denise Teixeira, 503.584.7111	16	70
Virtual Office Assistant	Patti Sessions, 503.399.6094	40	81
Web Developer	Mandy Reininger, 503.365.4822	31	87
Short-Term Training Awards (Non-credit) Training	Contact	Duration	
Basic Nurse Assistant	Nol Cobb, 503.589.7743	11 weeks	
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	
Business and Industry Certification Preparation Training	Contact	Duration	
Operating System Core Hardware* (A+)**, ***	Mandy Reininger, 503.365.4822	5 Terms	
Microsoft Certified Technical Specialist (MCTS)*	Mandy Reininger, 503.365.4822	5 Terms	
Oracle Database Administrator	Mandy Reininger, 503.365.4822	5 Terms	

* Credit, ** Non-credit, *** Available online

Accounting Programs

go.chemeketa.edu/accounting

See also **Business Administration and Management**.

Are you interested in becoming a bookkeeper, accountant, payroll specialist, or tax preparer? The Accounting certificate and degree, and the Payroll and Tax Preparation certificates offer you the training to qualify for entry-level positions requiring accounting in business, industry, and government agencies. The Accounting Baccalaureate Preparation certificate is geared to those who plan to transfer to a university to pursue an accounting degree or a business degree with emphasis in accounting.

The programs include a core of accounting, business, and general education courses and emphasize acquiring specialized business knowledge. You may select individual courses to meet your needs, or you may work toward a certificate of completion or an associate of applied science degree. The Accounting 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.

Program outcomes

Students completing the Accounting and Tax Preparation 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 Accounting Baccalaureate Preparation certificate will:

- Identify, analyze, record, and summarize routine economic events, and present the results of that work
- Demonstrate computer, math, writing, and communication skills required for upper-division college work and applicable to accounting career standards

Students completing the Payroll certificate will:

- Prepare complex fourth-quarter payroll
- Interpret legal and/or contracted language and apply to payroll

In addition to the certificate outcomes, students completing the degree will:

- 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 these programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Chemeketa's Advising and Counseling Services staff. You may need to complete entry-level courses. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Accounting certificate and degree, Payroll certificate, and Tax Preparation certificate programs

BA115	Introduction to Accounting (if less than RD090 and MTH060).....	4
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition.....	4

For the Accounting Baccalaureate Preparation certificate program

BA115	Introduction to Accounting (if less than RD090 and MTH060).....	4
MTH105	Math in Society.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition.....	4

If you have questions about the requirements, call 503.399.5048. 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 AAS

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, \$602. 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		
BA104	Business Applications Using Mathematics	4
BA211	Financial Accounting 1	4
CIS101	Introduction to Microcomputer Applications	3
	or	
CIS120	Digital Literacy (or higher)	4
WR121	The College Essay	4
	or	
BT210	Professional Communication Skills	4
Term 2		
BA101	Introduction to Business	4
BA212	Financial Accounting 2	4
CIS125E	Excel-Workbooks	4
	or	
BA225	Excel for Accounting	4
Term 3		
BA177	Payroll	4
BA213	Managerial Accounting	4
BA226	Business Law 1	4
BA228	Computer Accounting Applications	4

Accounting AAS

Accounting Baccalaureate Preparation Certificate of Completion

The Accounting Baccalaureate Preparation (ABP) certificate has been developed for students attending Chemeketa who are looking to transfer to a university to major in accounting or obtain a business degree with an emphasis in accounting. The certificate combines some of Chemeketa's accounting degree requirements with the requirements of the Associate of Science/Oregon Transfer degree in Business and contains a substantial portion of the lower division courses required for prospective accounting majors at the university level.

Students who complete the certificate and transfer to a four-year school to earn a bachelor's degree in accounting or business will be prepared for jobs in private, non-profit, and governmental accounting and may meet partial requirements in preparation for the Certified Public Accountant, Certified Management Accountant, and Certified Financial Planner exams.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$422; class fees, \$25; and universal fee, \$224. 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 54 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA211	Financial Accounting 1	4
CIS101	Introduction to Microcomputer Applications	3
	or	
CIS120	Digital Literacy (or higher)	4
WR121	The College Essay	4
Term 2		
BA101	Introduction to Business	4
BA212	Financial Accounting 2	4
BA214	Business Communications+	3
	or	
WR122	Argument and Research+	4
	or	
WR227	Technical Writing+	4
Term 3		
BA213	Managerial Accounting	4
BA226	Business Law 1	4
Term 4		
MTH243	Probability and Statistics 1+	4
	Psychology/Sociology elective+*	4
Term 5		
EC202	Introduction to Macroeconomics	4
COMM111	Fundamentals of Public Speaking	4
Term 6		
EC201	Introduction to Microeconomics	4
MTH244	Probability and Statistics 2	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.
*Psychology/Sociology elective: Choose from PSY101, PSY104, SOC204, SOC205, or SOC206.

Accounting AAS

Payroll Certificate of Completion

The Payroll certificate emphasizes skill development for those interested in pursuing a position as payroll/benefits specialist. Graduates of the program may find employment in local, state, or federal government agencies, or in any segment of the private sector. The demand for accounting firm employees with the special skill set of a payroll professional is expected to grow as these firms seek to increase revenue streams by adding the payroll function to their menu of services. More companies are outsourcing their payroll functions to accounting firms due to the increasing number and complexity of regulations.

The Payroll certificate program is wholly contained within Chemeketa's Accounting AAS degree curriculum and includes coursework in financial accounting, payroll, computer accounting applications, and human resource management. Upon completion of this program students will be prepared to sit for the Fundamental Payroll Certification exam offered by the American Payroll Association.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$422; class fees, \$25; and universal fee, \$224. 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
Term 1		
BA211	Financial Accounting 1	4
Term 2		
BA177	Payroll	4
BA228	Computer Accounting Applications.....	4
Term 3		
BA276	Advanced Payroll.....	4
Term 4		
BA224	Human Resource Management	4

Accounting AAS

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, \$224. 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 Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,200; class fees, \$464; universal fee, \$1,316; 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 94 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA104	Business Applications Using Mathematics+	4
BA211	Financial Accounting 1	4
CIS101	Introduction to Microcomputer Applications	3
	or	
CIS120	Digital Literacy (or higher)	4
SSP125	Learning Strategies for Online Students	1
WR121	The College Essay	4
	or	
BT210	Professional Communication Skills	4
Term 2		
BA101	Introduction to Business	4
BA212	Financial Accounting 2	4
BA214	Business Communications+	3
	or	
WR122	Argument and Research+	4
	or	
WR227	Technical Writing+	4
CIS125E	Excel-Workbooks.....	4
	or	
BA225	Excel for Accounting	4
Term 3		
BA177	Payroll.....	4
BA213	Managerial Accounting	4
BA226	Business Law 1	4
BA228	Computer Accounting Applications.....	4
Term 4		
BA266	Intermediate Financial Accounting 1	4
MTH095	Intermediate Algebra+ (or higher)	4
	Accounting elective*	4
	Psychology/Sociology elective+***	4
Term 5		
BA256	Income Tax 1	4
BA267	Intermediate Financial Accounting 2	4
COMM111	Fundamentals of Public Speaking (or higher: COMM130 recommended)	4
	Business/Economics elective**	4
Term 6		
BA257	Income Tax 2	4
BA268	Intermediate Financial Accounting 3	4
BA280C	Cooperative Work Experience	3
	or	
	Business/Economics elective **	3
	Accounting elective*	4
	or	
BA206	Business Management Principles.....	4
	or	
BA222	Financial Management.....	4
	or	
MTH111	College Algebra (or higher).....	5

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Accounting elective: Choose from BA215, BA218, BA225, BA237, BA240, BA265, or BA276.

**Business/Economics elective: Choose BA or EC course numbered 200 or above.

***Psychology/Sociology elective: Choose PSY101, PSY104, SOC204, SOC205, or SOC206.

Agriculture

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 49.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Social Science on Page 49.

Chemeketa offers a number of anthropology courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

go.chemeketa.edu/apprenticeship

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. HVAC/R technicians, plumbers, and electricians 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 Construction Trades, General Apprenticeship with specializations in Heating, Ventilation, Air-Conditioning, and Refrigeration (HVAC/R); Plumbing; and Sheet Metal, and a certificate of completion and an associate of applied science degree in Electrician Technologies Apprenticeship for Inside Wire Electricians. 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 courses 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.boli.state.or.us 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 go.chemeketa.edu/apprenticeship or www.oregonapprenticeship.org.

All students in the HVAC/R, Sheet Metal, or Inside Wire Electrician apprenticeship programs 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.

Students Transferring Into the Apprenticeship Programs

Transcripts from students interested in transferring to Chemeketa for apprenticeship program completion or for degree and certificate completion will be evaluated on an individual basis. Learner outcomes will determine the courses and number of credits accepted. The total number of credits accepted may or may not equal the number of credits approved for Chemeketa students.

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 Occupational Safety and Health Administration (OSHA) regulations
- Complete three general education courses: one each in communications, computation and human relations

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: one each in communications, computation and human relations

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: one each 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 three general education courses

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 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

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 National Electrical Code (NEC) and Oregon Electrical Specialty Code (OESC) standards for Inside Electrician
- Complete three general education courses: one each 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 three general education courses

Getting started

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

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 better 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
- One year of high school algebra with grade "C" or better or
- Completion of MTH060 or MTH070 at Chemeketa

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 better 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 entry requirements:

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

If you have questions about the program requirements, contact the Apprenticeship office at 503.399.5255 or e-mail marilyn.reed@chemeketa.edu.

Construction Trades, General Apprenticeship AAS

Construction Trades, General Apprenticeship, Certificate of Completion

You may earn a certificate of completion by successfully completing the Construction Trades, General Apprenticeship general education requirements of 12 credit hours, plus additional credits in one area of specialization listed below.

Construction Trades, General Apprenticeship general education requirements (12 credit hours)

Course	Title	Credit Hours
MTH095	Intermediate Algebra+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4
WR115	Introduction to Composition+ (or higher)	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Plus: Choose one area of specialization

HVAC/R Specialization

In addition to tuition, estimated costs for students who complete the entire four-year listed below are program fees, \$480; universal fee, \$1,008. 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 (12 hours of general education credits listed above plus 60 hours of HVAC/R trade-related coursework listed below).

Course	Title	Credit Hours
APR155A	HVAC/R Apprenticeship Fundamentals	5
APR155B	HVAC/R Apprenticeship Soldering and Brazing ...	5
APR155C	HVAC/R Apprenticeship Introduction to Code	5
APR155D	HVAC/R Apprenticeship Trade Math.....	5
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration	5
APR155F	HVAC/R Apprenticeship Electricity and Magnetism	5
APR255G	HVAC/R Apprenticeship Fuels.....	5
APR255H	HVAC/R Apprenticeship Residential Air Distribution	5
APR255I	HVAC/R Apprenticeship Welding	5
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals.....	5
APR255K	HVAC/R Apprenticeship Troubleshooting.....	5
APR255L	HVAC/R Apprenticeship Equipment Room and Layout.....	5

Plumbing Specialization

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$448; universal fee, \$896. 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 (12 hours of general education credits listed above plus 52 hours of plumbing trade-related coursework listed below).

Course	Title	Credit Hours
APR158A	Plumber Apprenticeship Fundamentals.....	5
APR158B	Plumber Apprenticeship Math and Print Reading	5
APR158C	Plumber Apprenticeship Pipe Sizing	3
APR158D	Plumber Apprenticeship Basic Installation	5
APR158E	Plumber Apprenticeship Occupancy.....	5
APR158F	Plumber Apprenticeship Advanced Wastewater Systems	3
APR258G	Plumber Apprenticeship Residential Installation...	5
APR258H	Plumber Apprenticeship Commercial Installation .	5
APR258I	Plumber Apprenticeship Code.....	3
APR258J	Plumber Apprenticeship Industrial Installation.....	5
APR258K	Plumber Apprenticeship Basic Wastewater Systems	5
APR258L	Plumber Apprenticeship Code and Test Preparation.....	3

Sheet Metal Specialization

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$480; universal fee, \$994. 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 (12 hours of general education credits listed above plus 59 hours of sheet metal trade-related coursework listed below).

Course	Title	Credit Hours
APR166A	Sheet Metal Apprenticeship Fundamentals.....	5
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawings	5
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout	5
APR166D	Sheet Metal Apprenticeship Basic Installation	5
APR166E	Sheet Metal Apprenticeship Architectural Systems	5
APR166W	Welding Processes for Apprenticeship	4
APR266F	Sheet Metal Apprenticeship Applied Math.....	5
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass	5
APR266H	Sheet Metal Apprenticeship Calculator Layout.....	5
APR266I	Sheet Metal Apprenticeship Radial Line Development.....	5
APR266J	Sheet Metal Apprenticeship Duct Sizing.....	5
APR266K	Sheet Metal Apprenticeship Job Site Management.....	5

Construction Trades, General Apprenticeship, Associate of Applied Science Degree

You may earn an associate of applied science degree by successfully completing the Construction Trades, General Apprenticeship general education requirements of 23 credit hours, plus additional credits in one area of specialization listed below, and 22 hours for proof of journey-level status.

Construction Trades, General Apprenticeship general education requirements (23 credit hours)

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications.....	3
COMM111	Fundamentals of Public Speaking.....	4
EC202	Introduction to Macroeconomics.....	4
MTH095	Intermediate Algebra+ (or higher).....	4
PSY101	Psychology of Human Relations+ (or higher).....	4
WR121	The College Essay+ (or higher).....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Plus: Choose one area of specialization

HVAC/R Specialization

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$480; universal fee, \$1,162. 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 (23 hours of general education credits listed above and 60 hours of HVAC/R coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
Term 1		
APR155A	HVAC/R Apprenticeship Fundamentals.....	5
APR155B	HVAC/R Apprenticeship Soldering and Brazing ...	5
APR155C	HVAC/R Apprenticeship Introduction to Code.....	5
APR155D	HVAC/R Apprenticeship Trade Math.....	5
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration.....	5
APR155F	HVAC/R Apprenticeship Electricity and Magnetism.....	5
APR255G	HVAC/R Apprenticeship Fuels.....	5
APR255H	HVAC/R Apprenticeship Residential Air Distribution.....	5
APR255I	HVAC/R Apprenticeship Welding.....	5
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals.....	5
APR255K	HVAC/R Apprenticeship Troubleshooting.....	5
APR255L	HVAC/R Apprenticeship Equipment Room and Layout.....	5

Plumbing Specialization

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$448; universal 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 an associate of applied science degree by successfully completing the required 97 credit hours (23 hours of general education credits listed above and 52 hours of plumbing coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
APR158A	Plumber Apprenticeship Fundamentals.....	5
APR158B	Plumber Apprenticeship Math and Print Reading	5
APR158C	Plumber Apprenticeship Pipe Sizing.....	3
APR158D	Plumber Apprenticeship Basic Installation.....	5
APR158E	Plumber Apprenticeship Occupancy.....	5
APR158F	Plumber Apprenticeship Advanced Wastewater Systems.....	3
APR258G	Plumber Apprenticeship Residential Installation...	5
APR258H	Plumber Apprenticeship Commercial Installation.	5
APR258I	Plumber Apprenticeship Code.....	3
APR258J	Plumber Apprenticeship Industrial Installation.....	5
APR258K	Plumber Apprenticeship Basic Wastewater Systems.....	5
APR258L	Plumber Apprenticeship Code and Test Preparation.....	3

Sheet Metal Specialization

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$480; universal fee, \$1,148. 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 (23 hours of general education credits listed above and 59 hours of sheet metal coursework listed below, plus 22 hours for proof of journey-level status).

Course	Title	Credit Hours
APR166A	Sheet Metal Apprenticeship Fundamentals.....	5
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawings.....	5
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout.....	5
APR166D	Sheet Metal Apprenticeship Basic Installation.....	5
APR166E	Sheet Metal Apprenticeship Architectural Systems.....	5
APR166W	Welding Processes for Apprenticeship.....	4
APR266F	Sheet Metal Apprenticeship Applied Math.....	5
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass.....	5
APR266H	Sheet Metal Apprenticeship Calculator Layout.....	5
APR266I	Sheet Metal Apprenticeship Radial Line Development.....	5
APR266J	Sheet Metal Apprenticeship Duct Sizing.....	5
APR266K	Sheet Metal Apprenticeship Job Site Management.....	5

Electrician Apprenticeship Technologies AAS

Electrician Apprenticeship Technologies Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$448; universal fee, \$896. 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.

General Education requirements (12 credit hours)

Course	Title	Credit Hours
MTH095	Intermediate Algebra+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4
WR115	Introduction to Composition+ (or higher)	4

Apprenticeship Related Training-Electrical (52 credit hours)

Course	Title	Credit Hours
APR153A	Electrician Apprenticeship Fundamentals	5
APR153B	Electrician Apprenticeship AC/DC Circuits	5
APR153C	Electrician Apprenticeship Measurements	3
APR153D	Electrician Apprenticeship Theory	5
APR153E	Electrician Apprenticeship Wiring and Print Reading	5
APR153F	Electrician Apprenticeship Residential Installation	3
APR253G	Electrician Apprenticeship Safety and Code	5
APR253H	Electrician Apprenticeship Motor and Controls	5
APR253I	Electrician Apprenticeship Fiber Optics	3
APR253J	Electrician Apprenticeship Math/Test Equipment .	5
APR253K	Electrician Apprenticeship Voltage	5
APR253L	Electrician Apprenticeship Code and Exam Prep .	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Electrician Apprenticeship Technologies Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire four-year program listed below are program fees, \$448; universal 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 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).

General Education requirements (23 credit hours)

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications	3
COMM111	Fundamentals of Public Speaking	4
EC202	Introduction to Macroeconomics	4
MTH095	Intermediate Algebra+ (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	4
WR121	The College Essay+ (or higher)	4

Apprenticeship Related Training-Electrical (52 credit hours)

Course	Title	Credit Hours
APR153A	Electrician Apprenticeship Fundamentals	5
APR153B	Electrician Apprenticeship AC/DC Circuits	5
APR153C	Electrician Apprenticeship Measurements	3
APR153D	Electrician Apprenticeship Theory	5
APR153E	Electrician Apprenticeship Wiring and Print Reading	5
APR153F	Electrician Apprenticeship Residential Installation	3
APR253G	Electrician Apprenticeship Safety and Code	5
APR153H	Electrician Apprenticeship Motor and Controls	5
APR253I	Electrician Apprenticeship Fiber Optics	3
APR253J	Electrician Apprenticeship Math/Test Equipment .	5
APR253K	Electrician Apprenticeship Voltage	5
APR253L	Electrician Apprenticeship Code and Exam Prep .	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Art

For discipline outcomes, see **General Education Outcomes—Arts and Letters on Page 48.**

See also **Visual Communications Programs.**

go.chemeketa.edu/art

Chemeketa's art curriculum offers a comprehensive range of foundational courses in design, drawing, ceramics, glass, painting, darkroom photography, printmaking, and sculpture. These courses present hands-on, medium-specific techniques, while emphasizing strong design skills, practical methods of developing ideas, teamwork, and craftsmanship. Chemeketa's art history courses explore not only formal and historical approaches to the visual arts, but also the role of art in constructing social systems. All courses emphasize visual literacy, a necessary tool to navigate our increasingly complex visual world, and encourage recognition of diversity through social and cultural literacy.

Many art courses can be used to fulfill the Arts and Letters requirement of the Oregon Transfer Module (OTM) and the Associate of Arts/Oregon Transfer degree (AAOT). See Pages 50 and 51 of this catalog for a complete listing. As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. 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 this academic area.

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. Western has majors in Art and Visual Communications. PSU has majors in Art History, Art Practices, and Graphic Design. OSU has majors in Art, Art History, Fine Arts, Graphic Design, and Photography. 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 offered at OSU, SOU, and U of O.

We strongly recommend developing a term-by-term plan of study. Consult with Chemeketa's Advising and Counseling Services or a Chemeketa advisor. Questions regarding Chemeketa's art offerings may be directed to the Humanities and Communications Office at 503.399.5184.

Automotive Technology Programs

go.chemeketa.edu/automotive

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 or less and the degree program in two years. The programs offer instruction and training in entry-level skills, 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.

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 degree 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 degree and the Auto Body Repair and Automotive Machining certificate programs have special admission requirements and enrollment limits. The first step to entering these programs is to take the college's free placement test and meet with Advising and Counseling 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, 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 Advising and Counseling 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 Advising and Counseling 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 AAS

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, \$686; 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 49 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (13 credit hours):

Course	Title	Credit Hours
WR088	Introduction to Technical Writing 1+	3
	or	
WR121	The College Essay+ (or higher)	4
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
PSY101	Psychology of Human Relations+ (or higher)	4

Automotive Body Repair core requirements (21 credit hours):

AUM168	Automotive Electrical Systems 1	5
AUM184	Automotive Materials and Resources	2
AUM280L	Cooperative Work Experience	12
WLD197	Welding	2
	or	
WLD161	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 42. For subject areas, see page 54.

Automotive Technology AAS

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, \$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 by successfully completing the required 28 credit hours with a grade of "C" or better in the AUM courses.

General Education requirements (10 credit hours):

Course	Title	Credit Hours
MTH052	Introduction to Algebra and Geometry (or higher)	3
PSY101	Psychology of Human Relations (or higher)	4
WR088	Introduction to Technical Writing 1	3

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 AAS

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 lab coursework 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, \$812; 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 58 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (13 credit hours):

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications (or higher).....	3
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
PSY101	Psychology of Human Relations+ (or higher)	4
WR088	Introduction to Technical Writing 1+	3
	or	
WR121	The College Essay+ (or higher).....	4

Automotive Machining core requirements (44 credit hours):

Course	Title	Credit Hours
AUM151	Basic Automotive Engines.....	5
AUM184	Automotive Materials and Resources.....	2
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
WLD177	Welding Processes	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Automotive Technology Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$900; class fees, \$618; universal fee, \$1,456; 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 the required 104 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.....	2
PH060	Applied Physical Science (or higher).....	3
WR088	Introduction to Technical Writing 1+	3
	or	
WR121	The College Essay+ (or higher).....	4
Term 2		
AUM152	Automotive Machine Shop.....	4
AUM157	Automotive Brake Systems	6
	or	
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
MTH052	Introduction to Algebra and Geometry+ (or higher).....	3
PSY101	Psychology of Human Relations+ (or higher)	4

Term 4

AUM262	Manual Drive Trains and Axles 2	4
AUM263	Automatic Transmissions and Transaxles 1.....	5
AUM266	Engine Performance 1	5
AUM277	Electronic Vehicle Controls 1.....	5

Term 5

AUM267	Engine Performance 2.....	5
AUM282	Electronic Vehicle Controls 2.....	5
AUM286	Automotive Heating and Air Conditioning	5
WR089	Introduction to Technical Writing 2	3
	or	
WR122	Argument 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	Engine Performance 3.....	5
WLD197	Welding.....	2
	or	
WLD177	Welding Processes	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Biology, Botany, General Science

For discipline outcomes, see **General Education Outcomes—Science or Computer Science on Page 49.**

Chemeketa offers a number of science courses, including biology, chemistry, geology, general science, and physics. Some of these courses can be used to fulfill the Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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 Administration

For discipline outcomes, see **General Education Outcomes** beginning on **Page 48**.

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

Chemeketa offers a number of business courses. Some of these courses may be used to fulfill the Business requirements of the Associate of Science/Oregon Transfer–Business degree. See **Page 52** of this catalog for a complete listing.

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 Advising and Counseling 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 short-term and 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 Business Software certificate is designed for individuals who wish to update their business software skills in applications including word processing, spreadsheets, presentations, and databases. 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. The Virtual Office Assistant certificate is a for those who already have administrative office experience and want to obtain the skills necessary to work as an independent contractor from home or another office site. The Business Technology certificate prepares you as an entry-level office support specialist. You may earn any of the certificates of Completion by successfully completing the credit hours required.

The two-year program is designed for those who want to become administrative assistants, secretaries, office assistants, and support specialists. There are four two-year programs: Administrative Office Professional, Accounting Administrative Assistant, Medical Administrative Assistant, and Virtual Office Assistant. You may earn an associate of applied science degree by successfully completing the credit hours required for each program.

Program Outcomes

Students completing the Business Software certificate will:

- 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 Office Fundamentals certificate will:

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

Students completing the Accounting Administrative Assistant degree 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 degree 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 degree 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

Students completing the Virtual Office Assistant certificate or degree 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 provide virtual support to 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 in a virtual office environment

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

Getting started

The first step to entering these programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Chemeketa’s Advising and Counseling Services staff. The Advising and Counseling staff will help you determine your first term courses. For your remaining terms your Business Technology faculty advisor will help you develop an individualized program of study. If your scores show you need entry-level courses, an advisor will help you determine if you need one or more of the following:

For the Business Software, Business Technology, and Virtual Office Assistant certificate programs

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

For the Office Fundamentals certificate program

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

For the degree programs

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, contact the Business Technology program chair at patti.sessions@chemeketa.edu or call the department office at 503.399.5048. Failure to be assessed may delay your entry into program classes.

Administrative Office Professional AAS

Business Software Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$1,192; class fees, \$86; universal fee, \$280; equipment and supplies, \$100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn 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 2.....	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 course descriptions in the back of this catalog for details.

***Business Software electives**

BA214	Business Communications.....	3
BT210	Professional Communication Skills.....	4
CA100	Beginning Computing.....	3
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

Administrative Office Professional AAS

Business Technology Certificate of Completion

This certificate prepares you to work as a word processing specialist, 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 and computer classrooms. 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, \$2,568; class fees, \$212; universal fee, \$770; equipment and supplies, \$275. 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
BT123	Minute-Taking, Level 1	2
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
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
	or	
CA100	Beginning Computing.....	3
MTH060	Introductory Algebra+.....	4
	Business Technology certificate electives**	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

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

**Choose BT280C, or any BA, BT, or CA course.

Administrative Office Professional AAS

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, McMinnville, and Woodburn.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$1,724; class fees, \$192; universal fee, \$518; 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 37 credit hours with a grade of "C" or better in all courses.

Office Fundamentals core requirements and electives (37 credit hours):

Course	Title	Credit Hours
BT104	Business English 1	3
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
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CIS101	Introduction to Microcomputer Applications.....	3
	or	
CA100	Beginning Computing.....	3
	Office Fundamentals elective*	3

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

Administrative Office Professional AAS

Virtual Office Assistant Certificate of Completion

This program is designed for individuals with prior administrative assistant experience who are seeking the necessary coursework and practical experience to work as an independent contractor. Admittance to the program is granted only through program faculty approval. For more information, contact Business Technology program chair patti.sessions@chemeketa.edu or call the department office at 503.399.5048.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$1,523; class fees, \$219; universal fee, \$560; 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 40 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BA209	Introduction to Social Media.....	4
BA223	Principles of Marketing.....	4
BA226	Business Law	4
BA251	Office Management	3
	or	
BA250	Small Business and Entrepreneurship	4
	or	
BA206	Business Management Principles.....	4
BT272	Virtual Office 1	4
BT273	Virtual Office 2	4
CA208	Workplace Presentations Using PowerPoint	3
CA119	Office Desk Publishing 1	4
CA220	QuickBooks-Computerized Bookkeeping.....	3
	Virtual Office Assistant elective*	3

***Virtual Office Assistant electives**

BA101	Introduction to Business.....	4
BA104	Business Application using Mathematics.....	4
BA214	Business Communications.....	3
BT112	Proofreading/Editing.....	3
BT130	Customer Service.....	3
BT210	Professional Communication Skills.....	4
CA122	Keyboard Skillbuilding.....	3
CA202D	Microsoft Word Processing 2.....	3
CA213	Integrating Office Procedures.....	3
CA225	Advanced Document Formatting.....	3

Administrative Office Professional AAS

Accounting Administrative Assistant Associate of Applied Science Degree 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, \$4,335; class fees, \$287; universal fee, \$1,400; equipment and supplies, \$500. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing 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
BT123	Minute-Taking, Level 1.....	2
BT128	Introduction to Records Management.....	2
BT130	Customer Service+.....	3
BT186	Personal and Professional Development.....	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
CA220	QuickBooks-Computerized Bookkeeping.....	3
CIS101	Introduction to Microcomputer Applications.....	3
	or	
CA100	Beginning Computing.....	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+.....	4
	or	
MTH070	Elementary Algebra+ (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
BT271	Administrative Capstone Projects.....	4
BT280C	Cooperative Work Experience.....	3
CA118E	Outlook Basics.....	1
CA122	Keyboard Skillbuilding.....	3
CA208	Workplace Presentations Using PowerPoint.....	3
CA225	Advanced Document Production.....	3
PSY104	Workplace Psychology (or other General Education elective).....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Administrative Office Professional Associate of Applied Science Degree

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 Advising and Counseling Services and a Chemeketa Business Technology faculty advisor on course transferability.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$4,070; class fees, \$256; universal fee, \$1,344; equipment and supplies, \$480. 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.

Administrative Office Professional first-year core requirements (48 credit hours):

Course	Title	Credit Hours
BT105	Business English 2	3
BT112	Proofreading/Editing.....	3
BT116	Office Procedures.....	3
BT123	Minute-Taking, Level 1	2
BT128	Introduction to Records Management	2
BT130	Customer Service+	3
BT186	Personal and Professional Development.....	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
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA208	Workplace Presentations using PowerPoint.....	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
	or	
CA100	Beginning Computing.....	3

Administrative Office Professional second-year core requirements (48 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA104	Business Applications Using Mathematics+	4
	or	
MTH070	Elementary Algebra+ (or higher).....	4
BA115	Introduction to Accounting	4
BA214	Business Communications+	3
BA226	Business Law	4
BA251	Office Management	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics.....	1
CA119	Office Desk Publishing 1	4
CA220	QuickBooks-Computerized Bookkeeping	3
CA225	Advanced Document Production	3
PSY104	Workplace Psychology (or other General Education elective).....	4
	Elective*	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Elective:** Choose four credits from BA, BT, CA, or foreign language courses.

Medical Administrative Assistant Associate of Applied Science Degree

The Medical Administrative Assistant program 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. Due to the confidential nature of medical office records, a background check may be required of students in this program.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$4,310; class fees, \$289; universal fee, \$1,358; equipment and supplies, \$480. 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.

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

Course	Title	Credit Hours
BI171	Introduction to Human Anatomy and Physiology 1	3
BI172	Introduction to Human Anatomy and Physiology 2	3
BT105	Business English 2	3
BT112	Proofreading/Editing.....	3
BT130	Customer Service+	3
BT186	Personal and Professional Development.....	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
	or	
CA100	Beginning Computing.....	3
HM120	Medical Terminology 1	3
HM121	Medical Terminology 2.....	4

Medical Administrative Assistant second-year core requirements (49 credit hours):

BA104	Business Applications Using Mathematics+	4
	or	
MTH070	Elementary Algebra+ (or higher).....	4
BA115	Introduction to Accounting	4
BA214	Business Communications+	3
BT123	Minute-Taking, Level 1	2
BT128	Introduction to Records Management	2
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics.....	1
CA122	Keyboard Skillbuilding	3
CA208	Workplace Presentations Using PowerPoint	3
CA225	Advanced Document Production	3
HM101	Medical Law and Ethics.....	3
HM114	CPT Coding and Reimbursement	3
HM115	ICD-10-CM Coding/Diagnosis	4
PSY104	Workplace Psychology (or other General Education elective).....	4
	Medical Administrative Assistant electives*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*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:

BT116	Office Procedures.....	3
CA119	Office Desk Publishing 1	4
CA220	QuickBooks-Computerized Bookkeeping.....	3
COMM115	Introduction to Intercultural Communication	4
HM113	Healthcare Financing, Insurance, and Reimbursement.....	3
SOC204	The Sociological Perspective	4
WR227	Technical Writing.....	4

Administrative Office Professional AAS

Virtual Office Assistant Associate of Applied Science Degree Option

The Virtual Office Assistant program prepares you for positions in which you provide clients with remote administrative office assistance from a home or other office. Virtual office assisting requires the ability to organize a variety of tasks and accept business responsibility. Often, virtual office assistants are self-employed professionals operating as independent contractors. Consequently, course content covers establishing a business; being aware of legal requirements; developing marketing tools and a business website; utilizing management skills; employing social media outlets; implementing accounting procedures; producing printed materials using desktop publishing software, and exploring all aspects of virtual office assisting as a career field.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$4,122; class fees, \$406; universal fee, \$1,386; equipment and supplies, \$500. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 99 credit hours with a grade of "C" or better in all courses.

Virtual Office Assistant first-year core requirements (47 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
BT186	Personal and Professional Development.....	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
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
	or	
CA100	Beginning Computing.....	3

Virtual Office Assistant second-year core requirements (52 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA104	Business Applications Using Mathematics+	4
	or	
MTH070	Elementary Algebra+ (or higher).....	4
BA209	Introduction to Social Media.....	4
BA214	Business Communications+	3
BA223	Principles of Marketing.....	4
BA226	Business Law	4
BA251	Office Management	3
	or	
BA250	Small Business and Entrepreneurship	4
	or	
BA206	Business Management Principles.....	4
BT272	Virtual Office 1	4
BT273	Virtual Office 2	4
CA118E	Outlook Basics.....	1
CA119	Office Desk Publishing 1	4
CA208	Workplace Presentations Using PowerPoint	3
CA220	QuickBooks-Computerized Bookkeeping.....	3
CA225	Advanced Document Production	3
PSY104	Workplace Psychology	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Chemistry

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 49.

Chemeketa offers a number of chemistry courses. Many of these courses can be used to fulfill the Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 48.

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 Advising and Counseling 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.

Communication

For discipline outcomes, see General Education Outcomes—Speech/Oral Communication or Writing on Page 49.

Chemeketa offers a number of communication courses. Many of these courses can be used to fulfill the requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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 Programs

cis.chemeketa.edu

The Computer Information Systems program offers an associate of 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. Additionally, the Computer Information Systems program 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 Network Management and Systems Security certificate graduate may work in computer crime law enforcement, corporate information systems or private computer security consulting. 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).

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.

Program outcomes

Students completing the degree 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 degree 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 degree 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 degree 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 degree 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 degree 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

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 Advising and Counseling Services staff. You may need to complete entry-level 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

Note: In some cases, students can enroll in program courses without completing all of the above prerequisite courses. If you have questions about the program requirements, contact the Computer Information System department at 503.365.4822 or e-mail mandy.reininger@chemeketa.edu.

Computer Systems and Information Technology AAS

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 below are books, \$897; class fees, \$434; 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 31 credit hours with a grade of "C" or better in all courses.

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

Computer Systems and Information Technology AAS

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 below are books, \$1,435; class fees, \$306; universal fee, \$476; 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 in Business	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 AAS

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 below are books, \$1,479; class fees, \$342; universal fee, \$518; 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
BA202	Personal Effectiveness in Business	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	4
CIS288	Advanced Client-Server Networks	4
CIS289	Advanced Network Applications Support.....	4

Computer Systems and Information Technology AAS

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 below are books, \$1,539; class fees, \$333; universal fee, \$504; 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 36 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	4
CIS288	Advanced Client Server Networks	4
CJ101	Criminology.....	3

Computer Systems and Information Technology AAS

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 below are books, \$710; class fees, \$279; universal fee, \$434; 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
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
VC237	Web Design 1.....	4

Computer Systems and Information Technology Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire degree program listed below are books, \$3,330; class fees, \$882; universal fee \$1,358; 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 97 credit hours. You must complete all CS/CIS core required courses with a grade of "C" or better.

General Education requirements (23 credit hours)

COMM111	Fundamentals of Public Speaking.....	4
MTH105	Math in Society+.....	4
	or	
MTH111	College Algebra+.....	5
PSY104	Workplace Psychology+.....	4
WR121	The College Essay+.....	4
WR227	Technical Writing.....	4
	Arts and Letters elective.....	3

Computer Systems and Information Technology Core Requirements (54 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
CIS179	Introduction to Client-Server Networks.....	4
CIS244	Systems Analysis.....	4
CIS278	Data Communications.....	4
CIS279	Network Management.....	4
CIS288	Advanced Client-Server Networks.....	4
CS275	Database Management.....	4

Computer Systems and Information Technology electives (Choose 20 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA202	Personal Effectiveness in Business.....	3
BA277	Business Ethics.....	3
CIS060	Techniques of User Training.....	2
CIS125E	Excel Workbooks.....	4
CIS125G	Introduction to Computer Game Development....	4
CIS125H	xHTML Basics.....	4
CIS133J	Fundamentals of Java Programming 1.....	4
CIS133JS	JavaScript Web Programming 1.....	4
CIS133VB	Visual Basic-Event Driven Programming.....	4
CIS178I	Introduction to the Internet/World-Wide Web.....	3
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	Oracle: Building Reports.....	4
CIS276D	Oracle Academy 1-SQL.....	4
CIS276E	Oracle Academy 2-PL/SQL.....	4
CIS277A	Database Administration Fundamentals 1.....	4
CIS277B	Database Administration Fundamentals 2.....	4
CIS280B-L	Cooperative Work Experience.....	2-12
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
VC237	Web Design 1.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Computer Science

For discipline outcomes, see **General Education Outcomes—Science or Computer Science on Page 49.**

All of Oregon's public universities offer bachelor of arts and/or bachelor of science degrees in Computer Science, Software Engineering, or another closely related field. Chemeketa offers a prescribed curriculum 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's degree in Computer Science at Chemeketa and are ready to begin junior level work after transferring to a university.

In general, most Computer Science transfer students should focus on completing the two-year Associate of Science/Oregon Transfer-Computer Science degree (ASOT-CS). However, some Computer Science programs require additional courses beyond those in the ASOT-CS and/or have additional requirements for admission. It is your responsibility to make sure that you understand the requirements of the school to which you plan to transfer.

As a prospective student, you should meet with Chemeketa's Computer Science instructor, Andrew Scholer (503.589.7649 or andrew.scholer@chemeketa.edu) or Advising and Counseling Services staff 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

(Transfer)

For discipline outcomes, see **General Education Outcomes beginning on Page 48.**

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 Advising and Counseling 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.

Criminal Justice, Law Enforcement, and Corrections Programs

cj.chemeketa.edu

Graduates of Chemeketa's Criminal Justice, Law Enforcement, and Corrections programs may enter career fields in juvenile or adult corrections; become law enforcement officers, adult or juvenile case workers, or parole or probation officers; gain entry-level positions within federal law enforcement or protection services; or elect to progress toward a career with Homeland Security, including positions with U.S. Customs and Border Protection, U.S. Immigration and Customs Enforcement, and the Transportation Security Administration; or the Federal Bureau of Investigation with opportunities to work in the areas of drug enforcement, computer information security services, and intelligence analysis.

The Criminal Justice associate of applied science degree program curriculum focuses on the criminal justice system, its organizational components, and processes. Graduates may find jobs in 9-1-1 telecommunications, intake and release work in correctional institutions, and in private and public security work. You may also qualify for work in a related enforcement or investigative field such as a liquor control agent, an insurance adjuster, an agency investigations officer, an agency auditor, a hearings officer, or a licensing inspector for the state department of motor vehicles. For additional information about the Criminal Justice program contact Debra Pillette-Stephens at 503.399.5110 or debra.pillette.stephens@chemeketa.edu.

The associate of applied science degree in Law Enforcement prepares program graduates to provide police services for the public and communities in which they serve and the agencies they represent. Students participate in the academic and practical "hands-on" learning environments required for entry-level duties and responsibilities of municipal, county, state, or federal law enforcement careers. The program includes concentrated academic and practical skills instruction for employment and certification leading to a city police officer, county sheriff's patrol deputy, or state police trooper designation.

Individual agencies may require employees to earn a bachelor's degree before entering or advancing in this field. Chemeketa's Law Enforcement program is a career-specific academic program from which graduates may move directly to employment. Alternatively, the Criminal Justice program is designed so that you may incorporate the necessary general education course work for transfer to a four-year school and where the criminal justice courses may also meet social science discipline requirements. Before you enroll at Chemeketa, consult with the Advising and Counseling Services and an advisor at the institution to which you plan to transfer.

The Corrections associate of applied science degree program offers students the unique opportunity to develop and practice the skills of a correctional officer as they prepare to provide adult or juvenile correctional services upon graduation from the program. Students participate in classroom and

practical learning environments to prepare for the duties and responsibilities of a municipal, county, state, or federal corrections professional. The program's curriculum is derived from two main sources: The Department of Public Safety, Standards, and Training corrections content, and state certification requirements specific to correctional officers and Oregon Youth Authority (OYA) new employee training. Students may choose to earn the degree with an emphasis in either adult or juvenile corrections.

The Corrections program curriculum prepares graduates for employment and subsequent certification leading to entry-level corrections officer or OYA life coordinator positions. The program also provides pathways into other corrections-related fields such as parole and probation, casework and counseling, residential treatment services, intake processing, risk/release assessment, visitation monitoring, perimeter patrols, and security clearance assignments within correctional agencies, facilities, halfway houses, residential treatment facilities, and mentor programs.

Students interested in the Corrections or Law Enforcement programs should contact Marshall Roache at 503. 589.7768 or marshall.roache@chemeketa.edu.

In addition to the associate degrees, certificates of completion are offered in Basic Law Enforcement, Basic Corrections, and Juvenile Corrections. The certificates of completion are educational "stepping stones" and fit wholly into the Law Enforcement, Corrections, and Juvenile Justice associate of applied science degrees (respectively), allowing you to work in your field while earning your degree. Additionally, individual courses such as Public Safety Telecommunications, Criminology, and Juvenile Law are available for those seeking opportunities for professional development.

Students in the Criminal Justice, Juvenile Corrections, Juvenile Justice, and Basic Corrections programs 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.

Students with law enforcement, criminal justice, or juvenile justice professional training, certification, or experience should contact program chair Debra Pillette-Stephens at 503.399.5110 or debra.pillette.stephens@chemeketa.edu to see if they are eligible for Credit for Professional Certification college credits.

Program outcomes

Students completing the Criminal Justice degree 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

Students completing the Juvenile Corrections 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

Students completing the Juvenile Justice degree 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

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 Corrections degree will:

- Operate safely and effectively under both general and close supervision when engaged in corrections-related activities.
- Demonstrate and explain specific operations of corrections, including briefing, uniform and equipment maintenance, chain of command, and inmate/client/resident management
- Describe the correct ethical, tactical, and legal decisions regarding proper responses to a variety of job-related situations
- Demonstrate the ability to perform a variety of tasks, including both low- and high-risk maneuvers for pat downs, intake and assessments, transports and restraints, cell searches, and cell extractions
- Utilize appropriate discretion when performing inmate and client contacts and tactical communication skills reflecting appropriate force continuum options
- Interact formally and informally with a diversified population in a manner that reflects a positive, professional image for entry-level correctional officers and related positions

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 Law Enforcement degree will:

- Operate safely and effectively under both general and close supervision as an integral member of a training squad when engaged in hazardous scenario activities

- Demonstrate and explain specific operations of patrol division that includes briefing, roll-call training, uniform and equipment maintenance, and chain of command
- Demonstrate correct ethical, tactical, and legal decisions regarding proper responses to a variety of scenario based training situations
- Drive and perform various traffic stop scenarios including both low and high risk maneuvers and impairment recognition
- Demonstrate acceptable competency and officer discretion when performing mock citizen/community contacts and tactical communication skills reflecting appropriate force continuum options
- Interact formally and informally with a diversified population in a manner that reflects a positive, professional image for entry level recruits in law enforcement

Getting started

The first step to entering these programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Advising and Counseling Services staff. You may need to complete program entry requirements.

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
CJ103	Program Application and Employment Standards*	1
MTH020	Basic Mathematics.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition	4
	or	
WR088	Introduction to Technical Writing 1	3

Additionally, students entering the Law Enforcement degree program must successfully complete the Oregon Physical Abilities Test (Or-PAT)

*CJ103 requires students to pass a criminal background check and drug screening. Failure to pass these assessments will prevent admission to these programs.

If you have questions about the requirements, call 503.399.5163. Failure to be assessed may delay your entry into program classes.

Criminal Justice Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,182; class fees, \$65; universal fee, \$1,400. 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 100 credit hours with a grade of "C" or better in all courses. These include the 67 credit hours listed under general education requirements, 18 credit hours of Criminal Justice core requirements, and 15 credit hours of Criminal Justice electives.

General Education requirements (67 credit hours):

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications (or higher).....	3
COMM218	Interpersonal Communication.....	4
	or	
	Communications elective.....	4
MTH060	Introductory Algebra+ (or higher)	4
	Physical Education elective (3 different activities) .	3
	or	
HPE295	Health and Fitness for Life.....	3
WR121	The College Essay+.....	4
WR122	Argument and Research.....	4
WR227	Technical Writing	4
	or	
CJ212	Police Report Writing	3
	General Education electives.....	18
	Arts and Letters electives*	12
	Psychology or Sociology electives+	12

Criminal Justice core requirements (18 credit hours):

Course	Title	Credit Hours
CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
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):

Choose any CJ course numbered 100 or above.

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Arts and Letters electives: Due to current bilingual hiring preferences, students are urged to take SPN111, SPN112, and SPN113.

Juvenile Corrections Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the entire program are books, \$770; universal fee, \$728. 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
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	Abnormal Psychology	4
SOC206	Social Problems.....	4
WR121	The College Essay+.....	4

Juvenile Corrections core requirements (21 credit hours):

CJ101	Criminology.....	3
CJ203	Crisis Intervention Seminar.....	3
CJ206	Crime and Delinquency	3
	or	
SOC221	Juvenile Delinquency	4
CJ230	Introduction to Juvenile Corrections.....	3
CJ132	Introduction to Parole and Probation.....	3
	or	
CJ232	Introduction to Corrections Casework	3
CJ235	Youth, Drugs, and Corrections	3
	or	
HS101	Addiction Pharmacology and Physiology	4
CJ280C	Cooperative Work Experience	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Juvenile Justice Associate of Applied Science Degree

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 (52 credits) in that all the courses can be applied to the degree.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,320; class fees, \$20; universal fee, \$1,372. 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 courses.

Course	Title	Credit Hours
Term 1		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
CJ101	Criminology.....	3
CJ206	Crime and Delinquency.....	3
	or	
SOC221	Juvenile Delinquency	4
BA202	Personal Effectiveness in Business**	3
	or	
CJ102	Survey of the Juvenile Justice System**	3
	or	
HS150	Personal Effectiveness for Human Service and Traditional Health Workers**	3
MTH060	Introductory Algebra+ (or higher)	4
Term 2		
CJ230	Introduction to Juvenile Corrections.....	3
CJ235	Youth, Drugs, and Corrections**	3
	or	
HS101	Addiction Pharmacology and Physiology**	4
HS155	Wellness Coaching, Interviewing, and Advocacy**	3
	or	
	Juvenile Justice elective* **.....	3
PSY201	Introduction to Psychology: Mind and Body+	4
WR121	The College Essay+.....	4
Term 3		
CJ203	Crisis Intervention Seminar.....	3
CJ132	Introduction to Parole and Probation.....	3
	or	
CJ232	Introduction to Corrections Casework	3
PSY202	Introduction to Psychology: Mind and Society	4
PSY237	Life Span Development.....	4
SOC206	Social Problems.....	4
Term 4		
CJ240	Intake, Assessment, and Interviewing**	3
	or	
HS214	Advanced Interviewing and Counseling Skills** ...	3
COMM111	Fundamentals of Public Speaking (or higher).....	4
WR122	Argument and Research.....	4
	Arts and Letters elective.....	4
	Juvenile Justice elective*	3
Term 5		
CJ241	Group Skills for Correctional Clients**	3
	or	
HS217	Group Counseling Skills**	3
HE250	Personal Health	3
	or	
HPE295	Health and Fitness for Life.....	3
PSY239	Abnormal Psychology	4
WR227	Technical Writing.....	4

Term 6

CJ170	Juvenile Justice Ethics and Boundaries.....	3
	or	
HS103	Ethics for Human Service and Traditional Health Workers.....	2
	or	
PHL203	Ethics.....	4
CJ280C	Cooperative Work Experience	3
	Arts and Letters elective.....	4
	Juvenile Justice electives*.....	6

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Recommended Juvenile Justice electives:**

CA121	Keyboarding.....	3
CJ280C	Cooperative Work Experience	3
COMM115	Introduction to Intercultural Communication	4
HDF	Any Human Development and Family Studies course (numbered 100 or above).....	3
HE262	Cardiopulmonary Resuscitation Instruction.....	2
HS	Any Human Service course (numbered 100 or above).....	3
PE185PA	Personal Defense, Beginning	1
PSY	Any Psychology course (numbered 100 or above).....	4
SOC	Any Sociology course.....	4
SPN111	Beginning Spanish Conversation-Term 1	3
SPN112	Beginning Spanish Conversation-Term 2	3
SPN113	Beginning Spanish Conversation-Term 3	3
	Or any CJ course numbered 100 or above.	

**Students in this program may select between two areas of emphasis—Human Services (HS101, HS150/BA202, HS155, HS214, and HS217) or Criminal Justice (CJ102, CJ235, CJ240, and CJ241)—for degree completion. Please meet with an advisor to determine the most suitable courses for career planning.

Law Enforcement AAS**Basic Corrections Certificate of Completion**

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,024; class fees, \$20; universal fee, \$504. 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 courses.

General Education requirements (12 credit hours):

Course	Title	Credit Hours
MTH060	Introductory Algebra (or higher).....	4
PSY201	Introduction to Psychology: Mind and Body.....	4
WR121	The College Essay	4

Basic Corrections core requirements (24 credit hours):

Course	Title	Credit Hours
CJ101	Criminology.....	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
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

Law Enforcement AAS**Corrections Associate of Applied Science Degree Option**

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,062; class fees, \$203; equipment and supplies, \$1,000; universal fee, \$1,414. 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		
CJ100	Survey of the Criminal Justice System	3
CJ146	Officer Survival Mindset.....	3
CJ281	Corrections Officer Related Experience 1	3
CJ289	Corrections Ethics and Professional Conduct	3
PE185PA	Personal Defense, Beginning	1
PE185WD	Strength, Beginning	1
	Corrections elective(s)*.....	3
Term 2		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
CJ101	Criminology.....	3
CJ211	Property Crimes: Behavior and Evidence.....	3
CJ271	Introduction to K-9s.....	1
CJ282	Corrections Officer Related Experience 2.....	3
	Corrections elective(s)*.....	3
Term 3		
CJ212	Police Report Writing	3
CJ283	Corrections Officer Related Experience 3.....	3
HPE295	Health and Fitness for Life.....	3
PSY201	Introduction to Psychology: Mind and Body+	4
WR121	The College Essay+.....	4
Term 4		
CJ200	Family Violence and Deviancy	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Introduction to Criminal Investigations 1: Crimes vs. Persons	3
CJ224	Missing and Abducted Children.....	1
CJ270	Crime Victim Advocacy	1
CJ272	Recognizing Child Molesters.....	2
CJ284	Corrections Officer Related Experience 4.....	3
Term 5		
CJ123	Spanish for Law Enforcement Personnel	3
CJ217	Interviewing and Interrogation in Criminal Justice	3
CJ268	Law Enforcement Photography	1
CJ285	Corrections Officer Related Experience 5.....	3
COMM115	Intercultural Communication (or higher)	4
	Corrections elective(s)*.....	3
Term 6		
CJ222	Profiling Serial Killers.....	3
CJ229	Domestic Terrorism	3
CJ255	How to Prepare for Oral Boards and Multi-Assessment	2
CJ273	Drugs and Pacific Northwest Street Gangs.....	3
CJ286	Corrections Officer Related Experience 6.....	3
MTH060	Introductory Algebra+ (or higher)	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Recommended Corrections electives (Adult Emphasis):**

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
CJ142A	Managing the Mentally Ill Offender	1
CJ145	Managing Long Term Offenders	1
CJ147	Criminal Personality and Errors in Thinking.....	1
CJ207	Diversity Issues in Criminal Justice	3
CJ232	Introduction to Corrections Casework	3
CJ253	Introduction to Penology	3

Or any CJ course numbered 100 or above.

***Recommended Corrections electives (Juvenile Emphasis):**

CJ102	Survey of the Juvenile Justice System.....	3
CJ134	Contraband and Search	1
CJ144	Suicide Prevention and Intervention Skills	2
CJ147	Criminal Personality and Errors in Thinking.....	1
CJ170	Juvenile Justice Ethics and Boundaries.....	3
CJ206	Crime and Delinquency.....	3
CJ207	Diversity Issues in Criminal Justice	3
CJ230	Introduction to Juvenile Corrections.....	3
CJ235	Youth, Drugs, and Corrections	3
CJ240	Intake, Assessment, and Interviewing	3
CJ241	Group Skills for Correctional Clients	3

Or any CJ course numbered 100 or above.

Law Enforcement AAS

Basic Law Enforcement Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,332; class fees, \$40; universal fee, \$532. 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.

General Education requirements (17 credit hours):

Course	Title	Credit Hours
COMM115	Introduction to Intercultural Communication	4
MTH060	Introductory Algebra (or higher).....	4
PE185PA	Personal Defense, Beginning	1
PSY201	Introduction to Psychology: Mind and Body.....	4
WR121	The College Essay	4

Basic Law Enforcement core requirements (21 credit hours):

Course	Title	Credit Hours
CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
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
CJ226	Introduction to Constitutional Law.....	3

Law Enforcement Associate of Applied Science Degree

To be admitted to this program, you must be interviewed by faculty to determine your eligibility and suitability for the program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,062; class fees, \$203; universal fee, \$1,414; and equipment and supplies, \$1,200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 101 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
CJ100	Survey of the Criminal Justice System	3
or		
CJ110	Introduction to Law Enforcement.....	3
CJ146	Officer Survival Mindset	3
CJ226	Introduction to Constitutional Law.....	3
CJ261	Law Enforcement Related Experience 1.....	3
CJ269	Police Ethics and Professional Conduct	3
PE185PA	Personal Defense, Beginning	1
PE185WD	Strength, Beginning	1
Term 2		
CIS101	Introduction to Microcomputer Applications.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ211	Property Crimes: Behavior and Evidence.....	3
CJ271	Introduction to K-9s.....	1
CJ262	Law Enforcement Related Experience 2.....	3
WR121	The College Essay+.....	4
Term 3		
CJ101	Criminology.....	3
CJ212	Police Report Writing	3
CJ263	Law Enforcement Related Experience 3.....	3
HPE295	Health and Fitness for Life.....	3
PSY201	Introduction to Psychology: Mind and Body+	4
Term 4		
CJ200	Family Violence and Deviancy	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Introduction to Criminal Investigations 1: Crimes vs. Persons	3
CJ224	Missing and Abducted Children.....	1
CJ264	Law Enforcement Related Experience 4	3
CJ270	Crime Victim Advocacy	1
CJ272	Recognizing Child Molesters.....	2
Term 5		
CJ123	Spanish for Law Enforcement Personnel.....	3
CJ217	Interviewing and Interrogation in Criminal Justice	3
CJ265	Law Enforcement Related Experience 5	3
CJ267	Introduction to Forensics.....	3
CJ268	Law Enforcement Photography	1
COMM115	Introduction to Intercultural Communication	4

Term 6

CJ222	Profiling Serial Killers.....	3
CJ229	Domestic Terrorism	3
CJ255	How to Prepare for Oral Boards and Multi-Assessment	2
CJ266	Law Enforcement Related Experience 6	3
CJ273	Drugs and Pacific Northwest Street Gangs.....	3
MTH060	Introductory Algebra+ (or higher)	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Dental Assisting Program

go.chemeketa.edu/dental

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 processing radiographic images, 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.

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 radiographic images
- 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 Chemeketa's Advising and Counseling Services staff. You may need to complete program entry requirements. 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
CIS101	Introduction to Microcomputer Applications.....	3
COMM111	Fundamentals of Public Speaking	4
FYE105	Creating College Success	2
RD115	Academic Thinking and Reading (or higher).....	3
SSP112	Effective Learning (If placement test score below RD120).....	3

If you have questions about the requirements, contact the Dean of Health Sciences at 503.399.5058 or e-mail healthsciences@chemeketa.edu.

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available on the Chemeketa website (www.chemeketa.edu).

To enroll, you must have a high school diploma or GED certificate. Once accepted into the program, 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, \$800; lab fees, \$749; universal fee, \$784; dental kit, \$410; uniform and shoes, \$300; exam fees, \$620; immunizations, \$150; criminal background check and drug testing, \$90; CPR certification, \$80; professional membership fee, \$45 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 practicum travel.

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		
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	The College Essay+.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Dental Hygiene

For discipline outcomes, see **General Education Outcomes—Science or Computer Science on Page 49.**

Oregon Institute of Technology (OIT) and Pacific University offer 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.

OIT 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/dentalhygiene. 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	The College Essay	4
Term 3		
BI232	Human Anatomy and Physiology	4
BI234	Microbiology	4
CH106	Chemistry for Allied Health	5
WR122	Argument and Research.....	4
Term 4		
COMM111	Fundamentals of Public Speaking	4
BI233	Human Anatomy and Physiology	4
NFM225	Nutrition	4

*Available through OIT online at <http://www.oit.edu/online/courses>.

Design

For discipline outcomes, see **General Education Outcomes—Arts and Letters on Page 48.**

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 Advising and Counseling 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

go.chemeketa.edu/drafting

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 gain experience using a variety of the latest 2D and 3D software programs 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 of completion 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.

Program outcomes

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 CAD certificate will:

- Produce accurate 2D and 3D drawings using CAD software

Students completing the Computer-Assisted Drafting (CAD) degree 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 these programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Chemeketa's Advising and Counseling Services staff. You may need to complete entry-level 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
CIS101	Introduction to Microcomputer Applications.....	3
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR080	Basic Writing.....	4

Note: In some cases students can enroll in program courses without completing all of the above prerequisite courses. If you have questions about the requirements, contact Mike Kelly at 503.399.5069 or e-mail mike.kelly@chemeketa.edu.

Computer-Assisted Drafting (CAD) AAS

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, \$900; class fees, \$940; universal fee, \$658; equipment and supplies, \$225. 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		
DRF110	Applied Engineering Computations.....	2
DRF240	Architectural Drafting 2.....	3
DRF272	Commercial Drafting with Revit 2.....	4
PSY104	Workplace Psychology+.....	4
WR088	Introduction to Technical Writing 1+.....	3
	or	
WR121	The College Essay+ (or higher).....	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 42. For subject areas, see page 54.

Computer-Assisted Drafting (CAD) AAS

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, \$900; class fees, \$880; universal fee, \$616; certification exam, \$100; equipment and supplies, \$225. 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	Workplace Psychology.....	4
Term 2		
DRF110	Applied Engineering Computations.....	2
DRF131	CAD 2.....	3
DRF150	Architectural Drafting 1.....	3
DRF220	GIS 1.....	2
WR088	Introduction to Technical Writing 1.....	3
	or	
WR121	The College Essay.....	4
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

*Drafting elective: Select a course with a CVL, DRF, EGR, or CAM prefix.

Computer-Assisted Drafting (CAD) Associate of Applied Science Degree

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, \$1,800; class fees, \$2,000; universal fee, \$1,400; equipment and supplies, \$450. 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		
CVL144	Intermediate Civil Survey	3
DRF131	CAD 2.....	3
DRF220	GIS 1.....	2
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
WR088	Introduction to Technical Writing 1+.....	3
	or	
WR121	The College Essay+ (or higher)	4
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	Workplace Psychology+.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

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.

You may select individual courses to meet your needs, or you may work toward an associate of applied science degree or a one-year 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.

Program outcomes

Students completing the ECE 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 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 degree 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 Advising and Counseling Services staff. You may need to complete program entry requirements. 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
RD090	College Textbook Reading.....	3
WR090	Fundamentals of Writing	4

If you have questions about the program requirements, contact the Early Childhood Education program at 503.399.6076 or e-mail pam.ditterick@chemeketa.edu.

Early Childhood Education AAS

Early Childhood Education 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, \$798; 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 57 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	The College Essay+ (or higher)	4
Term 2		
ECE068B	Observing Preschool Experiences.....	1
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition, Health, and Safety	3
	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 42. For subject areas, see page 54.

Early Childhood Education AAS

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 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, \$210; 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 AAS

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 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, \$196; 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 Associate of Applied Science Degree

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, \$1,386; 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 99 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	The College Essay+ (or higher)	4
Term 2		
ECE068B	Observing Preschool Experiences.....	1
ECE151	Observing and Guiding Behavior.....	3
ECE152	Creative Activities.....	3
ECE155	Child Nutrition, Health, and Safety	3
	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
	Arts and Letters 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
	Arts and Letters elective*	4
	or	
	Science/Applied Science elective*	4
	or	
	Communications elective*	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Selection may not be repeated.

**See Associate of Applied Science degree guidelines on page 54.

***Students transferring to Western Oregon University should see advisor.

****Requires recommendation from two Early Childhood Education program faculty members.

Economics

For discipline outcomes, see General Education Outcomes—Social Science on Page 49.

Chemeketa offers a number of economics courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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.

Are you interested in becoming a teacher? You can start your education degree at Chemeketa.

Elementary/Middle School Education

For discipline outcomes, see General Education Outcomes beginning on Page 48.

Chemeketa has developed a two-year transfer track designed specifically for students who want to become teachers. The curriculum consists of a small foundation of transferrable education courses, along with a specific group of general education courses required for a baccalaureate degree in education. The track also includes a colloquium component and practicum experience in local school districts in order to give students the best preparation possible. Courses are offered on the Salem and Woodburn campuses. Students planning to pursue a degree in education should contact Advising and Counseling Services at 503.399.5120 as soon as possible to ensure proper coursework.

Bilingual students are encouraged to consider this curriculum. To qualify as bilingual, students must demonstrate language proficiency at the 302 level on the CLEP exam or provide evidence of language ability through other test results. Tuition assistance may be available for bilingual students. Contact the Financial Aid Office for details.

Chemeketa offers articulation agreements with Oregon's state universities offering Elementary and Middle School Education

programs, including Oregon State University, Eastern Oregon University, and Western Oregon University, which offer bachelor of arts and/or bachelor of science degrees in Elementary and Middle School Education. Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, and University of Oregon offer fifth-year programs. Chemeketa also offers articulation agreements in Education with Pacific University and Linfield College.

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 fifth-year Elementary and Middle School Education programs 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 or middle 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 and Middle School Education programs.

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 and Middle School Education majors planning to transfer to Concordia University should contact Advising and Counseling Services at 503.399.5120 for transfer information.

Secondary Education

For discipline outcomes, see General Education Outcomes beginning on Page 48.

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 Advising and Counseling 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.

Electronic Technologies Programs

go.chemeketa.edu/electronics

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. or contact Charles Sekafetz at 503.399.6254.

Program outcomes:

Students completing the Electronic Engineering degree 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 degree 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 degree 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

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

In addition to the Electronic Engineering outcomes, students completing the Process Control Technology degree 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

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

In addition to the Electronic Engineering outcomes, students completing the Renewable Energy Management degree 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 Advising and Counseling Services staff. You may need to complete program entry requirements. 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 503.399.5114. Failure to be assessed may delay your entry into program classes.

Electronic Engineering Technician AAS

Electronics Certificate of Completion

The Electronics certificate is a three-term program, which focuses on core electronics concepts; use of testing and monitoring equipment; the fundamentals 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 degree.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,490; class fees, \$215; universal fee \$602; equipment and supplies, \$65; and Intel-compatible computer, \$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 43 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.....	5
	or	
MTH081	Technical Mathematics 1	4
WR088	Introduction to Technical Writing 1	3
	or	
WR121	The College Essay	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

ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Optoelectronic Devices	3
ELT161	Linear IC Fundamentals.....	4
FE205B	Resumes and Job Search Correspondence	1
WR089	Introduction to Technical Writing 2	3
	or	
WR227	Technical Writing.....	4

Electronic Engineering Technician AAS

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. Students gain skills in system performance and control processes which allows 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; universal fee \$518; 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 AAS

Computer Electronics Associate of Applied Science Degree 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, \$490; universal fee, \$1,428; equipment and supplies, \$460; and Intel-compatible computer, \$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 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	Network Computer Operating Systems.....	4
WR121	The College Essay+.....	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
	or	
NET141	Networks for Small Business	4
WR227	Technical Writing	4

Term 4		
COMM111	Fundamentals of Public Speaking	4
ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
	or	
NET142	Medium Business Networks	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics.....	4
Term 5		
CIS278	Data Communications.....	4
	or	
NET143	Routing and Switching Systems	4
ELT253	Microprocessor Systems.....	4
ELT254	Computer Hardware.....	4
	or	
CIS145	Microcomputer Hardware	4
PSY104	Workplace Psychology+	4
Term 6		
ELT222	Programming Concepts 2	4
	or	
CIS140U	UNIX/Linux	3
	or	
CIS179	Introduction to Client-Server Networks.....	4
ELT255	Advanced Data Communications.....	4
	or	
CIS279	Network Management	4
	or	
NET144	Network Design and Support	4
ELT256	Advanced Computer Architecture	4
ELT283	Logical Troubleshooting.....	4
FE205B	Resumes and Job Search Correspondence	1

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Electronic Engineering Technician Associate of Applied Science Degree

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 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, \$2,820; class fees, \$430; universal fee, \$1,442; Intel-compatible computer, \$800; 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	The College Essay+.....	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		
COMM111	Fundamentals of Public Speaking	4
ELT121	Programming Concepts 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics.....	4
	or	
PH201	General Physics	5
Term 5		
ELT253	Microprocessor Systems.....	4
ELT262	Linear IC Applications	3
ELT281	Antennas and Transmission Lines.....	2
ELT282	Telecommunications.....	3
FE205B	Resumes and Job Search Correspondence	1
PH122	Applied Physics	4
	or	
PH202	General Physics	5
Term 6		
ELT283	Logical Troubleshooting.....	4
ELT291	Control, Robotics, and Power Systems	4
PSY104	Workplace Psychology+.....	4
	Electronics electives*.....	6

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***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	5
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 AAS

Industrial Electronics Associate of Applied Science Degree Option

Students selecting the Industrial Electronics program may begin careers 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 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, \$2,625; class fees, \$450; universal fee, \$1,442; Intel-compatible computer, \$800; equipment and supplies, \$475. 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	The College Essay+.....	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		
COMM111	Fundamentals of Public Speaking	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	5
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	5
	Technical elective*.....	3
Term 6		
ELT291	Control, Robotics, and Power Systems	4
PSY104	Workplace Psychology+.....	4
	Technical electives*	9

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***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 AAS

Process Control Technology Associate of Applied Science Degree Option

Students in this program gain skills in system performance and control processes which allows 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, \$2,850; class fees, \$450; universal fee, \$1,288; equipment and supplies, \$480; and Intel-compatible computer, \$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 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	The College Essay+.....	4
	or	
WR088	Introduction to Technical Writing 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	
WR089	Introduction to Technical Writing 2	3

Term 4

COMM111	Fundamentals of Public Speaking	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	5

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	Workplace Psychology+	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Electronic Engineering Technician AAS**Renewable Energy Management Associate of Applied Science Degree 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, \$455; universal fee, \$1,316; equipment and supplies, \$625; and Intel-compatible computer, \$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 94 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
MT110	Microelectronics and Solar Cell Manufacturing....	3
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics 1+.....	4
WR088	Introduction to Technical Writing 1+.....	3
	or	
WR121	The College Essay+.....	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
ELT161	Linear IC Fundamentals.....	4
WR089	Introduction to Technical Writing 2	3
	or	
WR227	Technical Writing	4

Term 4

COMM111	Fundamentals of Public Speaking	4
ELT121	Programming Concepts 1	4
ELT252	Digital Circuit Applications.....	3
PH121	Applied Physics.....	4
	or	
PH201	General Physics	5
RNW110	Solar Energy Systems	3

Term 5

FE205B	Resumes and Job Search Correspondence	1
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
PH122	Applied Physics	4
	or	
PH202	General Physics	5
RNW120	Wind Energy Systems.....	3
RNW130	Biomass Energy Systems.....	3

Term 6

ELT291	Control, Robotics, and Power Systems	4
ELT293	Flexible Manufacturing Systems and Processes....	3
PSY104	Workplace Psychology+	4
RNW140	Hydroelectric and Geothermal Energy Systems ...	3
RNW180	Energy Management.....	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Emergency Medical Technology/Paramedic Program

go.chemeketa.edu/emt

The Paramedicine program offers career training for entry-level personnel, as well as certification and continuing education courses. Chemeketa offers a diverse, experienced emergency medical services faculty, excellent classroom and laboratory facilities, and outstanding hospital and pre-hospital clinical training sites. The program is accredited by the Oregon Department of Education and the Oregon Department of Health Services/Emergency Medical Services (DHS-EMS).

Nationally, Chemeketa's Paramedicine program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). You may contact these agencies for information about the program's accreditation status: CAAHEP, 1361 Park Street,

Clearwater, FL 33756, 727.210.2350, www.caahep.org; and CoAEMSP, 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088, 214.703.8445, fax 214.703.8992, www.coaemsp.org.

Students successfully completing the paramedic course work will receive an AAS degree in Paramedicine. Students successfully completing a level of training (EMT, Advanced EMT, or Paramedic) will be eligible to sit for the state licensure and national registry certification exam at that level.

Paramedics 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 a paramedic license 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.

Program outcomes

Students completing the degree 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

Paramedicine Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,116; class fees, \$1,893; universal fee, \$1,414; testing and licensing fees, \$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 101 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, Part 1	5
EMT175	Introduction to Emergency Medical Service	3
	or	
ES172	Introduction to Emergency Services	4
HM120	Medical Terminology 1	3
WR121	The College Essay+ (or higher)	4
Term 2		
BI232	Human Anatomy and Physiology	4
EMT152B	Emergency Medical Technician, Part 2	5
ES115	Crisis Intervention.....	3
MTH070	Elementary Algebra+ (or higher).....	4
Term 3		
BI233	Human Anatomy and Physiology	4
COMM111	Fundamentals of Public Speaking	4
EMT169	EMT Rescue.....	3
	or	
FRP256	Emergency Services 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
Term 4		
EMT296	Paramedic, Part 1	14
Term 5		
EMT297	Paramedic, Part 2	14
	Social Science/Arts and Letters elective	4
Term 6		
EMT280H	Cooperative Work Experience	8
EMT298	Paramedic, Part 3	4
HPE295	Health and Fitness for Life.....	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

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

For discipline outcomes, see **General Education Outcomes—Math and Science on Page 49.**

go.chemeketa.edu/engineering

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 Advising and Counseling 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

For discipline outcomes, see **General Education Outcomes—Arts and Letters on Page 48.**

Chemeketa offers a number of English courses. Many of these courses can be used to fulfill the social Arts and Letters requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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 Advising and Counseling 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
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
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
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

go.chemeketa.edu/fire

The Fire Protection programs offer career training in Fire Prevention and Fire Suppression. Both degree programs include training and education for those entering the career field and for those already employed. The Fire Service Supervision and Management certificate is designed to prepare current firefighters for promotion to officer positions. 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 503.399.5163.

Program outcomes

Students completing the Fire Prevention degree will:

- Exhibit safety practices 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
- Demonstrate effective verbal and written communications skills 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
- Exhibit the ability to collaborate with a diversity of colleagues in order to accomplish goals of the organization
- Demonstrate the ability to conduct risk reduction inspections through employing hazard identification, interpreting and applying codes and standards, and applying hazard abatement process
- Demonstrate the ability to conduct, coordinate, and complete basic fire cause and origin investigation and participate, under supervision, in the investigation of complex fire situations

Students completing the Fire Service Supervision and Management certificate will:

- Demonstrate skills and knowledge to function as a NFPA Fire Officer I and II
- Demonstrate effective verbal and written communications skills in both emergency and non-emergency situations
- Exhibit the ability to collaborate with a diversity of colleagues in order to accomplish goals of the organization
- Exhibit the ability to utilize human resources to accomplish assignments in accordance with safety plans and in an efficient manner and evaluating members' performance in the daily operations of a fire station and in emergency and non-emergency situations

- Demonstrate the ability to perform administrative functions and the implementation departmental policies and procedures at the unit level, according to job performance requirements

Students completing the Fire Suppression degree will:

- Exhibit safety practices as a response team member when engaged in training or emergency response activities
- Demonstrate effective verbal and written communications skills in both emergency and non-emergency situations
- Explain effective risk reduction activities through accurate hazard identification and public education activities.
- Demonstrate the ability to collaborate with a diversity of colleagues in order to accomplish the goals of the organization and successfully participate in the daily operations of a fire station
- Demonstrate skills and knowledge to function as an EMT Basic, firefighter I, driver and pumper operator

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 program entry requirements. Then, fire program faculty will help you develop an individualized program of study.

Fire Prevention Associate of Applied Science Degree

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, \$2,263; class fees, \$534; universal fee, \$1,442; 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	The College Essay+ (or higher).....	4

Term 3		
BLD267	Non-Structural Plan Review.....	3
CH110	Foundations of General, Organic, and Biochemistry.....	5
COMM115	Introduction to Intercultural Communication (or higher).....	4
FRP171	Fire Protection Systems and Extinguishers.....	3
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
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 42. For subject areas, see page 54.

***Fire Prevention electives (select 3 credits):**

CJ210	Introduction to Criminal Investigations 1: Crimes vs. Persons.....	3
FRP157	Hazardous Materials Operations.....	3
FRP159	Fire Behavior and Combustion.....	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
FRP169	Fire Department Leadership.....	3
FRP170	Fire Fighting Tactics and Strategies.....	3
FRP272	International Fire Codes 2.....	3
FRP278	NFPA Fire Instructor 2.....	3

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 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, \$1,219; class fees, \$80; universal fee, \$784; 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 42. For subject areas, see page 54.

***Communications electives:**

BA214	Business Communications.....	3
WR088	Introduction to Technical Writing 1.....	3
WR089	Introduction to Technical Writing 2.....	3
WR115	Introduction to Composition.....	4
WR121	The College Essay.....	4
WR122	Argument and Research.....	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
PH111	Physical Science for Fire Science and Emergency Services (or higher).....	5
	or	
	Any combination of one Chemistry and one Physics course of at least four credit hours each, which include a lab component.	

Fire Suppression Associate of Applied Science Degree

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.

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.

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, \$2,472; class fees, \$203; universal fee, \$1,470; 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 106 credit hours with a grade of “C” or better in all courses.

Course	Title	Credit Hours
Term 1		
EMT151	Emergency Medical Technician, 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
WR121	The College Essay+ (or higher).....	4
Term 2		
EMT152B	Emergency Medical Technician, Part 2.....	5
FRP152	Fire Incident Related Experience 2	3
FRP159	Fire Behavior and Combustion.....	3
FRP266	Building Construction for Fire Suppression.....	3
MTH095	Intermediate Algebra+ (or higher)	4

Term 3

CH110	Foundations of General, Organic, and Biochemistry	5
FRP153	Fire Incident Related Experience 3	3
FRP154	Water Supply Operations.....	3
FRP158	Fire Pump Construction and Operation.....	3
FRP169	Fire Department Leadership	3
	Fire Suppression elective*	3

Term 4

CIS101	Introduction to Microcomputer Applications (or higher).....	3
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

Term 5

COMM115	Introduction to Intercultural Communication (or higher).....	4
FRP172	International Fire Codes.....	3
FRP173	Law for Emergency Services.....	3
FRP179	Wildland Urban Interface	3
FRP256	Emergency Services Rescue Practices.....	4
FRP262	Fire Incident Related Experience 5	3

Term 6

FRP171	Fire Protection Systems and Extinguishers.....	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 42. For subject areas, see page 54.

***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
EMT167A	Oregon Emergency Medical Technician Intermediate, Part 1	5
EMT167B	Oregon 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
FRP174	Fire Investigation.....	4
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 Instruction.....	2
HM120	Medical Terminology 1.....	3

Foreign Languages

For discipline outcomes, see General Education Outcomes—Arts and Letters on Page 48.

Chemeketa offers a number of foreign language courses. Some of these courses can be used to fulfill the Arts and Letters requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

Chemeketa offers instruction in first-year (introductory) and second-year (intermediate) American Sign Language, French, Japanese, Russian and Spanish. Classroom instruction focuses on oral/visual communication as well as reading and writing.

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 American Sign Language and 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 Advising and Counseling 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.

General Science

See Biology.

General Studies

For discipline outcomes, see General Education Outcomes beginning on Page 48.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Social Science on Page 49.

Chemeketa offers a number of geography courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 49.

Chemeketa offers a few geology courses. Some of these courses can be used to fulfill the Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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.

Graphic Design

See Visual Communications Programs.

Health, Health Education

For discipline outcomes, see General Education Outcomes beginning on Page 48.

Chemeketa offers a number of health courses. Some of these courses can be used to fulfill the requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

Students wishing to explore careers in Health or Physical Education are encouraged to complete a two-year AAOT degree from Chemeketa with a Health Promotion emphasis and to continue their studies at a public or private four-year institution. Possible areas of interest include: Athletic Training, Coaching, Exercise Science, Fitness Management, Public Health, Nutrition, Pre-Therapy, Sports Management, and Teaching.

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, Oregon State University, Portland State University, Southern Oregon University, and Western Oregon University. EOU's degree is in Physical Education and Health. OSU offers options in 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 Advising and Counseling 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 Information Management Programs

go.chemeketa.edu/healthservices

These program offerings include a short-term Basic Health Care certificate and an associate of applied science degree in Health Information Management. The 16-credit Basic Health Care certificate readies you for entry-level positions in the health care industry and provides a solid foundation of skills and knowledge that will enable you to explore further education, training, and employment in the allied health care fields.

As a graduate of the Health Information Management 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 Information Management program curriculum focuses on four areas: applied science, the U.S. health care delivery system, business and health management, and general education.

You may transfer to a four-year institution to continue coursework in public health administration or health care administration. 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 program 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.

For admission to the program, an application is required. This is a separate step from the testing and assessment process. Applications are available in Advising and Counseling Services, at the Enrollment Center, in program offices, and on the web at www.chemeketa.edu.

Program outcomes

Students completing the certificate will:

- Comply with preventative health and safety requirements
- Apply an understanding of health care laws and ethics that are required in health care practice
- Explain the characteristics of health care professionals, including professional behavior, teamwork, leadership skills, and customer service
- Understand and apply appropriate medical terminology

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- Describe the anatomy and physiology of the various systems of the body
- Demonstrate basic computer skills
- Apply the principles and methods of health promotion and wellness

Students completing the degree 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 information management
- Integrate and apply theory and skill in a health care organization through a work site experience
- 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 Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Basic Health Care certificate program

AH115	Healthcare Career Success Strategies.....	2
MTH060	Introductory Algebra (or higher).....	4
RD090	College Textbook Reading (or higher)	3
WR115	Introduction to Composition (or higher)	4

For the Health Information Management degree program

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

If you have questions about the requirements, contact the Dean of Health Sciences at 503.399.5058 or e-mail healthsciences@chemeketa.edu.

Health Information Management AAS

Basic Health Care Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$400; class fees, \$71; universal fee, \$224. 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 16 credit hours with a grade of “C” or better in all courses.

Course	Title	Credit Hours
BI171	Introduction to Human Anatomy and Physiology 1	3
BI172	Introduction to Human Anatomy and Physiology 2	3
CIS101	Introduction to Microcomputer Applications	3
HM120	Medical Terminology 1	3
HM121	Medical Terminology 2.....	4

Health Information Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,486; class fees, \$188; universal fee, \$1,260; equipment and supplies, \$135; criminal background check, \$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 an associate of applied science degree by successfully completing the required 90 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 Information Management degree program, contact the advisor in this program.

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 1	3
BI231	Human Anatomy and Physiology	4
CA118B1	Excel Basics 1	1
CIS101	Introduction to Microcomputer Applications	3
FYE105	Creating College Success	2
HM120	Medical Terminology 1	3
PSY104	Workplace Psychology+	4
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
BI232	Human Anatomy and Physiology	4
CA208	Workplace Presentations Using PowerPoint	3
HM121	Medical Terminology 2.....	4
MTH070	Elementary Algebra+ (or higher).....	4

Term 3

CA118B2	Excel Basics 2	1
CA118C1	Access Basics 1	1
HM112	Health Information Systems and Procedures	4
HM123	Essentials of Pathophysiology	3
HM210	Introduction to Health Services	3
WR121	The College Essay+ (or higher)	4

Term 4

HM101	Medical Law and Ethics	3
HM115	ICD-10-CM Coding/Diagnosis	4
HM161	Computer Technology and Systems for Health Information Management	3
HM217	Quality Data Management in Health Services	3
HM250	Health Information Management 1	3

Term 5

HM113	Healthcare Financing, Insurance, and Reimbursement	3
HM114	CPT Coding and Reimbursement	3
HM150	Professional Development and Communication for Health Information Management	3
HM251	Health Information Management 2	3
PHM230	Pharmaceutical Drug Classifications	3

Term 6

HM160	ICD-10-PCS/Procedures	4
HM230	Health Information Management Practicum	5
HM231	Health Information Management Seminar	1
HM252	Health Information Management 3	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Hemodialysis Technician Program

go.chemeketa.edu/hemodialysis

The Hemodialysis Technician program prepares graduates 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.

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 readiness test and meeting with Advising and Counseling Services. You may need to complete program entry requirements. 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 503.399.6071. Failure to be assessed may delay your entry into program classes.

Hemodialysis Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$750; class fees, supplies, criminal background check, drug testing, CPR and first aid certification, scrubs, \$1,252; immunizations, \$250; universal fee, \$686. Students are responsible for costs related to travel to practicum locations. 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		
CIS101	Introduction to Microcomputer Applications	3
HEM101	Hemodialysis Technology 1	8
HM120	Medical Terminology 1	3
WR090	Fundamentals of Writing+ (or higher)	4
Term 2		
HEM102	Hemodialysis Technology 2	8
HM121	Medical Terminology 2	4
MTH060	Introductory Algebra+ (or higher)	4
Term 3		
HEM103	Hemodialysis Technology 3	8
NFM225	Nutrition	4
PSY104	Workplace Psychology+	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

History

For discipline outcomes, see **General Education Outcomes—Social Science on Page 49.**

Chemeketa offers a number of history courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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 Program

go.chemeketa.edu/ag

The Horticulture program offers career training and education for those entering the career field and for those already employed. The program curriculum includes a wide variety of topics ranging from plant propagation to sustainable landscape design. Chemeketa has a well-equipped greenhouse in which students will acquire hands-on training in the basic knowledge and technical skills required for successful employment in a variety of positions in the horticulture industry.

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.

Horticulture Associate of Applied Science Degree

The Horticulture program prepares students for occupations in greenhouse and nursery production, propagation, or plant protection as managers, crew leaders, inventory controllers, irrigation specialists, plant sellers, or customer service representatives. The program offers a two-year associate of applied science degree.

For more information about the program, contact Joleen Schilling at 503.399.5150.

Program outcomes

Students completing the Horticulture degree 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 Advising and Counseling Services. You may need to complete program entry requirements. 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
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

Note: In some cases, students can enroll in program courses without competing all of the above prerequisite courses. If you have questions about the program requirements, contact the Agricultural Sciences department at 503.399.5139 or e-mail sherrie.magarrell@chemeketa.edu.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$3,125; class fees, \$648; universal fee, \$1,372. 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 courses:

Course	Title	Credit Hours
Term 1		
CIS101	Introduction to Microcomputer Applications (or higher).....	3
HOR111	Introduction to Horticulture.....	3
WR121	The College Essay+ (or higher).....	4
	Horticulture elective*	4
Term 2		
HOR211	Plant Propagation.....	4
HOR260	Soils, Media, and Nutrition.....	4
MTH070	Elementary Algebra+ (or higher).....	4
PSY104	Workplace Psychology+ (or higher)	4
Term 3		
BI153	Fundamentals of Plant Biology	4
COMM111	Fundamentals of Public Speaking (or higher).....	4
	or	
COMM115	Introduction to Intercultural Communication (or higher).....	4
HOR221	Nursery Production and Management.....	3
WR227	Technical Writing (or higher).....	4

Term 4

HOR237	Integrated Pest Management: Insects and Diseases	4
SPN101	First Year Spanish, Term 1 (or higher)	4
	Horticulture elective*	4
	Plant Identification course**	3

Term 5

HOR112	Pesticides and Safety	2
HOR225	Greenhouse Production and Management	4
SPN102	First Year Spanish, Term 2 (or higher)	4
	Horticulture elective*	4
	Plant Identification course**	3

Term 6

HOR224	Horticulture Practicum	4
HOR236	Integrated Pest Management: Weeds	3
VMW256	Agricultural Business Management	3
	Horticulture elective*	2
	Plant Identification course**	3

Term 7

HOR280F	Cooperative Work Experience	6
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+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Horticulture electives (select 14 credit hours):**

BI131	Environmental Science 1	4
BI132	Environmental Science 2	4
BI133	Environmental Science 3	4
CH121	College Chemistry (or higher)	5
HOR110	Bees and Other Pollinators	2
HOR115	Nursery and Greenhouse Equipment and Safety ..	3
HOR116	Introduction to Phytotechnology	4
HOR201	Growing Vegetables in the Willamette Valley	4
HOR202	Growing Fruit in the Willamette Valley	4
HOR212	Advanced Plant Propagation	2
HOR238	Plant Problem Diagnosis	2
HOR240	Sustainable Landscape Design	4
HOR256	Identification of Herbaceous Plants 2	2
HOR257	Horticultural Marketing	3
HOR273	Urban and Community Forestry	2
HOR275	Innovative Strategies for Water Management in Nurseries	2
HOR276	Organic Gardening	2
HOR277	Composting	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

Hospitality Management Programs

See also **Tourism and Travel Management**.

go.chemeketa.edu/hospitality

Program courses are delivered entirely online.

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 resort

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 lodging staff.

The intent of the program is for students with an associate of applied science degree or 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.

Program outcomes

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 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 degree 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 program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Event Management and Hospitality Management certificate programs

CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD115	Academic Thinking and Reading	3
SSP112	Effective Learning	3
WR115	Introduction to Composition	4

For the degree program

CA121A	Keyboarding A (if less than 25 wpm).....	1
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 Hospitality Management program staff at 503.584.7540. Failure to be assessed may delay your entry into program classes.

Hospitality Management AAS

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 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, \$578; universal fee, \$420. 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 AAS

Hospitality Management Certificate of Completion

The Hospitality Management certificate focuses on hospitality industry careers related to hotel operations, marketing, and sales; meeting, convention and special event planning; catering and banquet operations; and casino supervision. The certificate prepares students for direct entry into the workforce and allows them 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, \$1,072; class fees, \$70; universal fee, \$644. 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	The College Essay+ (or higher).....	4
Term 2		
HTM103	Service Marketing: Fundamentals	3
HTM109	Front Desk Operations.....	3
HTM143	Computer Reservation Systems 1	3
PSY104	Workplace Psychology+ (or higher)	4
	Hospitality Management elective*	3
Term 3		
COMM218	Interpersonal Communication (or higher)	4
HTM107	Hospitality Cost Control	3
HTM127	Selling in Hospitality and Tourism	3
HTM130	Beverages.....	3
	Hospitality Management elective*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***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
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 Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,767; class fees, \$140; universal fee, \$1,288. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing these required 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
HTM131	Customer Service Management 1	3
MTH060	Introductory Algebra+ (or higher)	4
WR121	The College Essay+ (or higher)	4
Term 2		
COMM218	Interpersonal Communication (or higher)	4
HTM103	Service Marketing: Fundamentals	3
HTM105	Food and Beverage Industry	3
HTM109	Front Desk Operations	3
HTM143	Computer Reservation Systems 1	3
Term 3		
HTM107	Hospitality Cost Control	3
HTM127	Selling in Hospitality and Tourism	3
HTM130	Beverages.....	3
	Hospitality Management elective*	3
	Arts and Letters 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
HTM230	Hotel, Restaurant, and Travel Law	3
PSY104	Workplace Psychology+ (or higher)	4
Term 6		
HTM125	Special Events 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
	Hospitality Management elective*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*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

go.chemeketa.edu/humanservices

The Human Services programs offer training for entry-level positions in human service agencies. The degree 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.

Post baccalaureate students are also eligible to complete the Addiction Counselor Certification Preparation program and earn a one-year certificate.

These programs have special admissions requirements and enrollment limits, and there is a deadline for applications. It is recommended that you contact Advising and Counseling Services at 503.399.5120 for details if you are considering one of the Human Services programs. Students with criminal histories may be prevented from obtaining necessary field experience required for program completion. Students recovering from chemical dependency who elect the Addiction Studies degree must have a minimum of two years continuous sobriety in an unrestricted environment before they begin practicum.

The Human and Social Services Traditional Health Worker (THW) certificate program is designed to meet the advanced education and training needs of individuals interested in employment in traditional health care, roles which have been identified by the Oregon Legislature as critical for bridging the gap for those citizens needing individualized assistance in accessing and using community resources, managing metabolic disease, and navigating the healthcare system.

Additionally, an award of participation may be earned by taking only HS171, Traditional Health Worker, and HE251 Community Health. Contact Yolanda T. Martinez, 503.399.6236, for additional information about the THW certificate program and the Award of Participation.

By enrolling in PLP121, Introduction to Prior Learning Portfolio, 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.

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 degree and Addiction Counselor Certification Preparation certificate will:

- Describe, identify, assess, and treat addictions

In addition to the outcomes, students completing the Social Services degree 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

Students completing the Human and Social Services Traditional Health Worker certificate will develop core competencies in the following areas:

- Outreach and Mobilization: Outreach methods; community engagement and outreach and relationship building; communication skills, including cross-cultural communication, active listening, and group and family dynamics; empowerment techniques; knowledge of community resources
- Community and Cultural Liaising: Cultural knowledge/awareness in bridging clinical and community cultures; conflict identification and problem solving; social determinants of health; conducting individual needs assessments; advocacy skills; building partnerships with local agencies and groups
- Case Management, Care Coordination, and System Navigation: Roles and expectations for working in multidisciplinary teams; ethical responsibilities in multicultural contexts; legal responsibilities; paths to recovery; data collection and types of data; organization skills and documentation; crisis identification and intervention; professional conduct; navigating public and private case management, care coordination and system navigation, and health promotion and coaching
- Health Promotion and Coaching: Introduction to disease processes including chronic illnesses, mental health, and addictions; trauma-informed care; health across the life span; adult learning principles/teaching and coaching; stages of change; health promotion best practices; self-care; health literacy issues

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 Advising and Counseling Services staff. You may need to complete program entry requirements. 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	The College Essay.....	4

If you have questions about the requirements, contact 503.399.5114, or the Human Services program chair Yolanda T. Martinez at 503.399.6236 or e-mail yolanda.martinez@chemeketa.edu.

Addiction Studies AAS

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, \$1,937; class fees, \$115; universal fee, \$714; application fee, \$25; intern registry, \$50; equipment and supplies, \$231; 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 Wanda Urban, 503.399.6154, 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 and Traditional Health Workers.....	2
HS155	Wellness Coaching, Interviewing, and Advocacy..	3
HS219	Client Records, Case Management, and Care Coordination	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-Addiction Studies .	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-Addiction Studies .	5-8

Term 4

HS201	Addiction and the Family System.....	3
HS209	Co-occurring Disorders	2
HS211	HIV, TB and Infectious Diseases: Risk Assessment, Harm Reduction, and Counseling	1
HS218C	Group Processes C.....	1
HS285A-		
HS288A	Practicum: Human Services-Addiction Studies .	5–8

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Addiction Studies Associate of Applied Science Degree

The Addiction Studies degree prepares students to work in public and private agencies treating chemically-dependent people and their families. Training sites include both residential and outpatient 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, \$3,510; class fees, \$255; universal fee, \$1,512; application fee, \$25; intern registry, \$50; equipment and supplies, \$278; 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 108 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; 10 credits can be satisfied at a social services placement.

Course	Title	Credit Hours
Term 1		
HS101	Addiction Pharmacology and Physiology	4
HS150	Personal Effectiveness for Human Service and Traditional Health Workers.....	3
HS154	Community Resources and Advocacy.....	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-Addiction Studies .	4–8
PSY201	Introduction to Psychology: Mind and Body+	4
HS211	HIV, TB and Infectious Diseases: Risk Assessment, Harm Reduction, and Counseling	1

Term 3

HS103	Ethics for Human Service and Traditional Health Workers.....	2
HS155	Wellness Coaching, Interviewing, and Advocacy..	3
HS219	Client Records, Case Management, and Care Coordination	3
HS284A-		
HS288A	Practicum: Human Services-Addiction Studies .	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-Addiction Studies .	4–8
PSY239	Abnormal Psychology	4

Term 5

COMM111	Fundamentals of Public Speaking	4
	or	
COMM112	Persuasive Speaking.....	4
	or	
COMM130	Business and Professional Speaking.....	4
HS216	Clinical Screening, Assessment, and Treatment Planning	3
HS217	Group Counseling Skills	3
HS218B	Group Processes B	1
HS284A-		
HS288A	Practicum: Human Services-Addiction Studies .	4–8
SOC204	The Sociological Perspective	4

Term 6

HS201	Addiction and the Family System.....	3
HS209	Co-occurring Disorders	2
HS218C	Group Processes C.....	1
HS284A-		
HS288A	Practicum: Human Services-Addiction Studies ..	4–8
PSY237	Life Span Development.....	4
SOC205	United States Society	4
	or	
SOC206	Social Problems.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Human and Social Services Traditional Health Worker Certificate of Completion

The Human and Social Services Traditional Health Worker certificate program prepares graduates to work in three emerging roles in the health care field. Community health workers, peer wellness/support specialists, and health system navigators have all been identified as critical positions for bridging the gap for those who need individualized assistance to use community resources, manage metabolic disease, and navigate the healthcare system. All students in the program will take a common core of courses, and then branch off into one of two career tracks: Health Services Navigator/Community Health Worker or Peer Wellness/Support Specialist.

Additionally, students may earn an award of participation for completing two courses: HS171 and HE251. At this level, students will be qualified for entry-level positions in the Traditional health worker field.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,293; class fees, \$39; universal fee, \$504; equipment and supplies, \$176; 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 36 credit hours (11 credits of the Traditional Health Worker core requirements plus an additional 25 credits in one of the two areas of specialization listed below).

Traditional Health Worker core requirements:

Term 1	Title	Credit Hours
HS150	Personal Effectiveness for Human Service and Traditional Health Workers.....	3
HS154	Community Resources and Advocacy.....	3
HS171	Traditional Health Workers.....	5

Plus: Choose one area of specialization

Health Services Navigator/Community Health Worker

Specialization

Term 2

HE251	Community Health	3
HS103	Ethics for Human Service and Traditional Health Workers.....	2
HS213	Multicultural Practice.....	3
HS266	Case Management, Care Coordination, and Systems Navigation.....	3

Term 3

HE213	Women’s Health Issues.....	3
	or	
HS223	Aging: Theory and Practice.....	3
	or	
HS260	Group Dynamics.....	3
HS155	Wellness Coaching, Interviewing, and Advocacy..	3
HS158	Trauma Informed Theory, Practice, and Crisis Management.....	3
HS285T	Practicum: Human Services-Traditional Health Workers.....	5

Peer Wellness/Support Specialist Specialization

Term 2

HE251	Community Health	3
HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service and Traditional Health Workers.....	2
HS213	Multicultural Practice.....	3

Term 3

HS155	Wellness Coaching, Interviewing, and Advocacy..	3
HS158	Trauma Informed Theory, Practice, and Crisis Management.....	3
HS219	Client Records, Case Management, and Care Coordination.....	3
HS284T	Practicum: Human Services-Traditional Health Workers.....	4

Social Services Associate of Applied Science Degree

The Social Services AAS degree program trains students for employment in social service agencies. These agencies provide services in areas such as crisis counseling,

employment, 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, \$3,910; class fees, \$165; universal fee, \$1,498; application fee, \$25; equipment and supplies, \$286; 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 Service courses. Twenty-five credits of practicum are required.

Course	Title	Credit Hours
Term 1		
HS150	Personal Effectiveness for Human Service and Traditional Health Workers.....	3
HS154	Community Resources and Advocacy.....	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
HS129	Understanding Grief, Loss, and Transition	3
HS260	Group Dynamics.....	3
HS284S- HS288S	Practicum: Human Services-Social Services Social Services elective*.....	4-8 1
Term 3		
HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service and Traditional Health Workers.....	2
HS155	Wellness Coaching, Interviewing, and Advocacy..	3
HS211	HIV, TB, and Infectious Diseases: Risk Assessment, Harm Reduction, and Counseling	1
HS284S- HS288S	Practicum: Human Services-Social Services Life Span Development.....	4-8 4
PSY237		
Term 4		
HS156	Counseling Theories	3
HS213	Multicultural Practice.....	3
HS265	Casework Interviewing	3
HS284S- HS288S	Practicum: Human Services-Social Services Introductory Algebra (or higher)+	4-8 4
MTH060		
Term 5		
HS266	Case Management, Care Coordination, and Systems Navigation.....	3
HS284S- HS288S	Practicum: Human Services-Social Services	4-8
PSY239	Abnormal Psychology	4
SOC204	The Sociological Perspective	4
	Social Services elective*.....	3

Term 6

COMM111	Fundamentals of Public Speaking	4
	or	
COMM112	Persuasive Speaking.....	4
	or	
COMM130	Business and Professional Speaking.....	4
HS223	Aging: Theory and Practice.....	3
HS284S-		
HS288S	Practicum: Human Services-Social Services	4-8
SOC205	United States Society	4
	or	
SOC206	Social Problems.....	4
	Arts and Letters elective.....	3
	or	
	Science/Applied Science elective	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Social Services electives: Any course with an HS, ATH, HST, PS, PSY (numbered 200 or higher), SOC, WS, CJ, ECE, ASL, or PLP prefix.

Interactive Media

See Visual Communications Programs.

Journalism

For discipline outcomes, see General Education Outcomes—Speech/Oral Communication or Writing on Page 49.

Chemeketa offers a few journalism courses. Some of these courses can be used to fulfill the requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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.

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), manufacturing engineering, and mechanical design.

The Basic Manufacturing Technician program 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 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).

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) degree 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 these programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Advising and Counseling Services staff. You may need to complete program entry requirements. Then your program 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 program requirements, please contact program chair Sheldon Schnider at 503.589.7875 (sheldon.schnider@chemeketa.edu) or the office of the Dean of Applied Technologies, 503.399.5210.

Basic Manufacturing Technician Certificate of Completion

The Basic Manufacturing Technician certificate program 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, \$500; class fees, \$54; universal fee, \$224; 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

WLD151	Basic Arc Welding	5
WLD156	Blueprint Reading and Sketching.....	4

CNC Mill Specialization

CAM110	Benchwork and Manual Fundamentals	4
CAM120	Manual Milling Processes.....	4

Machining Specialization

CAM110	Benchwork and Manual Fundamentals	4
CAM140	Metallurgy for Manufacturing.....	2

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

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, \$364; precision tools 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 a certificate of completion by successfully completing the required 26 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
CAM110	Benchwork and 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
CAM140	Metallurgy for Manufacturing.....	2
MTH053	Introduction to Trigonometry and Geometry.....	3
WR088	Introduction to Technical Writing 1	3

Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) AAS**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 program 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, \$574; precision tools 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 a certificate of completion by successfully completing the required 41 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
CAM110	Benchwork and 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
CAM140	Metallurgy for Manufacturing.....	2
CAM160	Intermediate CNC Mill Operation and Programming.....	4
MTH053	Introduction to Trigonometry and Geometry.....	3
Term 3		
CAM150	Cutting Tools and Materials	3
CAM190	Intermediate CNC Lathe Operation and Programming.....	4
CAM280D	Cooperative Work Experience	4
WR088	Introduction to Technical Writing 1	3

Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) AAS**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 set-up 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, \$574; precision tools 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 a certificate of completion by successfully completing the required 41 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
CAM110	Benchwork and 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
CAM120	Manual Milling Processes.....	4
CAM140	Metallurgy for Manufacturing.....	2
MTH053	Introduction to Trigonometry and Geometry.....	3
Term 3		
CAM121	Manual Lathe Processes.....	4
CAM150	Cutting Tools and Materials	3
CAM280D	Cooperative Work Experience	4
WR088	Introduction to Technical Writing 1	3

Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) Associate of Applied Science Degree

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 machining/manufacturing and engineering technologies. Graduates 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, \$1,302; precision tools and supplies, \$4,00. 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		
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
CAM110	Benchwork and 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
CAM120	Manual Milling Processes.....	4
CAM140	Metallurgy for Manufacturing.....	2
CAM160	Intermediate CNC Mill Operation and Programming.....	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
CAM121	Manual Lathe Processes.....	4
CAM150	Cutting Tools and Materials	3
CAM190	Intermediate CNC Lathe Operation and Programming.....	4
WR088	Introduction to Technical Writing 1+.....	3
	or	
WR121	The College Essay+ (or higher).....	4
Term 4		
CAM210	Advanced Mill Processes.....	4
CAM230	CAM Programming Mills.....	3
CAM235	Advanced CNC Mill Operation and Programming.....	3
DRF210	Parametric Design with SolidWorks	3
PH121	Applied Physics.....	4
	or	
PH201	General Physics (or higher).....	5
	or	
GS104	General Science: Physics.....	4

Term 5		
CAM220	Advanced Lathe Processes.....	4
CAM260	CAM Programming Lathes.....	3
CAM265	Advanced CNC Lathe Operation and Programming.....	3
CAM270	Machine Design	3
FE205B	Resumes and Job Search Correspondence	1
PSY104	Workplace Psychology+.....	4

Term 6		
CAM225	Advanced Manual Integrations.....	4
CAM275	Tool Design	3
CAM290	Advanced CAD/CAM Integrations.....	4
CAM295	Introduction to Lean Manufacturing.....	1
WR089	Introduction to Technical Writing 2	3
	or	
WR227	Technical Writing.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Management Programs

go.chemeketa.edu/management

See also Accounting and Business Administration.

These program offerings include certificates of completion and two-year associate of applied science degrees. The 12-credit Sustainability in Management certificate prepares students to enter the business environment with a foundational knowledge of sustainability and responsible management practices. The 38-credit Retail Management certificate readies students for careers in sales and management. As a graduate of Chemeketa's Management AAS degree program, you may begin as a management trainee or other entry-level employee of a small business, mid-size organization, or large firm. The Procurement Management certificate and the Procurement and Supply Chain Management degree programs emphasize skill development for those interested in pursuing a position in the field of procurement, including specializations in the areas of contract management, inventory management, materials management, production management, quality control/quality assurance, distribution, and transportation.

You may select individual courses to meet your needs, or you may work toward a certificate or degree.

For more information about these programs, contact program faculty Karen Edwards at 503.399.3996 or karen.edwards@chemeketa.edu, Laney Furr at 503.399.6163 or laney.furr@chemeketa.edu, Jason Jones at 503.399.6155 or jason.jones@chemeketa.edu, or Kristi Newton at 503.399.6238 or kristi.newton@chemeketa.edu.

Program Outcomes

Students completing the Sustainability in Management certificate will:

- Demonstrate an understanding of sustainability through the use of terms and concepts
- Identify how sustainability connects to society as a whole
- Know and understand responsible management (sustainability, responsibility, and ethics) through the four functions of management: planning, organizing, leading, and controlling

- Understand sustainability-related issues and the impact on different organizations

Students completing the Management degree will:

- Explain how the strategic plan of a business interrelates with functional areas 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, or business reports
- Identify the legal, ethical, and financial consequences of decisions to business organizations

Students completing the Procurement Management certificate will:

- Demonstrate a basic understanding of procurement and supply chain literacy through use of terms and concepts
- Apply math and computer skills requisite with industry expectations
- Apply industry standards in making ethical decisions in situations involving procurement and supply chain 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

In addition to the Procurement Management certificate outcomes, students completing the Procurement and Supply Chain Management degree will:

- Identify systems that track and control the acquisition and movement of goods and services
- Use communication skills with individuals and groups in procurement-related settings

Students completing the Retail Management 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 these programs is to take part in an assessment process, which includes taking the college’s free placement test and meeting with Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Sustainability in Management, Management, and Retail Management programs

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
WR121	The College Essay	4

For the Procurement Management and Procurement and Supply Chain Management programs

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications	3
MTH095	Intermediate Algebra	4
RD090	College Textbook Reading	3
WR121	The College Essay	4

Management AAS

Sustainability in Management Certificate of Completion

Providing an interdisciplinary approach, this program integrates sustainable development and environmentalism with business management strategy to achieve corporate social responsibility. The certificate will provide an educational foundation in the sustainability issues and concepts addressed in today’s business setting and will prepare students to seek employment in organizations that strive to better care for the environment.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$350; class fees, \$150; universal fee, \$168. 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 12 credit hours with a grade of “C” or better in all courses:

Course	Title	Credit Hours
BA285	Organizational Behavior.....	4
BA288	Principles of Responsible Management	4
SOC223	Sociology of the Environment and Sustainability..	4

Management Associate of Applied Science Degree

As a graduate of Chemeketa’s Management program, you may begin as a management trainee or other entry-level employee of a small business, mid-size organization, or large firm.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$2,500; class fees, \$200; universal fee, \$1,316; equipment and supplies, \$1,500. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 94 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		
BA212	Financial Accounting 2.....	4
BA214	Business Communications+*	3
BA285	Organizational Behavior.....	4
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	Workplace Psychology+.....	4
	or	
SOC204	The Sociological Perspective+	4
	or	
SOC223	Sociology of the Environment and Sustainability+	4
Term 4		
BA223	Principles of Marketing.....	4
BA226	Business Law 1	4
COMM111	Fundamentals of Public Speaking (or higher).....	4
EC200	Introduction to Economics (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
	Arts and Letters elective.....	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Placement determined by testing. Lower division collegiate courses may be substituted.

**Business electives: Choose BA or EC courses numbered 200 or above.

***Choose CIS133 or above, or CA200 or above.

Procurement and Supply Chain Management AAS

Procurement Management Certificate of Completion

The Procurement Management certificate program emphasizes skill development in public and private procurement, contract administration, and project management. Graduates of this program may find work as purchasing and procurement clerks, purchasing agents, and purchasing managers in various organizations and business settings.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,500; class fees, \$200; universal fee, \$644; 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 46 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA214	Business Communications+*	3
BA226	Business Law 1	4
BA234	Fundamentals of Supply Chain Management.....	4
BA235	Principles of Public Procurement.....	4
BA236	Contract Management	4
BA277	Business Ethics	3
BA287	Principles of Project Management	4
CIS125E	Excel-Workbooks.....	4
COMM111	Fundamentals of Public Speaking	4
	or	
COMM130	Business and Professional Speaking.....	4
	or	
COMM115	Introduction to Intercultural Communication	4
	or	
COMM218	Interpersonal Communication.....	4
MTH105	Math in Society+	4
PSY104	Workplace Psychology+	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Placement determined by testing. Lower division collegiate classes may be substituted.

Procurement and Supply Chain Management Associate of Applied Science Degree

Graduates of the Procurement and Supply Chain Management degree program may find employment in local, state, or federal government agencies, or in the private sector in a variety of settings ranging from health care to manufacturing and every kind of enterprise in between.

In addition to tuition, estimated costs for students who complete the entire program listed below are books/software, \$2,500; class fees, \$200; universal fee, \$1,288; equipment and supplies, \$1,500. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 92 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
BA234	Fundamentals of Supply Chain Management.....	4
CIS125E	Excel-Workbooks.....	4
Term 2		
BA202	Personal Effectiveness in Business	3
BA212	Financial Accounting 2.....	4
BA214	Business Communications+ *.....	3
BA235	Principles of Public Procurement.....	4

Term 3

BA213	Managerial Accounting	4
BA236	Contract Management	4
CIS125A	Micro Database Software-Access	3
PSY104	Workplace Psychology+	4
	or	
SOC204	The Sociological Perspective+	4
	or	
SOC223	Sociology of the Environment and Sustainability+	4

Term 4

BA226	Business Law I	4
BA231	Fundamentals of Transportation and Logistics Management	4
COMM111	Fundamentals of Public Speaking	4
	or	
COMM115	Introduction to Intercultural Communication	4
	or	
COMM130	Business and Professional Speaking.....	4
	or	
COMM218	Interpersonal Communication.....	4
MTH105	Math In Society+ (or higher).....	4

Term 5

BA227	Business Law 2	3
BA286	Negotiations.....	4
EC200	Introduction to Economics (or higher).....	4
	Business elective**	3

Term 6

BA277	Business Ethics	3
BA287	Principles of Project Management	4
WR227	Technical Writing	4
	Arts and Letters elective.....	3
	Business elective**	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Placement determined by testing. Lower division collegiate courses may be substituted.

**Business electives: Choose BA or EC courses numbered 200 or above.

Retail Management Certificate of Completion

retail.chemeketa.edu

The Retail Management 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 part of a statewide cooperative effort, this program is also offered by other community colleges, including Clackamas, Lane, Linn-Benton, Oregon Coast, Mt. Hood, and Portland.

In addition to tuition, estimated costs for students who complete the program listed below are books/software, \$1,500; class fees, \$150; universal fee, \$476; equipment and supplies, \$200. 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 38 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
BA115	Introduction to Accounting	4
BA206	Business Management Principles	4
BA214	Business Communications.....	3
BA223	Principles of Marketing.....	4
BA224	Human Resource Management.....	4
BA249	Principles of Retailing.....	3
BA285	Organizational Behavior.....	4
CIS120	Digital Literacy	4
COMM111	Fundamentals of Public Speaking (or higher).....	4

Mathematics

For discipline outcomes, see General Education Outcomes—Mathematics on Page 49.

Chemeketa offers a number of mathematics courses. Some of these courses can be used to fulfill the requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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.

Medical Assisting Program

This program prepares graduates for a wide range of duties in medical offices and other healthcare settings. Administrative responsibilities may include scheduling and receiving patients, keeping medical records, handling telephone calls and correspondence, and maintaining supplies and equipment.

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

The program offers clinical experience as well as theory and laboratory courses. Students in the program must earn grades of "C" or better in all required courses and complete all courses required in the first term to be eligible for the practicum.

Program outcomes

Students completing the certificate will:

- Perform basic clinical assessments and minor treatments.
- Accurately record patient history and related information.

- Apply current technology associated with health care systems that are the standard of practice in outpatient clinics, health departments, and medical practices.
- Use specific skills related to the scope of practice for a medical assistant such as injections, phlebotomy, and other diagnostic testing, in order to maintain and upgrade the delivery of health care.
- Comply with the professional ethics policies and procedures related to medical and legal matters, including confidentiality, medical records management, release of information, patient rights, workplace rights, and informal consents in health care facilities.

Getting started

This is a three-term program with 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 Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study to meet prerequisite application requirements, which may include one or more of the following:

MTH020	Basic Mathematics (or higher)	4
RD090	College Textbook Reading (or higher)	3

Prior to program entry, students must also pass a criminal background check and drug test (pursuant to OAR 855-010-0045). Clinical sites may also require this.

If you have questions about the requirements, contact the Yamhill Valley Campus in McMinnville, 503.584.7540. Failure to be assessed may delay your entry into program classes.

Medical Assisting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$300; class fees, supplies, criminal background check, drug testing, CPR and first aid certification, scrubs, \$806; universal fee, \$532; immunizations, \$250. Students are responsible for costs related to travel to practicum locations. 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:

Course	Title	Credit Hours
Term 1		
MTH060	Introductory Algebra (or higher).....	4
PSY104	Workplace Psychology	4
WR090	Fundamentals of Writing (or higher)	4
Term 2		
MED124	Medical Assisting, Basic Procedures	4
MED125	Medical Assisting, Advanced Procedures	5
MED130	Medical Assisting Practicum.....	5
MED131	Medical Assisting Seminar	1
Term 3		
MED132	Medical Assisting Clinical Practice	11

Nursing Programs

go.chemeketa.edu/nursing

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 Accreditation Commission for Education in Nursing (ACEN). You may contact ACEN for information about the program's accreditation status. The address for ACEN is 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326. The telephone number is 404.975.5000. The Web address is www.acenursing.org.

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's nursing program, Please contact your program advisor or Advising and Counseling Services for details at 503.399.5120. You should also make early contact with an advisor at the institution to which you plan to transfer.

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 three 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 Ethics for Nurses established by the American Nurses Association)

Students completing the degree 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 Ethics for Nurses 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 2015–2016:

1. BI231 Anatomy and Physiology (completed within seven years). (Four credits.)

2. MTH095 Intermediate Algebra+ (or higher). This requirement cannot be waived by a placement test score. (Four credits.)

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 (five credits); 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 Advising and Counseling Services at 503.399.5120 for details.

In addition, the program has specific entry requirements for 2015–2016 as outlined in the nursing application packet available on Chemeketa's web site, www.chemeketa.edu. Most nursing bound 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 the Dean of Health Sciences at 503.399.5058 or e-mail healthsciences@chemeketa.edu for details if you are considering the Nursing program. Most students spend one or more years completing program entry requirements 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 AAS

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, \$500; class fees, \$600 universal fee, \$742; clinical fee, \$1,184; equipment and supplies, \$464; criminal background check and drug testing fee, \$90; CPR certification, \$80; immunizations and TB screening, \$150; licensure testing fee, \$412. 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	The College Essay+†.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

†The following options may be used to fulfill this Psychology course requirement:

Completed	Course No.	Cr Hrs
Pre-Summer Term 2010	PSY201	3
	and	
Pre-Summer Term 2010	PSY202	3

‡The following options may be used to fulfill this Writing course requirement:

Completed	Course No.	Cr Hrs
Pre-Summer Term 2010	WR121	3
	and	
Pre-Summer Term 2010	WR122 or WR123 or WR227	3

Note: The number of clock hours required for the above courses is higher than the number of credit hours. Details about clock hours for each course 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 Degree

You may earn an associate degree by successfully completing the required 91 credit hours (38 credits during the second year in addition to the 53-credit Practical Nursing program) 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, \$500; class fees, \$737; universal fee, \$532; clinical fee, \$1,275; criminal background check and drug testing fee, \$90; equipment and supplies, \$44; CPR certification, \$80; TB screening, \$50; licensure testing fee, \$412. 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
	Arts and Letters elective.....	3
	or	
	Science/Applied Science elective	3
	or	
	Social Science elective	3
Term 6		
NUR209	Preparation for Entry into Practice	8
	Additional elective**	3

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

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Or CIS120 or higher CIS course with CIS101 as a prerequisite.

**Additional elective: Any course of at least three credits and with a course number of 100 or above chosen from one of the following academic areas: ART, ASL, ATH, BI, CH, CLA, COMM, CIS, CS, ENL, ENG, FA, FR, GE, GEG, GEO, GS, HDF, HE, HOR, HPE, HST, HUM, JNL, JPN, MTH, MUS, NFM, OC, PE, PH, PHL, PS, PSY, RD, REL, RUS, SOC, SPN, SSC, SSS, WR, WS

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

Nursing

Chemeketa is ready to help you plan your program entry requirements 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.

ADN to BSN Options

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's Nursing program, Please contact your program advisor or Advising and Counseling Services, 503.399.5120 for details.

Our program is a strong advocate for a seamless transition in attaining a bachelor of science in Nursing (BSN) and advanced degrees. 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.htmpprograms.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.htmpprograms.com.

Occupational Skills Training Program

go.chemeketa.edu/occupationskill

The Occupational Skills Training (OST) program offers students with a career goal in mind the opportunity to earn college credit for worksite-based training with 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. Program terms are standard length but 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.

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 18 to 44 credits of ST100A-Q 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, are 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-graded process that is monitored according to a personalized outcome assessment and provides workers' compensation at the training site.

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 at 503.399.7398.

Pharmacy Programs

go.chemeketa.edu/pharmacology

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 degree in Pharmacy Management. The Pharmacy Technician certificate program is accredited by the American Society of Health-Systems Pharmacists/Accreditation Council for Pharmacy Education.

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

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.

(If you plan to pursue a degree to become a registered pharmacist, see the Pre-Professional Study section on Page 136 of this catalog.)

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 degree 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 Advising and Counseling Services staff. You may need to complete program entry requirements. 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
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 the Dean of Health Sciences at 503.399.5058 or e-mail healthsciences@chemeketa.edu.

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

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, be fingerprinted, and undergo drug testing (pursuant to OAR 855-010-0045). Practicum sites also require student licensure from the Oregon Board of Pharmacy.

Pharmacy Management AAS

Pharmacy Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$500; class fees, \$128; universal fee, \$812; equipment and supplies, \$22; One-year non-renewable license (includes criminal background check and fingerprinting), \$50; drug testing, \$50; CPR certification, \$80; immunizations, \$150; 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 55 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
MTH095	Intermediate Algebra+ (or higher)	4
PHM101	Introduction to Pharmacy Technology	1
PHM115	Pharmacy Operations/Management	3
PHM120	Pharmacy Operations/Laboratory	3
PHM230	Pharmaceutical Drug Classifications	3
PHM231	Pharmacology 1	5
Term 2		
PHM110	Pharmacy Calculations	3
PHM205	Pharmacy Specialized Care	3
PHM210	Over-the-Counter (OTC) Products.....	2
PHM215	Sterile Compounding/Cytotoxic Medications	3
PHM220	Multicultural Patient Healthcare	2
PHM232	Pharmacology 2	5
Term 3		
PHM130	Pharmacy Information/Law and Ethics	3
PHM150	Pharmacy Technician Practicum	4
PHM151	Pharmacy Technician Seminar	1
PHM160	Hospital/Ambulatory Pharmacy Practicum.....	2
PSY201	Introduction to Psychology: Mind and Body+	4
WR121	The College Essay+.....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Pharmacy Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete second year courses listed below are books, \$1,475; class fees, \$31; universal fee, \$630. 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 required 100 credit hours of the two-year Pharmacy Management program (45 credits during the second year in addition to the 55-credit Pharmacy Technician program) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 4		
BA101	Introduction to Business.....	4
BA251	Office Management	3
CIS125E	Excel-Workbooks.....	4
WR227	Technical Writing	4

Term 5

BA206	Business Management Principles.....	4
BA234	Fundamentals of Supply Chain Management.....	4
COMM218	Interpersonal Communication.....	4
EC201	Introduction to Microeconomics (or higher).....	4

Term 6

BA226	Business Law 1	4
HPE295	Health and Fitness for Life.....	3
PSY237	Life Span Development (or higher)	4
	Arts and Letters elective*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

*Choose courses numbered 200 or above.

Philosophy

For discipline outcomes, see General Education Outcomes—Arts and Letters on Page 48.

Chemeketa offers a number of philosophy courses. Some of these courses can be used to fulfill the Arts and Letters requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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

Refer to the Associate of Arts Oregon Transfer degree information in the Degrees, Diplomas, certificates and Transfer Information section of this catalog beginning on page 51.

Physical Education and Human Performance

For discipline outcomes, see General Education Outcomes beginning on Page 48.

Chemeketa offers a number of physical education courses. Some of these courses can be used to fulfill the requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

Students wishing to explore careers in Health or Physical Education are encouraged to complete a two-year AAOT degree from Chemeketa with a Health Promotion emphasis and continue their studies at a public or private four-year institution. Possible areas of interest include: Athletic Training, Coaching, Exercise Science, Fitness Management, Public Health, Nutrition, Pre-Therapy, Sports Management, and Teaching.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 49.

Chemeketa offers a few physics courses. Some of these courses can be used to fulfill the Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Social Science on Page 48.

Chemeketa offers a number of political science courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes beginning on Page 48.

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)

For discipline outcomes, see General Education Outcomes—Science or Computer Science on Page 49.

Chemeketa offers a number of science courses, including chemistry, biology, and anatomy and physiology. Some of these courses can be used to fulfill the Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

For discipline outcomes, see General Education Outcomes—Social Science on Page 49.

Chemeketa offers a number of psychology courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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.

Sociology

For discipline outcomes, see General Education Outcomes—Social Science on Page 49.

Chemeketa offers a number of sociology courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Art/Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See Pages 51, 52, and 53 for a complete listing.

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 Advising and Counseling 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

go.chemeketa.edu/speechpathology

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.

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 following the directed treatment plan of the supervising SLP while working independently to deliver therapy services to children and adults, taking and tracking data, and various other roles and responsibilities within their scope of practice.

The SLPA program heavily assesses 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 strong 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, most states require you to be licensed as an SLPA. Please contact your state board of examiners for speech-language pathology and audiology for verification of requirements. Chemeketa's SLPA program website has more information on licensing for various states.

Oregon residents may contact the Oregon State Board of Examiners for Speech Pathology and Audiology at 971.673.0220 or through their website at www.oregon.gov/BSPA/index.shtml to review the educational and practicum requirements necessary to be certified as a speech-language pathology assistant.

Program outcomes

Students completing the certificate or degree 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 SLPA application

packet is required to apply for admission to this program. This is a separate step in addition to the placement testing and advising that may be required through Advising and Counseling Services. Applications are available on the program website. Application deadlines are July 15 for fall 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 nine credits is typical and considered part-time. The program usually takes five 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 criminal background check at their own expense in order to be admitted to 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 entry-level courses, including computer literacy, keyboarding, math, reading, and writing. Students are strongly encouraged to meet with the designated advisor for the SLPA program within Advising and Counseling Services to formulate an individualized program of study, which may include the following program entry requirements:

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 SLPA program staff at 503.589.7815.

Speech-Language Pathology Assistant AAS

Speech-Language Pathology Assistant Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,400; universal fee, \$798; 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 required 57 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
MTH070	Elementary Algebra+ (or higher).....	4
PSY101	Psychology of Human Relations+ (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	The College Essay+ (or higher).....	4

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

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, \$1,330; 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 an associate of applied science degree by successfully completing 95 credit hours (57 credits for the certificate, and an additional 38 general education credits) 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
COMM100	Introduction to Communication (or higher).....	4
	Arts and Letters electives.....	12
	Physical Education or Health electives.....	3
	Science/Applied Science electives.....	8
	Social Science electives.....	8

Tourism and Travel Management Programs

See also **Hospitality Management**.

go.chemeketa.edu/tourism

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 focus on the knowledge, skills, and abilities needed to formulate and implement effective business and marketing strategies in a tourism context. Students develop strong leadership and communication skills required to lead destination stakeholder groups and local business leaders. In addition, students 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 an associate of applied science degree or one-year 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.

Program outcomes

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 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 degree 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 program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Destination Marketing and Tourism and Travel Management certificate programs

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Introduction to Microcomputer Applications.....	3
MTH060	Introductory Algebra.....	4
RD115	Academic Thinking and Reading.....	3
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

For the degree program

CA121A	Keyboarding A (if less than 25 wpm).....	1
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 Tourism and Travel program staff at 503.584.7540. Failure to be assessed may delay your entry into program classes.

Tourism and Travel Management AAS

Destination Marketing Certificate of Completion

The Destination Marketing certificate 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 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, \$525; and 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 27 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 AAS

Tourism and Travel Management Certificate of Completion

The Tourism and Travel Management certificate focuses on travel-related careers in airline, tour operations, resort and hotel front-desk, and travel agency employment. The certificate prepares students for direct entry into the workforce and allows them to continue into the Tourism and Travel Management degree program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$729; class fees, \$70; universal fee, \$630. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a certificate of completion by successfully completing these required 45 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	Workplace Psychology+ (or higher)	4
WR121	The College Essay+ (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 42. For subject areas, see page 54.

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, \$1,791; class fees, \$140; and universal fee, \$1,288. 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 Advising and Counseling 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	Workplace Psychology+ (or higher)	4
WR121	The College Essay+ (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		
COMM218	Interpersonal Communication (or higher)	4
HTM208	Attractions and Entertainment	3
HTM226	Event Management	3
HTM236	Tour Operations	3
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	Practicum 1: Hospitality and Tourism Management	4
	or	
HTM290	Operations Management	3
	Arts and Letters elective	3
	or	
	Science/Applied Science elective	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***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

Visual Communications Programs

vc.chemeketa.edu

The Visual Communications program offers two associate of applied science degrees: Graphic Design and Interactive Media. All students share a common course of study during the first two quarters, which includes general education as well as program classes. Before spring term of your first year, you will meet with your assigned faculty advisor to determine your degree path. Students completing the program over a three-year period have the option of earning both degrees. (Check with the Financial Aid Office to see if this will work for you.) During the second year, students take either the required graphic design or interactive media courses and then come together during their final term for the capstone portfolio class and show. Students work closely together in all classes, sharing common studio space and computer lab facilities. Opportunities to work in traditional media alongside new media abound in both required and elective classes.

As part of the program, all students develop skills in graphic design, web design, layout, typography, and digital media, as well as the teamwork, creative problem solving, and life-long learning skills essential to a successful creative career. Students 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 takes a minimum of two full years to complete, and students must begin the program fall term. Some students choose to spread their coursework over three years which allows for more in-depth study and often culminates in the completion of both degrees. Students interested in completing a bachelor's degree have several transfer options and should meet with the program chair before beginning the program. For more information, visit the program web site at vc.chemeketa.edu.

Program outcomes

Students completing the 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

The program has special admission requirements and enrollment limits. Attending a program overview session is strongly recommended in order to learn all current program information and application procedures. Sessions are scheduled throughout the year, and dates are posted on the program web site at vc.chemeketa.edu. You will also find a digital application form on the web site. A portfolio of previous work is part of the application process. Your work can be in any media—not just graphic design.

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 Advising and Counseling staff. You may need to complete program entry requirements. 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
RD115	Academic Thinking and Reading	3
WR115	Introduction to Composition.....	4

The Visual Communications program accepts digital applications for fall entry from April 27 through June 25, 2015. Students may apply for the program while completing the prerequisite courses listed above.

If you have questions about program requirements, contact the Visual Communications program at 503.399.5070 or e-mail vc@chemeketa.edu.

Graphic Design Associate of Applied Science Degree

In addition to tuition, estimated costs for the students who complete the entire Graphic Design program average \$618 per term. Costs include photographic supplies, books, printing, presentation supplies, tracing paper, sketchbooks, and digital media. A portfolio, at a cost of up to \$250, is required for graduation. Class fees for Graphic Design total \$1,200 for required courses, and universal access fees are an additional \$1,498. 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 required 107 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ART115	Basic Design: Black and White	4
ART131	Introduction to Drawing 1	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics.....	4

Term 2		
ART207	Graphic Design Literacy: Decoding Traditions of Visual Culture	4
ART224	Type Design 1	4
VC115	Introduction to Digital Layout	4
VC151	Graphic Production	3
WR121	The College Essay+	4
Term 3		
ART118	Digital Design and Color	4
ART225	Type Design 2	4
ART234	Figure Drawing	4
COMM112	Persuasive Speaking	4
VC224	Layout 1: Page Design	4
Term 4		
ART221	Graphic Design 1: Icons and Symbols	4
ART238	Introduction to Illustration	3
	or	
ART265	Photography 1	4
VC225	Layout 2: Intermediate Page Design	4
VC246	File Prep	3
VC272A	Design Studio	2
Term 5		
ART222	Graphic Design 2: Logo Design	4
ART239	Introduction to Digital Illustration	3
MTH060	Introductory Algebra+ (or higher)	4
VC226	Layout 3: Publication Design	4
VC235	Interface Design	3
Term 6		
ART223	Graphic Design 3: Package Design	4
PSY104	Workplace Psychology+	4
VC283	Business of Graphic Arts	4
VC284	Portfolio	4
VC285A	Design Portfolio Preparation	2

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Graphic Design AAS

Interactive Media Associate of Applied Science Degree Option

Interactive Media students average \$539 per term. Costs include photographic supplies, books, printing, presentation supplies, tracing paper, sketchbooks, and digital media. Class fees for the Interactive Media option total \$1,360 for required courses, and universal access fees are an additional \$1,428. 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 required 102 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ART115	Basic Design: Black and White	4
ART131	Introduction to Drawing 1	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics	4

Term 2		
ART207	Graphic Design Literacy: Decoding Traditions of Visual Culture	4
ART224	Type Design 1	4
VC115	Introduction to Digital Layout	4
VC151	Graphic Production	3
WR121	The College Essay+	4
Term 3		
ART118	Digital Design and Color	4
ART225	Type Design 2	4
VC224	Layout 1: Page Design	4
VC237	Web Design 1	4
Term 4		
ART221	Graphic Design 1: Icons and Symbols	4
CIS121	Introduction to Programming Concepts	4
COMM112	Persuasive Speaking	4
VC238	Web Design 2	4
VC272B	Web Studio	2
Term 5		
CIS133SC	Fundamentals of Scripting Languages	4
PSY104	Workplace Psychology+	4
VC235	Interface Design	3
VC239	Web Design 3	4
Term 6		
MTH060	Introductory Algebra+ (or higher)	4
VC241	Interactive Media	4
VC283	Business of Graphic Arts	4
VC284	Portfolio	4
VC285B	Web Portfolio Preparation	2

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Welding Technology Programs

go.chemeketa.edu/welding

The Welding Technology program offers two options: a three-term Welding certificate program and the six-term Welding Fabrication AAS degree program. The Welding certificate 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 Welding Fabrication degree 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.

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 degree will:

- Perform basic set-ups and operations for manual and computer numeric controlled machining equipment
- Design and carry out planning procedures for welding purposes
- Select and use tools and equipment to manufacture, measure, and inspect parts in a welding environment.

Getting started

The first step to entering these programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Advising and Counseling Services staff. You may need to complete program entry requirements. 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
RD090	College Textbook Reading.....	3

If you have questions about the requirements, contact the Welding department at 503.399.6059 or e-mail mike.pintler@chemeketa.edu.

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available at <http://www.chemeketa.edu/programs/welding/documents/WeldingTechApp2015.pdf>.

Enrollment in these programs is limited, and there is an early deadline for applications. All applicants must attend the Welding Technology Orientation as a requirement for acceptance into the program. We recommend that you contact Advising and Counseling Services at 503.399.5120, or the Welding Technology program chair at 503.399.6059 for details if you are considering the Welding certificate or the Welding Fabrication degree programs.

Welding Fabrication AAS

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, semiautomatic 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, \$756; equipment and supplies, \$750; certification test, \$400 (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 the required 54 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
WLD151	Basic Arc Welding	5
WLD156	Blueprint Reading and Sketching.....	4
WLD161	Basic Gas Metal Arc Welding (MIG)	3
WLD170	Oxyacetylene Processes.....	3
Term 2		
PSY101	Psychology of Human Relations+ (or higher)	4
WLD152	Intermediate Arc Welding	5
WLD157	Introduction to Layout and Fabrication.....	2
WLD162	Intermediate Gas Metal Arc Welding (MIG).....	3
WLD173	Basic Gas Tungsten Arc Welding (TIG).....	4
WR088	Introduction to Technical Writing 1+ (or higher) ...	3
Term 3		
WLD080	Metallurgy for Welders.....	2
WLD153	Advanced Arc Welding	3
WLD163	Advanced Gas Metal Arc Welding (MIG)	3
WLD258	Weld Shop Problems.....	7

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Welding Fabrication Associate of Applied Science Degree

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, \$1,386; equipment and supplies, \$750; certification test, \$400 (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 99 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
WLD151	Basic Arc Welding	5
WLD156	Blueprint Reading and Sketching.....	4
WLD161	Basic Gas Metal Arc Welding (MIG)	3
WLD170	Oxyacetylene Processes.....	3
Term 2		
WLD152	Intermediate Arc Welding	5
WLD157	Introduction to Layout and Fabrication.....	2
WLD162	Intermediate Gas Metal Arc Welding (MIG).....	3
WLD173	Basic Gas Tungsten Arc Welding (TIG).....	4
WR088	Introduction to Technical Writing 1+ (or higher) ...	3
Term 3		
PSY101	Psychology of Human Relations+ (or higher)	4
WLD080	Metallurgy for Welders.....	2
WLD153	Advanced Arc Welding	3
WLD155	Fabrication Procedures.....	3
WLD163	Advanced Gas Metal Arc Welding (MIG)	3
Term 4		
CAM110	Benchwork and Manual Fundamentals	4
CAM111	Industrial Safety Seminar.....	1
CAM130	CNC Machine Setup/Operation.....	4
MTH053	Introduction to Trigonometry with Geometry (or higher).....	3
WLD250	Fabrication Practices 1	3
Term 5		
CAM120	Manual Milling Processes	4
CAM160	Intermediate CNC Mill Operation and Programming.....	4
GS104	General Science: Physics (or higher)	4
WLD251	Fabrication Practices 2	3
WR089	Introduction to Technical Writing 2	3
Term 6		
CAM062	Practical Applications 2	2
CAM121	Manual Lathe Processes	4
WLD258	Weld Shop Problems.....	7
WLD273	Advanced TIG Welding.....	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

Wine Studies Programs

go.chemeketa.edu/ag

Career opportunities in the wine industry are diverse, exciting, and rewarding. Chemeketa's Wine Studies department offers four programs of study to meet the present and future challenges of the wine industry: a certificate in Vineyard Operations, and associate degrees in Vineyard Management, Wine Business, and Winemaking.

The college operates the Northwest Wine Studies Center at Chemeketa Eola, which includes a vineyard planted with cool climate grapes and a commercial-sized winery. Oregon LIVE, a non-profit organization dedicated to sustainable viticulture practices is housed there as well.

For additional information about the Wine Studies programs, contact Joel Keebler at 503.399.6565.

Program outcomes

Students completing the Vineyard Operations 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 Vineyard Management degree 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

Students completing the Wine Business degree will:

- Develop a wine marketing plan for a variety of distribution channels
- Create and present sales presentations
- Develop a brand plan for a winery

Students completing the Winemaking degree 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, recordkeeping, regulatory compliance, and health and safety programs

Getting started

The first step to entering these programs is to take part in an assessment process, which includes taking the college's free placement test and meeting with Advising and Counseling Services. You may need to complete program entry requirements. Then your advisor will help you develop an individualized program of study, which may include one or more of the following:

For the Vineyard Operations program

CA121A	Keyboarding A (if less than 25 wpm).....	1
MTH060	Introductory Algebra.....	4
SSP112	Effective Learning.....	3
	or	
RD090	College Textbook Reading.....	3
WR090	Fundamentals of Writing.....	4

For the Vineyard Management program

CA121A	Keyboarding A (if less than 25 wpm).....	1
MTH060	Introductory Algebra.....	4
SSP112	Effective Learning.....	3
	or	
RD090	College Textbook Reading.....	3
WR090	Fundamentals of Writing.....	4

For the Wine Business program

CA121A	Keyboarding A (if less than 25 wpm).....	1
MTH060	Introductory Algebra.....	4
SSP112	Effective Learning.....	3
	or	
RD115	Academic Thinking and Reading.....	3
WR115	Introduction to Composition.....	4

For the Winemaking program

CA121A	Keyboarding A (if less than 25 wpm).....	1
MTH070	Elementary Algebra.....	4
SSP112	Effective Learning.....	3
	or	
RD115	Academic Thinking and Reading.....	3
WR115	Introduction to Composition.....	4

Note: In some cases, students can enroll in program courses without competing all of the above prerequisite courses. If you have questions about the program requirements, contact the Agricultural Sciences department at 503.399.5139 or e-mail sherrie.magarrell@chemeketa.edu.

Vineyard Management AAS

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 those wanting to establish a vineyard. Students must begin this program winter term.

For more information about this program, contact Jessica Cortell at 503.584.7278.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$1,500; class fees, \$444; universal fee, \$588. 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

PSY101	Psychology of Human Relations (or higher).....	4
VMW115	Spring Vineyard Practices.....	4
WR115	Introduction to Composition+ (or higher).....	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
VMW260	Soil and Plant Nutrition.....	4

Vineyard Management Associate of Applied Science Degree

Rapid growth in the region's wine industry, as well as national demand for qualified vineyard managers, has created a need for a wine industry workforce that is grounded in basic principles and creative in tackling challenges.

Students in this program take classes in chemistry, plant science, and business management, along with a variety of electives, to create a solid educational foundation from which to begin a career in the viticulture industry.

For more information about this program, contact Jessica Cortell at 503.584.7278.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$3,362; class fees, \$743; universal fee, \$1,358. 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 97 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
VMW131	Wine Appreciation (or higher).....	3
Term 2		
CH122	College Chemistry (or higher).....	5
VMW114	Winter Vineyard Practices.....	4
VMW122	Introduction to Winemaking.....	3
WR121	The College Essay+ (or higher).....	4
Term 3		
VMW115	Spring Vineyard Practices.....	4
VMW262	Vineyard Pest Management (IPM).....	3
WR227	Technical Writing (or higher).....	4
	Vineyard Management elective*.....	4
Term 4		
VMW116	Summer Vineyard Practices.....	4
Term 5		
COMM111	Fundamentals of Public Speaking (or higher).....	4
SPN101	First Year Spanish, Term 1 (or higher).....	4
VMW117	Fall Vineyard Practices.....	4
VMW260	Soil and Plant Nutrition.....	4

Term 6

PSY101	Psychology of Human Relations+ (or higher).....	4
VMW105	Spanish in the Vineyard.....	3
	or	
SPN102	First Year Spanish, Term 2 (or higher).....	4
VMW261	Vine Physiology (or higher).....	4
VMW280C	Cooperative Work Experience	3

Term 7

VMW256	Agriculture Business Management.....	3
VMW280C	Cooperative Work Experience	3
	Vineyard Management electives*	8

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Vineyard Management electives (select 12 credit hours):**

BA223	Principles of Marketing (or higher).....	4
BI101	General Biology (or higher).....	4
BI131	Environmental Science 1 (or higher).....	4
CA220	QuickBooks-Computerized Bookkeeping.....	3
CH123	College Chemistry (or higher).....	5
CIS125A	Micro Database Software-Access.....	3
CIS125E	Excel-Workbooks.....	4
CIS178I	Introduction to the Internet/World-Wide Web	3
HOR211	Plant Propagation.....	4
VMW102	Wine Industry Exploration.....	3
VMW132	Wines of the World	3
VMW134	Wines of the Pacific Northwest	3
VMW170	Introduction to Wine Marketing.....	3
VMW198A-D	Independent Studies.....	1-4
VMW222	Science of Winemaking.....	4
VMW232	Sensory Evaluation of Wine Varietals	3
VMW233	Sensory Evaluation of Wine Components.....	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
VMW257	Direct to Consumer Wine Sales Management.....	3
VMW271	Wine Marketing: Brand Development	4
VMW272	Wine Marketing: Understanding the Wine Market Place.....	4
VMW273	Wine Marketing: Assessing and Targeting the Market.....	4
VMW280B-F	Cooperative Work Experience	2-6
WLD151	Basic Arc Welding	5

Wine Business Associate of Applied Science Degree

This program 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 the wine business.

For more information about this program, contact Michael Adams at 503.584.7280.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$3,309; class fees, \$947; universal fee, \$1,344. 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.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business (or higher)	4
CA117	Microsoft Publisher (or higher)	3
	or	
CIS101	Introduction to Microcomputer Applications (or higher).....	3
VMW101	General Viticulture.....	3
VMW170	Introduction to Wine Marketing	3
WR121	The College Essay+ (or higher)	4
Term 2		
COMM111	Fundamentals of Public Speaking	4
	or	
COMM115	Introduction to Intercultural Communication	4
VMW122	Introduction to Winemaking	3
VMW131	Wine Appreciation	3
VMW272	Wine Marketing: Understanding the Wine Market Place.....	4
	Wine Business elective*	3
Term 3		
BA115	Introduction to Accounting (or higher).....	4
VMW274	Global Wine Markets.....	4
WR227	Technical Writing (or higher).....	4
	Wine Business elective*	3
Term 4		
MTH070	Elementary Algebra+ (or higher).....	4
VMW257	Direct to Consumer Wine Sales Management.....	3
VMW271	Wine Marketing: Brand Development	4
VMW280C	Cooperative Work Experience	3
	Wine Business elective*	3
Term 5		
PSY101	Psychology of Human Relations+ (or higher).....	4
VMW132	Wines of the World	3
	or	
VMW134	Wines of the Pacific Northwest	3
VMW258	Wine E-Marketing	4
	Wine Business elective*	3
Term 6		
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 Business elective*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Wine Business electives (select 15 credit hours):**

ART115	Basic Design–Black and White	4
BA209	Introduction to Social Media	4
BA211	Financial Accounting 1	4
BA231	Fundamentals of Transportation and Logistics Management	4
BI131	Environmental Science 1	4
BI230	Introductory Microbiology	4
CA220	QuickBooks-Computerized Bookkeeping	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel-Workbooks	4
CIS178I	Introduction to the Internet/World-Wide Web	3
GS106	General Science: Earth Science	4
HTM103	Service Marketing Fundamentals	3
HTM233	Strategies in Tourism and Destination Marketing	3
JNL225	Advertising and Public Relations	3
SPN101	First Year Spanish, Term 1	4
SPN102	First Year Spanish, Term 2	4
SPN103	First Year Spanish, Term 3	4
VC114	Introduction to Digital Graphics	4
VMW102	Wine Industry Exploration	3
VMW105	Spanish in the Vineyard	3
VMW114	Winter Vineyard Practices	4
VMW115	Spring Vineyard Practices	4
WVM116	Summer Vineyard Practices	4
VMW117	Fall Vineyard Practices	4
VMW132	Wines of the World	3
VMW134	Wines of the Pacific Northwest	3
VMW198A-D	Independent Studies	1–4
VMW222	Science of Winemaking	4
VMW232	Sensory Evaluation of Wine Varietals	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
VMW260	Soil and Plant Nutrition	4
VMW261	Vine Physiology	4
VMW280B-F	Cooperative Work Experience	2–6

Winemaking Associate of Applied Science Degree

The northwest section of Oregon wine country is celebrated for its cool-climate grape varieties, including Pinot Gris, Chardonnay, and especially, Pinot Noir. Though winemaking in Oregon can be traced back to before statehood, the industry has really come into its own over the past 50 years. Presently, there are approximately 14,000 wine-related jobs at Oregon’s 900+ vineyards and 545 wineries, and the industry is growing at a double-digit rate. The need for workers with the specific training and skillset required for successful employment in this field is only expected to grow.

Students in the Winemaking program take classes in chemistry, biology, and viticulture, along with instruction and hands-on training in the basic knowledge and technical skills of wine production.

Our Cooperative Work Experience program will set you up with an internship related to winemaking where you will have the opportunity to work at a site to gain specific skills and strengthen your professional network.

For more information about this program, contact Jessica Sandrock at 503.584.7255.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, \$3,141; class fees, \$1,004; universal fee, \$1,288. 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		
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH095	Intermediate Algebra+ (or higher)	4
	or	
MTH111	College Algebra+ (or higher)	5
VMW101	General Viticulture	3
VMW122	Introduction to Winemaking	3
Term 2		
BI230	Introductory Microbiology (or higher)	4
VMW132	Wines of the World	3
	or	
VMW134	Wines of the Pacific Northwest	3
VMW222	Science of Winemaking	4
WR121	The College Essay+ (or higher)	4
Term 3		
PSY101	Psychology of Human Relations+ (or higher)	4
VMW131	Wine Appreciation	3
VMW170	Introduction to Wine Marketing (or higher)	3
VMW223	Fundamentals of Chemistry for Winemaking	5
	Winemaking elective*	3
Term 4		
COMM111	Fundamentals of Public Speaking (or higher)	4
VMW224	Chemical Analysis of Must and Wine	4
Term 5		
VMW244	Wine Production	6
VMW280F	Cooperative Work Experience	6
	Winemaking elective*	3
Term 6		
VMW232	Sensory Evaluation of Wine Varietals	3
VMW245	Wine Clarification and Stabilization	4
VMW254	Winery Process Planning and Design	3
Term 7		
VMW233	Sensory Evaluation of Wine Components	3
VMW246	Wine Aging, Filtration, and Bottling	4
VMW256	Agriculture Business Management	3
	Winemaking elective*	3

+Meets related instruction requirement, see page 42. For subject areas, see page 54.

***Winemaking electives (select 9 credit hours):**

BA101	Introduction to Business (or higher)	4
BA223	Principles of Marketing.....	4
BI101	General Biology (or higher).....	4
CA220	QuickBooks-Computerized Bookkeeping	3
CH117	Chemistry in the Kitchen	4
CH121	College Chemistry (or higher)	5
CH122	College Chemistry (or higher)	5
CH123	College Chemistry (or higher)	5
CIS125A	Micro Database Software-Access.....	3
CIS125E	Excel-Workbooks.....	4
CIS178I	Introduction to the Internet/World-Wide Web	3
SPN101	First Year Spanish, Term 1	4
SPN102	First Year Spanish, Term 2	4
SPN103	First Year Spanish, Term 3	4
VMW102	Wine Industry	3
VMW105	Spanish in the Vineyard.....	3
VMW114	Winter Vineyard Practices	4
VMW115	Spring Vineyard Practices.....	4
VMW116	Summer Vineyard Practices.....	4
VMW117	Fall Vineyard Practices.....	4
VMW132	Wines of the World	3
VMW134	Wines of the Pacific Northwest	3
VMW198A-D	Independent Studies.....	1-4
VMW232	Sensory Evaluation of Wine Varietals	3
VMW257	Direct to Consumer Wine Sales 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
VMW280B-F	Cooperative Work Experience	2-6

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.

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 AAOT requirements for information literacy and cultural literacy.

For information on when and where classes meet, consult the Schedule of Classes available each term.

How courses are listed

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, AS/OT-CS 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
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
HDF: Human Development and Family Studies
HEM: Hemodialysis Technician
HM: Health Information Management
HOR: Horticulture
HS: Human Services
HTM: Hospitality Management; Tourism and Travel Management
MED: Medical Assisting

MT: Industrial
NET: Network Technology
NUR: Nursing
PHM: Pharmacy Technician/Pharmacy Management
PLP: Portfolio for Prior Learning
RD: Reading
RNW: Renewable Energy Management
SLP: Speech-Language Pathology Assistant
SSP: Study Skills
ST: Occupational Skills Training
VC: Visual Communications
VMW: Vineyard Management/Wine Business/Winemaking
WFB: Welding Fabrication
WLD: Welding
****Many career and technical courses are applicable to the baccalaureate degree. Please contact your school of choice for additional information.**

Lower Division Collegiate Courses

(first two years of the baccalaureate degree)

ART: Art
ASL: American Sign Language
ATH: Anthropology
BA: Business Administration***/*
BI: Biology***
CG: Counseling and Guidance***
CH: Chemistry
CIS: Computer Information Science***/*
CJ: Criminal Justice****
CLA: Chicano/Latino Studies
COMM: Oral Communication/Speech
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: Religious Studies
RUS: Russian
SOC: Sociology
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 Advising and Counseling 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 Information 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 with a grade of C or better; or recommendation of Registered Youth Apprenticeship Committee; or consent 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**

APR105 Electrical Trade Skills Fundamentals

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

Introduces students to work tasks in the electrical construction industry. Covers basic electrical concepts and building basic circuits using the physical components of electrical systems. Focuses on the use of electrical trade tools, equipment, and materials relevant to constructing wiring projects. **Offered as needed**

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; or consent of instructor. **F**

APR153B Electrician Apprenticeship AC/DC Circuits

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

Provides training for the inside wire electrician apprentice. Covers mathematical formulas of equations, basic AC theory, use of test equipment, and applicable National Electrical Code. Includes safety procedures, first aid, and CPR. **Prerequisite:** APR153A with a grade of C or better; or consent of instructor. **W**

APR153C Electrician Apprenticeship Measurements

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

Covers first year, Area II, of the 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 with a grade of C or better; or consent of instructor. **Sp**

APR153D Electrician Apprenticeship Theory

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

Presents training for the inside wire electrical apprentice. 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 the inside wire electrical apprentice. 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. **Prerequisite:** APR155C with a grade of C or better; or consent of instructor. **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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Sp**

APR158A Plumber Apprenticeship Fundamentals**4 class and 2 lab hr/wk, 5 cr.**

Introduces related training for the plumber apprentice 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 the plumber apprentice to study theory and trade practices. Includes mathematics, installation practices, related plumbing code, health and safety, and blueprint reading and sketching. **Prerequisite:** APR158A with a grade of C or better; or consent of instructor. **W**

APR158C Plumber Apprenticeship Pipe Sizing**2 class and 1 lab hr/wk, 3 cr.**

Provides training for the plumber apprentice in the interpretation of plumbing code theory and practice. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR158B with a grade of C or better; 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 the plumber apprentice. Includes installation and related codes, safety and CPR, welding and brazing, and blueprint reading. **Prerequisite:** APR158C with a grade of C or better; or consent of instructor. **F**

APR158E Plumber Apprenticeship Occupancy**4 class and 2 lab hr/wk, 5 cr.**

Continues theory and trade practices for the plumber apprentice. Includes single occupancy installation and code, trade math calculations and related sources, properties of water, pressure and testing, and single occupancy. **Prerequisite:** APR158D with a grade of C or better; 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 the plumber apprentice. Includes installation standards (I.S.) and reviews. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR158E with a grade of C or better; 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 consent 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 submetals, and mechanical codes. **Prerequisite:** APR166A with a grade of C or better; or consent of instructor. **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, sheet metal processes, and introduction to fabrication. **Prerequisite:** APR166B with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **W**

APR166W Welding Processes for Apprenticeship**2 class and 6 lab hr/wk, 4 cr.**

Introduces the fundamentals of shield metal arc welding, oxyacetylene welding and cutting, metallic inert gas (MIG) welding, and arc-air procedures. **Prerequisite:** Enrollment in the Sheet Metal Apprenticeship program; or consent of instructor. **W**

APR253G Electrician Apprenticeship Safety and Code**4 class and 2 lab hr/wk, 5 cr.**

Provides training for the inside wire electrical apprentice. Covers applied electrical theory, residential and commercial wiring practices, busways, motor fundamentals application, and the National Electrical Code. **Prerequisite:** APR153F with a grade of C or better; or consent of instructor. **F**

APR253H Electrician Apprenticeship Motors and Controls**4 class and 2 lab hr/wk, 5 cr.**

Offers training for the inside wire electrical apprentice. Covers motors, generators, controls, and applicable national electrical code. **Prerequisite:** APR253G with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Sp**

APR253J Electrician Apprenticeship Math/Test Equipment**4 class and 2 lab hr/wk, 5 cr.**

Offers related training for the inside wire electrical apprentice. Includes trade history, safety and first aid, blueprint reading, commercial and residential calculations, wiring methods, related theory, and applicable National Electrical Code.

Prerequisite: APR253I with a grade of C or better; or consent of instructor. **F**

APR253K Electrician Apprenticeship Voltage**4 class and 2 lab hr/wk, 5 cr.**

Offers training for the inside wire electrician apprentice. 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 with a grade of C or better; or consent of instructor. **W**

APR253L Electrician Apprenticeship Code and Test Preparation**2 class and 1 lab hr/wk, 3 cr.**

Covers a thorough review of the National Electrical Code books for the inside wire electrician apprentice. Includes theory and application of motor controls, solid state fundamentals, special termination, layout, hazardous locations and transformer locations. **Prerequisite:** APR253K with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; 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 trouble-shooting, plans and specifications, and effective communications and record keeping. Designed for Oregon state recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR255I with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **Sp**

APR258G Plumber Apprenticeship Residential Installation**4 class and 2 lab hr/wk, 5 cr.**

Continues training for the plumber apprentice 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 with a grade of C or better; or consent of instructor. **F**

APR258H Plumber Apprenticeship Commercial Installation**4 class and 2 lab hr/wk, 5 cr.**

Continues related training for the plumber apprentice in trade theory and practices. Includes commercial installation practices, related applied math and science, OSHA, safety, CPR, and Uniform Plumbing Code. **Prerequisite:** APR258G with a grade of C or better; or consent of instructor. **W**

APR258I Plumber Apprenticeship Code**2 class and 1 lab hr/wk, 3 cr.**

Covers theory and trade practices for the plumber apprentice. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR258H with a grade of C or better; or consent of instructor. **Sp**

APR258J Plumber Apprenticeship Industrial Installation**4 class and 2 lab hr/wk, 5 cr.**

Continues training for the plumber apprentice 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 with a grade of C or better; or consent of instructor. **F**

APR258K Plumber Apprenticeship Basic Waste Water Systems**4 class and 2 lab hr/wk, 5 cr.**

Continues training for the plumber apprentice 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 with a grade of C or better; or consent of instructor. **W**

APR258L Plumber Apprenticeship Code and Test Prep**2 class and 1 lab hr/wk, 3 cr.**

Covers theory and trade practices for the plumber apprentice. Focuses on current national plumbing code and Oregon amendments. **Prerequisite:** APR258K with a grade of C or better; or consent of instructor. **Sp**

APR266F Sheet Metal Apprenticeship Applied Math

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 shop production and organization, estimating, field measuring and fitting, louvers, dampers, and access doors. **Prerequisite:** APR166E with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **Sp**

APR266L CAD for Apprenticeship

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

Incorporates hands-on experience with computer-aided drafting (CAD) 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**

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 WR090, or WR115 or higher, with a grade of C or better; or consent of instructor. **F, W, Sp, Su; CL**

ART102 Introduction to Creative Process

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

Introduces concrete idea generation strategies to help students push beyond previous experience and their current skill set to discover novel approaches that encourage lifelong innovation. Stresses the importance of play, flirting with failure, experimentation, teamwork, the environment, and the psychological and emotional components of creativity. **F, W; CL**

ART115 Basic Design: Black and White

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

Introduces the basic principles of design, visual perception, and organization of visual elements in works of art. Explores black and white two-dimensional design. **F, W, Sp, Su**

ART116 Basic Design: Color

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

Introduces the basic principles of design, visual perception, and organization of visual elements in works of art. Focuses on color and two-dimensional design. **F, W, Sp, Su**

ART117 Basic Design: Three Dimensional

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

Introduces the basic principles of design, visual perception, and organization of visual elements in works of art. Focuses on three-dimensional design. **F, W, 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 VC114, both with a grade of C or better; or consent of instructor. **Sp**

ART120 Digital Media Time Design

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

Introduces the concepts of time-design and the practical study of software, tools, techniques, processes, and practices of digital time-based media, including animation, motion graphics, video, photography, and sound design. **Offered as needed**

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, 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 with a grade of C or better; or consent of instructor based on portfolio review. **Offered as needed**

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.

Prerequisite: ART115, ART116, and ART131, each with a grade of C or better; or consent of instructor. **Offered as needed**

ART142 Introduction to Photography

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

Introduces digital photography camera handling and editing, and the printing of digital images. Covers important photographic themes and composition. **Offered as needed**

ART154 Pottery 1: Handbuilding**1 class and 4 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**1 class and 4 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**1 class and 4 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 or ART155, either with a grade of C or better; or consent of instructor based on portfolio review. **Sp, Offered as needed**

ART201 Introduction to the Arts of East Asia: India and Southeast Asia, China, and Japan to 1300**4 class hr/wk, 4 cr.**

Introduces the arts of India and Southeast Asia, China, and Japan. Emphasizes art and architecture as both constructive and reflective of religious, political, and social structures. Traces continuity and change in India: Indus Valley Civilization to the Delhi Sultanate (1206); China: Xia Dynasty to the invasion of the Mongols (1276); and Japan: Jomon Culture to the Kamakura Shogunate (ca. 1300). **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **Offered as needed**

ART202 History of Photography**3 class hr/wk, 3 cr.**

Surveys the history of photography from its beginning to the present. Includes technical, artistic, commercial, and social development of photography as a form of visual communication. **Prerequisite:** WR115 with a grade of C or better, or concurrent enrollment; or consent of instructor. **Offered as needed**

ART203 New Media Art**4 class hr/wk, 4 cr.**

Introduces aesthetic, historical, and critical issues of new media arts and design. Presents aspects of printmaking, photography, graphic design, video, film, performance, installation, and other forms of time-based art in terms of experiencing, appreciating, and understanding its role in our lives. **Prerequisite:** Placement into WR115; or WR090 or higher with a grade of C or better; or consent of instructor. **F, Sp; CL**

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:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **F, W, 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:** Placement into WR121; or WR115 or higher, 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:** Placement into WR121; or WR115 or higher, with a grade of C or better, or consent of instructor. **W, Sp**

ART207 Graphic Design Literacy: Decoding Traditions of Visual Culture**4 class hr/wk, 4 cr.**

Explores the historical and cultural underpinnings of graphic art and design and brings a holistic presentation of graphic design history from the pre-historic to the present. Examines how culturally based assumptions influence perceptions, behaviors, and issues. **W, Su; CL**

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:** ART118 and ART131, both with a grade of C or better; and demonstrated ability to work with vector graphic software; or consent of instructor. **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 in 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. **W**

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 skills development begun in ART131 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 with a grade of C or better; 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 build skills in critically analyzing drawings. **Prerequisite:** ART131 and ART234, both with a grade of C or better; 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 course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

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. **Recommended:** ART115 and ART131, both with a grade of C or better; or consent of instructor. **Offered as needed**

ART239 Introduction to Digital Illustration
2 class and 2 lab hr/wk, 3 cr.
Introduces the basics of digital illustration. **Prerequisite:** VC139 with a grade of C or better; or demonstrated experience in vector graphics software and PhotoShop; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **Offered as needed**

ART243 Advanced Illustration
2 class and 2 lab hr/wk, 3 cr.
Continues professional instruction in concept development, process, and techniques for illustration. Course content may be mastered with traditional media (paint, pencil, ink, etc.) or digital illustration software, or a combination of techniques. Course may be repeated for a total of six credits. **Prerequisite:** ART237, ART238, or ART239; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

ART247 Glass Fusing and Slumping 1
1 class and 4 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. **Recommended:** ART115 and ART116, both with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART247B Glass Fusing and Slumping– Intermediate
1 class and 4 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 completion of at least one of the following studio art classes: ART115, 116, or 117; or ART154; or ART291, 292, or 293; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

ART247C Glass Fusing and Slumping– Advanced
1 class and 4 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 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART253 Ceramic Surface Decoration
1 class and 4 lab hr/wk, 3 cr.
Introduces ceramic surface decoration. Covers a variety of pre-fired processes and techniques used to decorate and embellish clay surfaces. **Prerequisite:** ART156 with a grade of C or better; or consent of instructor. **Offered as needed**

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, or ART156; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Offered as needed**

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:** Previous photography course work; or experience as determined by instructor. **Offered as needed**

ART261 Darkroom and Film 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. **F, W, Sp**

ART265 Photography 1
2 class and 4 lab hr/wk, 4 cr.
Investigates digital photography stressing competent SLR camera handling. Covers exposure control, digital management, image editing, printing, and presentation. Emphasizes important photographic themes, including still life, lighting, and composition. **F, W, Sp, Su, Offered as needed**

ART266 Digital Photography 2
2 class and 4 lab hr/wk, 4 cr.
Introduces studio lighting for portraits and product photography, color correction, and asset management. Includes the role of the photographer in the graphic communications industry. **Prerequisite:** ART265 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

ART267 Portrait Photography
4 class 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:** ART265 with a grade of C or better; or consent of instructor. **Offered as needed**

ART268 Documentary Photography
4 class hr/wk, 4 cr.
Covers photographic concepts and aesthetics of documentary photography. Includes the development of a photo essay: story-telling through an edited series of images with effectively-captioned images; and well-crafted written essays that support and enhance documentary photo projects. **Prerequisite:** ART265 with a grade of C or better; or consent of instructor. **Offered as needed**

ART270 Printmaking: Screen Printing 1
1 class and 4 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:** ART101, ART115, ART131, or ART261; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

ART271 Printmaking: Photo Etching
1 class and 4 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:** ART115, ART131, or ART261; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

ART272 Printmaking: Woodcuts and Linocuts

1 class and 4 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:** ART115, ART131, or ART261; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

ART273 Printmaking: Monoprints

1 class and 4 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. **Prerequisite:** ART115, ART131, or ART261; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

ART274 Printmaking: Screen Printing 2

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

Continues skill building in techniques of silkscreen printing introduced in ART270 including photographic processes.

Prerequisite: ART270 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART275 Printmaking: Screen Printing 3
1 class and 4 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 with a grade of C or better; or consent of instructor. **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. **Recommended:** ART115 and ART116, both with a grade of C or better. **Prerequisite/Corequisite:** ART131 with a grade of C or better; or consent of instructor based upon demonstration of drawing skills. **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: ART281 with a grade of C or better; or consent of instructor based upon demonstration of fundamental painting and drawing skills. **F, W, Sp; CL**

ART281C Painting 3

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

Covers execution of 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 are 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: ART281B with a grade of C or better; or consent of instructor based upon demonstration of intermediate painting and foundation drawing skills. **Offered as needed; CL**

ART282 Landscape Painting

1 class and 4 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. **Recommended:** ART115 and ART116, both with a grade of C or better.

Prerequisite: ART131 with a grade of C or better; or consent of instructor based upon demonstrated skill in drawing. **Offered as needed**

ART284 Watercolor

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

Introduces technical issues in watercolor as a medium and its potential for personal expression. Includes an introduction to watercolor materials and methods, color theory, composition, historical and cultural perspectives, critical analysis, and studio time. **Recommended:** ART115 and ART116, both with a grade of C or better. **Prerequisite:** ART131 with a grade of C or better; or consent of instructor based upon demonstrated skill in drawing. **Offered as needed**

ART285 Intermediate Watercolor

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

Emphasizes further skill building and technical accomplishment in watercolor, leading to paintings executed with a greater degree of intention, gracefulness, and accuracy. Stresses individual expression and thematic development in tandem with control of the medium, critical analysis, and revision. Considers watercolor in the larger context of historical, commercial, and contemporary fine art production.

Prerequisite: ART284 with a grade of C or better; or consent of instructor. **Offered as needed**

ART286 Advanced Watercolor

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

Explores advanced technical, theoretical, and conceptual skill-building approaches. For students with a strong foundation in watercolor painting and with an ability to work independently. Implements research and self-critiquing skills leading to autonomous expression. **Prerequisite:** ART285 with a grade of C or better; or consent of instructor. **Offered as needed**

ART289 The Medium and the Message

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

Contemporary exploration of historic art icons in specific visual media using thematic study and hands-on learning. Media projects will focus on contemporary issues. Historical content reflecting themes across different cultures and time periods will be paired with design challenges in various media. **Offered as needed; CL**

ART291 Beginning Sculpture

1 class and 4 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:** ART117 with a grade of C or better. **F**

ART292 Ceramic Sculpture

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

Introduces the characteristics and potential of clay as a sculptural material. **Recommended:** ART117 with a grade of C or better. **W**

ART293 Wax to Bronze Sculpture

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

Introduces the casting and finishing of bronze sculpture through the lost wax process using ceramic shell technologies.

Recommended: 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 the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, fingerspelling and grammatical non-manual signals. Develops gestural skills as a foundation for ASL enhancement. ASL questions, commands, and other simple sentence structures are introduced to develop rudimentary conversational skills in ASL short signed or video-recorded. Instructor and students use ASL as the primary language of the class. Course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** Internet skills. **F, W, Sp, Su**

ASL112 First Year American Sign Language, Term 2

4 class hr/wk, 4 cr.

Continues development of American Sign Language (ASL) skills with primary focus on refining the use of basic ASL sentence types. Pronominalization, spatial referencing, pluralization, and distributional aspects are introduced. Students will learn routine communicative functions of the language: asking, requesting, providing clarification conversations and share a short signed presentation via video-recorded. Instructor and students use ASL as the primary language of the class. Course has an online component that requires students to use Internet resources for coursework.

Prerequisite: ASL111 with a grade of C or better within the past year; or one year of high school ASL; or consent of instructor.

W, Sp

ASL113 First Year American Sign Language, Term 3

4 class hr/wk, 4 cr.

Continues development of more complex vocabulary, conversational competence and grammatical knowledge with a total immersion approach. Continues expanding dialogue, short stories, narratives both receptive and expressive skills. Instructor and students use ASL as the primary language of the class. Course has an online component that requires students to use Internet resources for coursework.

Prerequisite: ASL112 with a grade of C or better within the past year; or two years of high school ASL; or consent of instructor.

Sp, Su

ASL211 Second Year American Sign Language, Term 1

4 class hr/wk, 4 cr.

Continues development of expressive and receptive skills taken in American Sign Language (ASL) first year sequence. Expands vocabulary, structures, classifiers, and introduces forms of ASL literature. Description of general surroundings, appropriate sequencing, temporal aspects, and conditionals will be covered. Instructor and students use ASL as the primary language of the class. Course has an online component that requires students to use Internet resources for coursework.

Prerequisite: ASL113 with a grade of C or better within the past year; or three years of high school ASL; or consent of instructor. **F**

ASL212 Second Year American Sign Language, Term 2

4 class hr/wk, 4 cr.

Expands on the development of American Sign Language (ASL) vocabulary and grammar, including variety of classifier usages, temporal sequencing, and year-around planning and activities. Introduces basic transcription and analysis of signing from videos as well as interviews and VLOGS. Instructor and students use ASL as the primary language of the class. This course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** ASL211 with a grade of C or better within the past year; or three years of high school ASL; or consent of instructor. **W**

ASL213 Second Year American Sign Language, Term 3

4 class hr/wk, 4 cr.

Builds on the cultural competence and language skills developed in ASL 211 and 212 with increased focus on developing comprehension, multiple character role shifting narratives and daily lives and culture via live-storytelling techniques. Explores concepts of linguistics as it relates to variations in ASL. Instructor and students use ASL as the primary language of the class. This course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** ASL212 with a grade of C or better within the past year; or consent of instructor. **Sp**

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 archeological 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 a methodology for studying human sociocultural 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 cultural 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 Mexican Prehistory

4 class hr/wk, 4 cr.

Explores the development of Mexican culture from the early hunter gatherers of the Archaic to the formation of cultigens, ceramics, settlements, and the establishment of traditional Mesoamerican cultural traits and cosmologies. The innovations of the Pre-classic, Classic, Epi-classic, and Post-classic Periods, and the rise and fall of the Aztec state are examined through archaeological, ethnographic, and ethnohistoric evidence. Major Mexican and Mayan archaeological sites of Mesoamerica are discussed with an emphasis on change through time. **Offered as needed**

ATH214 Contemporary Mexican Culture

4 class hr/wk, 4 cr.

Provides a look at key situations and events throughout the prehistoric and historic periods which significantly shaped or contributed to Mexican culture and ethnic identity. Emphasis is placed on the modern historic era. Explores the development and characteristics of Mexican culture from the early hunter gatherers of the Archaic to the establishment of traditional Mesoamerican cultural traits and cosmologies. Major Mexican and Mayan archaeological sites of Mexico are initially discussed, as well as specific cultural innovations of the Classic, Epi- and Post-classic periods. **Offered as needed**

ATH215 Early Greek/Aegean Archeology

4 class hr/wk, 4 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**

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, fasteners, 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 and AUM158, both with a grade of C or better; or consent of instructor. **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 and AUM158, both with a grade of C or better; or consent of the instructor. **W**

AUM158 Automotive Steering and Suspension

3 class and 6 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 class hr/wk, 2 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 with a grade of C or better; 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

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

Covers theory and application in automotive machining procedures. Includes use of precision measuring tools, torque wrenches, camshaft timing checks, clearance checks, blueprint measurement, and engine assembly and sealing techniques. **Prerequisite:** AUM188 and/or AUM189, either with a grade of C or better; or consent of instructor. **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 Engine Performance 1

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 and testing. **Prerequisite:** AUM161 and AUM176, both with a grade of C or better; or consent of instructor. **F**

AUM267 Engine Performance 2

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 Electronic Vehicle Controls 1

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 Engine Performance 3

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 2

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**

AUM284 Rechargeable Energy Storage Systems

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

Prepares students for future industry and environmental needs by providing advanced training in the operation and testing of RESS (rechargeable energy storage systems) and related sub systems currently used in the automotive industry and a variety of other green industries. **Prerequisite:** AUM282 with a grade of C or better; or consent of instructor. **Offered as needed**

AUM286 Auto Heating and Air Conditioning

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

See also ENT–Entrepreneurship

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. **Recommended:** Placement into RD090 and WR121. **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:** Placement into MTH070 or higher; or completion of MTH060 or higher; and computer literacy; 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:** BA115 or BA211, either with a grade of C or better; and computer literacy; 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. **Recommended:** Placement into RD090 and WR121. **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. **Recommended:** Placement into RD090 and WR121. **F, Sp, Su**

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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

BA209 Introduction to Social Media**4 class hr/wk, 4 cr.**

Introduces the impact and benefits of social media in businesses and organizations. Explores the components and trends of social media. Researches best practices of social networks across organizations. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better; and computer literacy. **F, Sp**

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. **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:** BA211 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

BA213 Managerial Accounting**4 class hr/wk, 4 cr.**

Covers manager's use of accounting. Includes job order and process costing, activity-based costing, cost-volume profit analyses, short-term business decisions, capital investments, time-value-of-money concepts, master budgeting, and flexible budgets and standard costs. **Prerequisite:** BA212 with a grade of C or better; or consent of instructor. **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:** BT210 or WR121, either with a grade of C or better; touch keyboarding at 30 wpm; or consent of instructor. **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.) **F, Sp, Offered as needed**

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. **Su, 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. **Recommended:** Placement into RD090 and WR121; and BA212, CIS125E, and MTH070 or higher. (All recommended 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 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. **Recommended:** Placement into RD090 and WR121; and BA101, BA211, and CIS125E. (All recommended courses must be completed with a grade of C or better.) **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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **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 MTH070 or higher; or completion of MTH060 or higher; and BA211; and computer literacy; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **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, and agency and partnership law. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **W, Sp**

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:** BA115 or BA211, either with a grade of C or better; and computer literacy; or consent of instructor. **F, W, Sp, Su**

BA231 Fundamentals of Transportation and Logistics Management
4 class hr/wk, 4 cr.

Examines logistics as a key part of supply chain management that plans, implements, and controls the flow and storage of goods, services, and related information between points of origin and points of consumption. **Prerequisite:** BA234 and BA236, each with a grade of C or better; or consent of instructor. **F**

BA234 Fundamentals of Supply Chain Management
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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **W**

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). **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **F**

BA236 Contract Management
4 class hr/wk, 4 cr.

Introduces administration and management of contracts developed and established through the 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. **Recommended:** Placement in RD090 and WR121; and BA101 with a grade of C or better. **Sp**

BA237 Financial Records Management
4 class hr/wk, 4 cr.

Covers establishing policies and procedures for maintaining, archiving, and appropriate retention and disposal of financial records for accounting departments in accordance with industry and legal standards and guidelines. Includes proper document handling according to governing bodies and information confidentiality. Includes converting a traditional accounting document management system to an electronic paperless system. **Sp, 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. **Recommended:** College level reading and writing. **Recommended:** Placement into RD090 and WR121, and BA101 with a grade of C or better. **F, 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:** BA211 with a grade of C or better; or consent of instructor. **W, Offered as needed**

BA242 Investments
4 class hr/wk, 4 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:** Placement into RD090 and WR121; and BA212, CIS125E, and MTH070 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **W**

BA250 Small Business and Entrepreneurship
4 class hr/wk, 4 cr.

Covers foundation of entrepreneurship and small business management. Explores challenges facing entrepreneurship and small business today, business management strategies, financing, various forms of business ownership, opportunity assessment, business plan, and feasibility analysis. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **F**

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**

BA256 Income Tax 1**4 class hr/wk, 4 cr.**

Presents the first of two courses in preparing Federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the educational requirements to take the Oregon Licensed Tax Preparer's exam and the IRS Registered Tax Return Preparer exam. **F, W, Su**

BA257 Income Tax 2**4 class hr/wk, 4 cr.**

Presents the second of two courses in preparing Federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the educational requirements to take the Oregon Licensed Tax Preparer's exam and the IRS Registered Tax Return Preparer exam. **F, Sp, 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:** Placement into MTH095 or higher; or BA213; and BA225 or CIS125E; and MTH070 or higher; and SSP125; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Sp**

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:** BA266 with a grade of C or better; or consent of instructor. **F, 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: BA267 with a grade of C or better; or consent of instructor. **W, 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, both with a grade of C or better; or consent of instructor. **Offered as needed**

BA276 Advanced Payroll**4 class hr/wk, 4 cr.**

Expands student's current knowledge of payroll to include multi-state payroll processing, internal controls over payroll systems, global payroll topics, and ethics. **Prerequisite:** BA177; and BA228 or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

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. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better. **F, W, Sp, Su**

BA280B-L Cooperative Work**Experience****See CWE-Cooperative Work Experience.****BA285 Organizational Behavior****4 class hr/wk, 4 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.

Recommended: Placement into RD090 and WR121; and BA101 with a grade of C or better. **F, W, Sp, Su**

BA286 Negotiations**4 class hr/wk, 4 cr.**

Introduces the fundamentals and phases of negotiations, tools to use during negotiations, and ways to find win-win solutions. Covers preparing for negotiations, developing a negotiation style, building trust and relationships, and bargaining strategies. Addresses use of power and persuasion; the role of ethics; and the dynamics of multiple parties, coalitions, and teams in negotiations. Introduces cross-cultural negotiations and use of technology. **Recommended:** Placement into RD090 and WR121; and BA101 and COMM115, both with a grade of C or better. **W**

BA287 Principles of Project Management**4 class hr/wk, 4 cr.**

Explores the various facets of project management. Covers the fundamentals, core concepts, techniques, and skills needed for success. Identifies the management skills needed for projects, goals, activities, resources, team development, risks, budgets, and controls from start to finish. **Recommended:** Placement into RD090 and WR121; BA101; and MTH095 or higher. (All recommended courses must be completed with a grade of C or better.) **F, Sp**

BA288 Principles of Responsible**Management****4 class hr/wk, 4 cr.**

Introduces the three areas of management: sustainability, responsibility, and ethics as they relate to business, government, and society as a whole. Provides an understanding of the triple bottom line (ecologic performance, social performance, and economic performance) utilizing the four functions (planning, organizing, leading, and controlling) of management.

Recommended: Placement into RD090 and WR121; and BA101 with a grade of C or better. **W**

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 1**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 2**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 in summer as needed**

BI103 General Biology 3**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 summer 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 uses, 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 rocky intertidal, estuaries, beaches, coastal waters of the continental shelf (neritic), and other marine environments. Evaluates marine life found along Oregon's coastal environments and the adaptations to a marine existence; particular emphasis on the ecology, physiology, and morphology of marine plants and animals. **Sp, Offered summer as needed**

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 program. **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, 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 with a grade of C or better; or consent of instructor. **W, 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 or BI131, either with a grade of C or better; or equivalent course as determined by instructor; 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/ Corequisite:** CH121 or CH221, either with a grade of C or better; or consent of instructor. **F**

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**

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**

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**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:** CH110; or CH104 and concurrent enrollment in CH105; or CH121 and concurrent enrollment in CH122; or a score of 70% in the Chemistry Proficiency Exam; or one term of accelerated college chemistry within the last seven years equivalent to the courses mentioned above; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Offered summer 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 as a chemistry sequence; or completion of CH110 with a grade of C or better; or consent of instructor. **F, W, Offered 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 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 summer as needed**

BLD**Building Inspection Technology****BLD151 Building Codes 1**
3 class hr/wk, 3 cr.

Studies the scope, meaning, and use of the Model International Residential Code including occupancy classifications, building area, height and location limitations, types of construction, exits, and fire resistive standards. Focuses on one- and two-family structures. **F**

BLD152 Building Codes 2
3 class hr/wk, 3 cr.

Studies the scope, meaning, and use of the Model International Building Code 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 with a grade of C or better; or consent of instructor. **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, both with a grade of C or better; or consent of instructor. **Sp**

BT**Business Technology****BT104 Business English 1**
3 class hr/wk, 3 cr.

Emphasizes basic English skills, including spelling, parts of speech, sentence patterns, and terminal punctuation. Covers common mistakes with nouns, pronouns, and verbs. Applies these skills to writing and speaking in clear, concise sentences. **F, W, Sp**

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. **F, W, Sp**

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. **W, Sp**

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, office careers, and preparation of a job application and basic resume. **F, W, Sp, Su**

BT123 Minute-Taking, Level 1
2 class hr/wk, 2 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. **F, Sp**

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, W, Sp**

BT130 Customer Service
3 class hr/wk, 3 cr.

Covers various aspects of customer service, including using verbal communication, and nonverbal communication, listening, using technology (telephone, voice mail, e-mail, etc.), composing 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 or higher with a grade of C or better; or consent of instructor. **Offered as needed**

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. **Offered as needed**

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. **Offered as needed**

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. **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, CA213, BT116, and BA214; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

BT272 Virtual Office 1

4 class hr/wk, 4 cr.

Introduces the skills needed to become a successful virtual office assistant. Covers the steps to establishing a virtual office assistant business, conducting a market analysis, developing a business plan, determining office requirements, and planning a company website. **Prerequisite:** BA101 with a grade of C or better; or equivalent course as determined by instructor; and touch keyboarding ability of 35 wpm or higher; or consent of instructor. **W**

BT273 Virtual Office 2

4 class hr/wk, 4 cr.

Presents the benefits of and the accounting, legal, and insurance requirements of owning a virtual office assistant business, including licenses and fees. Covers the creation of a marketing plan, advertising documents, an electronic portfolio, customer contracts, and a business website. **Prerequisite:** BA209 and BT272, both with a grade of C or better; or consent of instructor. **Sp**

BT280B-L Cooperative Work Experience

See CWE-Cooperative Work Experience

CA

Computer Applications

CA100 Beginning Computing

3 class hr/wk, 3 cr

Explores beginning computer concepts and uses, the evolution of the computer, and application skills as they apply to the business/office environment. Introduces operating systems/file management, various software and computer devices for business/office use, and accessing information via the Internet/Social Media. **Prerequisite:** Touch keyboarding ability; or consent of instructor. **F, W, Sp**

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; and using Borderart, Wordart, and text wrap. Covers features for improving publications design and creating multiple-page publications. **Offered as needed**

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 and touch keyboarding ability of 25 words per minute; or consent of instructor. **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/Corequisite:** CA117A with a grade of C or better, or equivalent course as determined by instructor; computer literacy and touch keyboarding ability of 25 words per minute; or consent of instructor. **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. **Prerequisite/Corequisite:** 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; or consent of instructor. **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 apps. **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 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/Corequisite:** CA118B1 with a grade of C or better; or consent of instructor. **W, Sp**

CA118B3 Excel Basics 3

1 class hr/wk, 1 cr.

Continues the reinforcement of Excel functions. Includes what-if analysis, macros, PivotTables and PivotCharts, linking, embedding, and exploring MS Excel options. **Prerequisite/Corequisite:** 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:** CIS101; or CA118A and CA118B1; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

CA118C2 Access Basics 2

1 class hr/wk, 1 cr.

Reinforces basic database skills. Introduces multiple table and action queries; forms and subforms; and importing, exporting, and publishing data. **Prerequisite/Corequisite:** CA118C1 with a grade of C or better; or consent of instructor. **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 finding and citing 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; or consent of instructor. **F, W, Sp**

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 and touch keyboarding ability; or consent of instructor. **F, Sp, Su**

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 using Adobe InDesign. **Prerequisite:** CIS101 with a grade of C or better; and touch keyboarding ability of 25 words per minute; or consent of instructor. **F**

CA121 Keyboarding

3 class hr/wk, 3 cr.

Presents basic touch keyboarding skills on standard microcomputer keyboard with numeric keypad. 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, Su**

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, including the numeric keypad. **Prerequisite/Corequisite:** 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; or consent of instructor. **Offered as needed**

CA121C Keyboarding C

1 class hr/wk, 1 cr.

Emphasizes drills to increase speed and accuracy in touch keyboarding, including numeric keypad. Includes accurate proofreading and calculating scores for 3-minute timings. **Prerequisite/Corequisite:** CA121B with a grade of C or better; or touch keyboarding ability of 20 words per minute for two minutes with three or fewer errors; or consent of instructor. **Offered as needed**

CA122 Keyboard Skillbuilding

3 class hr/wk, 3 cr.

Improves alphabetic and numeric keypad keyboarding skill, including proficiency, speed, and accuracy. Serves as preparation for production keyboarding as well as general skill development. Covers basic document formatting. Course may be repeated for a maximum of six (6) credits.

Prerequisite: Touch keyboarding ability of 25 words per minute (30 words per minute recommended); or consent of instructor. **F, W, Sp, Su**

CA122A, B, C Keyboard Skillbuilding A, B, C

1 class hr/wk, 1 cr. each

Improves keyboarding skill, including keyboard (alphabetic and numeric) proficiency, speed, and accuracy. Serves as preparation for production keyboarding as well as general skill development. Course may be repeated for a maximum of two (2) credits. **Prerequisite/Corequisite:** 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. **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 keyboarding ability of 30 words per minute; or consent of instructor. **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 for Windows. **Prerequisite:** CA201D1: Touch keyboarding ability of 35 words per minute; or consent of Instructor. CA201D2: CA201D1 with a grade of C or better; or consent of instructor. CA201D3: CA201D2 with a grade of C or better; or consent of instructor. **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: CA201D with a grade of C or better; and touch keyboarding ability of 35 wpm; or consent of instructor. **F, W, Sp, Su**

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/Corequisite: 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 and touch keyboarding ability of 25 words per minute; or consent of instructor. **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. **W, Sp**

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, CA118A, CA118B1, CA118C1, CA201D, and CIS101; and BT210 or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

CA219 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**

CA220 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, Sp**

CA225 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 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 time. **Prerequisite:** BT105, BT112, CA122, and CA201D; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp**

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**

CAM064 Practical Applications 4
12 lab hr/wk, 4 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. **Offered as needed**

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**

CAM110 Benchwork and 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, 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 on manual machining 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: CAM105 or CAM130, either with a grade of C or better; and print reading experience as confirmed by instructor; or consent of instructor. **W**

CAM120 Manual Milling Processes
2 class and 6 lab hr/wk, 4 cr.

Covers basic milling processes; work-holding methods; cutter identification, selection, and use; speeds and feeds; adapters; and tool holders and application. Includes operation of vertical and horizontal manual milling machines, and applying related operational theory. **Prerequisite:** CAM112 with a grade of C or better; or consent of instructor. **W**

CAM121 Manual Lathe Processes
2 class and 6 lab hr/wk, 4 cr.

Introduces turning operations as related to manual turning machines with emphasis on work holding methods and tool holding/selection methods. Covers related hole-making process, facing, tapping, grooving, and parting. Includes operation of manual lathes, and applying related operational theory. **Prerequisite:** CAM120 with a grade of C or better; 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/Corequisite: CAM121 with a grade of C or better; or consent of instructor. **Sp**

CAM160 Intermediate CNC Mill Operations and Programming**2 class and 6 lab hr/wk, 4 cr.**

Introduces Computer Numerical Control (CNC) programming for milling applications and operations related to manufacturing.

Prerequisite: CAM130 with a grade of C or better; or consent of instructor. **W**

CAM190 Intermediate CNC Lathe Operations and Programming**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 and CAM160, both with a grade of C or better; or consent of instructor. **Sp**

CAM210 Advanced Mill Processes**2 class and 6 lab hr/wk, 4 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. Uses computers and manufacturing equipment to plan for and carry out assigned projects. **Prerequisite:** CAM120 and CAM121, both with a grade of C or better; or consent of instructor. **W**

CAM220 Advanced Lathe Processes**2 class and 6 lab hr/wk, 4 cr.**

Covers advanced lathe theory and operations. Includes lathe settings, boring, single-point, threading, knurling, calculations, controls, taper attachments, follower rests, steady rests, advanced tooling, safety, and work-holding applications. Uses computers and manufacturing equipment to plan for and carry out assigned projects. **Prerequisite:** CAM121 with a grade of C or better; or consent of instructor. **W**

CAM225 Advanced Manual Integration**2 class and 6 lab hr/wk, 4 cr.**

Introduces advanced production and assembly methods in manufacturing of parts. Includes advanced instruction on lathes and milling machines. Covers setup, operation, tool selection and application, proper feed, speeds, and depth of cuts in the production of parts. Uses computers and manufacturing equipment to plan and carry out assigned projects. Includes advanced lathe theory and operations, lathe and mill settings, advanced tooling, safety, and work-holding applications. **Prerequisite:** CAM210 and CAM220, both with a grade of C or better; or consent of instructor. **Sp**

CAM230 CAM Programming 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. (All prerequisite courses must be completed with a grade of C or better.) **F**

CAM235 Advanced CNC Mill Operations and Programming**1 class and 6 lab hr/wk, 3 cr.**

Introduces advanced computer numerical control (CNC) programming and machine setups for milling applications and operations related to CNC machining.

Prerequisite: CAM190 with a grade of C or better; or consent of instructor. **F**

CAM260 CAM Programming 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; and CAM160 or CAM190; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

CAM265 Advanced CNC Lathe Operations and Programming**1 class and 6 lab hr/wk, 3 cr.**

Introduces advanced computer numerical control (CNC) programming and machine setups for turning applications and operations related to CNC machining.

Prerequisite: CAM235 with a grade of C or better; or consent of instructor. **W**

CAM270 Machine Design**1 class and 6 lab hr/wk, 3 cr.**

Covers practical design situations as related to the drafting room and machine shop floor. The design project(s) selected will lead to a comprehensive study of parts relationships, materials application, and product design. Duo-dimensioning (English-metric), geometric tolerancing, bolting and pinning, and welding applications are an integral part of this course. **Prerequisite:** DRF210 with a grade of C or better; or consent of instructor. **W**

CAM275 Tool Design**1 class and 6 lab hr/wk, 3 cr.**

Introduction to principles of tool design. Focuses on gaging, locating, clamping, and fixture design. Incorporates high production techniques and tooling. **Prerequisite:** CAM270 with a grade of C or better; or consent of instructor. **Sp**

CAM280B-L Cooperative Work Experience**See CWE—Cooperative Work Experience****CAM290 Advanced CAD/CAM Integrations****2 class and 6 lab hr/wk, 4 cr.**

Emphasizes production and assembly methods in manufacturing of parts utilizing manual and CNC milling/turning machines. Covers 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 3-D and 4th axis generated parts and transfer of Computer Aided Design (CAD) generated 2-D drawing solids and parametric models to a Computer Aided Manufacturing (CAM) system for manufacturing purposes. **Prerequisite:** CAM160, CAM190, CAM230, CAM235, CAM260, and CAM265; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

CAM295 Introduction to Lean Manufacturing**1 class hr/wk, 1 cr.**

Introduces Lean concepts and practices present in today's highly advanced manufacturing facilities. **Prerequisite:** Second year standing in the CAD/CAM degree program; 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. **Offered as needed**

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**

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, and 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. **Recommended:** Placement into RD090 and WR090, or completion of each with a grade of C or better. **F, W, Sp, Su**

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 Leadership through Mentoring**1 class and 3 lab hr/wk, 2 cr.**

Develops necessary skills to be an effective mentor and community leader. Prepares mentors to serve as role models to encourage and influence the personal, educational, and professional development of at-risk students. Course may be repeated for a maximum of six 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: Native American Culture Through Film**2 class hr/wk, 2 cr.**

Examines critical issues pertaining to Native American tribes and culture throughout North America. Explores and defines key structures, traditions, perspectives, and themes through documentaries and feature films. **Offered as needed**

CG127B Intercultural Leadership: African American Culture Through Film**2 class hr/wk, 2 cr.**

Examines critical issues pertaining to African American culture. Explores and defines key structures, traditions, perspectives, and themes through documentaries and feature films. **Offered as needed**

CG127C Intercultural Leadership: Strong and Progressive Women Through Film**2 class hr/wk, 2 cr.**

Examines critical issues pertaining to strong and progressive women. Explores and defines key structures, traditions, perspectives, and themes through documentaries and feature films. **Offered as needed**

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 Four-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 to the four-year college systems. **F, W**

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:** Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or consent of instructor. **F, W, Offered summer as needed**

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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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:** Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CH114 Chemistry in Art

3 class and 3 lab hr/wk, 4 cr.
Introduction to chemistry designed specifically for the non-science student. Offers a broad, non-quantitative descriptive survey of scientific principles relevant to art and art-related topics such as light, color, pigments, dyes, solubility, acidity, oxidation, and polymers. Emphasizes an interdisciplinary perspective on chemistry. **Offered as needed**

CH115 Chemistry in Society

3 class and 3 lab hr/wk, 4 cr.
Introduces a chemistry survey designed specifically for the non-science student. Emphasizes the history of chemistry, its impact on society, and its connection to other disciplines. Covers topics such as the periodic table of the elements, scientific method, atomic structure and theory, acids and bases, chemical bonding, gases, nomenclature, and chemical reactions. Relates these concepts to history as well as current events. **Offered as needed**

CH116 Chemistry in the Environment

3 class and 3 lab hr/wk, 4 cr.
Introduction to chemistry designed specifically for the non-science student. Covers topics such as energy and chemistry of the earth, air, and water; and relates these topics to current events, pollution, and consumer related concerns. **Offered as needed**

CH117 Chemistry in the Kitchen

3 class and 3 lab hr/wk, 4 cr.
Introduction to chemistry designed specifically for the non-science student. Emphasizes the chemistry of food and cooking. Covers topics such as acids and bases, and organic functional groups: carbohydrates, fats, proteins, and enzymes. Relates these topics to recipes and nutrition. The associated laboratory will provide an opportunity to occasionally create tasty food and put the scientific method to work understanding recipes. **Offered as needed**

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:** Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **W, Sp**

CH123 College Chemistry

3 class, 2 lab and 1 recitation hr/wk, 5 cr.
Introduces 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 with a grade of C or better; or consent of instructor. **Sp, Su**

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:** Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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. **Corequisite/Prerequisite:** CH201 with a grade of C or better.

Prerequisite: Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or consent of instructor. **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:** CH202 with a grade of C or better; or consent of instructor. **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:** Placement into MTH112 or higher; or MTH111 or higher with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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, either with a grade of C or better; or consent of instructor. **Offered as needed**

CH241B Organic Chemistry Lab**3 lab hr/wk, 1 cr.**

Accompanies CH241 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, either with a grade of C or better; or consent of instructor. **Offered as needed**

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 with a grade of C or better; or consent of instructor. **Offered as needed**

CH242B Organic Chemistry Lab**3 lab hr/wk, 1 cr.**

Offers a laboratory course to accompany CH242 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 with a grade of C or better; or consent of instructor. **Offered as needed**

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 with a grade of C or better; or consent of instructor. **Offered as needed**

CH243B Organic Chemistry Lab**3 lab hr/wk, 1 cr.**

Offers a laboratory course to accompany CH243 for students majoring in physical and life sciences. Emphasizes microscale laboratory synthesis, spectroscopy, 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 with a grade of C or better; or consent of instructor. **Offered as needed**

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. **Recommended:** Touch keyboarding ability and placement into RD090 or higher; 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, 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 tags, location-based tracking technologies, and the Digital Millennium Copyright Act. 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, either with a grade of C or better; or equivalent knowledge as determined by instructor; or consent of instructor. **W**

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:** Placement into MTH095 and RD115 or higher; and MTH070 or higher with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

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, Sp**

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/ Corequisite:** CIS120 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

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, either with a grade of C or better; 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, either with a grade of C or better; or consent of instructor. **F, 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. **Recommended:** CIS120 or CIS101, either with a grade of C or better. **F, 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, either with a grade of C or better; 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.) **Sp**

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 web functionality for both client side and server side computers. Covers scripting languages, hosts, and libraries, and Web development tools. **Prerequisite:** CIS121 with a grade of C or better; or consent of instructor. **F, W, Offered as needed**

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; or consent of instructor. **W**

CIS135AE Advanced MS Excel**4 class hr/wk, 4 cr.**

Introduces Microsoft Excel 2010 programming concepts to the non-programmer user who is already proficient with the Excel user interface. Covers recording and editing macros, using variables, and constants, writing subroutines and functions, conditional statements, and various methods of coding loops to repeat actions. Introduces using Visual Basic for Applications script in Microsoft Excel 2010. **Prerequisite:** CIS125E with a grade of C or better; or consent of instructor. **Offered as needed**

CIS140B Microcomputer Operating Systems**3 class hr/wk, 3 cr.**

Studies operating systems currently used on larger microcomputers and small minicomputers. 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, Sp, 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, either with a grade of C or better; or consent of instructor. **F, Sp, Su**

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. **Sp**

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, either with a grade of C or better; 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, either with a grade of C or better; or consent of 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 certification. **Prerequisite:** CIS140B with a grade of C or better; or consent of instructor. **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, and CIS179; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

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**

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 application using a visual Interface Development Environment. **Prerequisite:** CIS133J with a grade of C or better; 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 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 application programmer interface. **Prerequisite:** CIS233J with a grade of C or better; 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. **Prerequisite:** Second-year standing In the Computer Systems and Information Technology program. **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/Corequisite:** CS275 with a grade of C or better; 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 as determined by instructor; 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 Structured Query Language (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 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. **Offered as needed**

CIS276E Oracle Academy 2-PL/SQL**4 class hr/wk, 4 cr.**

Covers database programming with Procedural Language/Structured Query Language (PL/SQL). 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. **Offered as needed**

CIS277A 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 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. **Offered as needed**

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. Uses hands-on software activity related to protocols, switching, routing, and peer-to-peer networking using a VM environment. **Prerequisite:** CIS120 and CIS179, both with a grade of C or better; or consent of instructor. **W**

CIS279 Network Management**4 class hr/wk, 4 cr.**

Focuses on the logical design, construction, operation, maintenance, and management of a network using directory services which includes installation of network server(s); configuring and managing DHCP, DNS, and RRAS; file and print services; system updates; and network security using secure IPSEC protocols. Prepares students to obtain both the Microsoft Certified Technical Specialist and Microsoft Certified Information Technology Professional certifications. **Prerequisite:** CIS179 with a grade of C or better; or consent of instructor. **F**

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 and Microsoft Certified Information Technology Professional certifications. **Prerequisite:** CIS179 and CIS279, both with a grade of C or better; or consent of instructor. **W**

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 e-mail server services, remote access, and domain security. Prepares students to obtain the Microsoft Certified Information Technology Professional certification. **Prerequisite:** CIS288 and CIS279, both with a grade of C or better; and consent of instructor. **Sp**

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, CIS195, or VC237; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

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 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. **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. **Corequisite:** 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. **Corequisite:** 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. **Recommended:** CJ110 or CJ112 unless student already has prior practical experience as a cadet, reserve, or certified law enforcement officer. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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: 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. **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 and security concerns, and current issues. **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. **Corequisite:** 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. **Corequisite:** 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. **Corequisite:** 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. **Recommended:** PSY201 or PSY202, either 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 to recognize and review risk and intervene to prevent 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. **Corequisite:** 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. **Recommended:** CJ110, CJ112, or CJ130. (All recommended courses must be completed with a grade of C or better.) **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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. Addresses errors in thinking which are uniquely present in criminal behavior. Reviews the foundational work of Yochelson and Samenow on the criminal mind. **Corequisite:** 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 learner's application of ethical reasoning in the face of agency corruption, use of force, gender and race discrimination, due process, and duty towards others. **Corequisite:** 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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp, Su**

CJ171 Juvenile Sex Offenders**1 class hr/wk, 1 cr.**

Provides in-depth information related to juvenile sex offenders. Introduces an overview of trends in treatment and covers therapeutic interventions necessary to deter a future of repeated victimization or the development of similar abusive behaviors toward others. Covers professional boundaries when working with juvenile sex offenders. Identifies sex-offending behaviors in juveniles and what to look for. Discusses normal and abnormal adolescent sexual development as it relates to juvenile sex offenders. Identifies paraphilia behaviors as they relate to juvenile sex offenders as described in the Diagnostic and Statistical Manual of Mental Disorders. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

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. **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. **Corequisite:** 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. **Corequisite:** 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, socio-economic 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. **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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

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. **Corequisite:** 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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, W, Sp**

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. **Corequisite:** 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.

Corequisite: CJ110 or CJ112; and CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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.

Corequisite: CJ110 or CJ112; and CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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 technique of interviewing and interrogation, 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.

Corequisite: 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. **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.

Corequisite: 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 and cult murder, grooming techniques, crime scene indicators, and forensic evidence. Introduces notification and training systems, including National Center for Missing and Exploited Children, Amber Alert Plan, FBI's Child Abduction and Serial Murder Investigative Resource Center, Violent Criminal Apprehension Program, K-9 usage, and A Child is Missing plan. Emphasizes the first four hours investigative tasks. **Corequisite:** 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. **Corequisite:** 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. **Corequisite:** 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, both with a grade of C or better; or consent of instructor. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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 and security issues, and public concerns. **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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, Sp**

CJ235 Youth, Drugs, and Corrections
3 class hr/wk, 3 cr.

Studies current trends, programs and philosophies regarding addiction, treatment options, assessment processes, and related behavioral issues for youthful offenders specifically in correctional settings and in post-conviction supervision. **Corequisite:** 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. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Offered as needed**

CJ240 Intake, Assessment, and Information 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, and 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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; 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 and 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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp, Su**

CJ245 Introduction to Public Safety Telecommunications 1
9 lab hr/wk, 3 cr.

Introduces basic public safety and emergency services telecommunication functions, essential duties, responsibilities, training, and career requirements. Covers entry-level customer service, customer tips, confidentiality, how 9-1-1 works, reasons to call 9-1-1, call taker response, liability, and dispatcher actions. Explores cultural differences in communication, and the ability to tactfully and courteously communicate with callers and difficult people in emergency situations, and suicidal and/or altered mental states. Addresses multi-tasking, decision making, and interpersonal relationships with co-workers and supervisors. Introduces students to mutual aid agreements, agency jurisdictions, appropriate agency referrals, and resources. Acquaints students with Willamette Valley Communication Center, Norcom Dispatch, Oregon State Police Dispatch, state 9-1-1 programs, and Oregon Revised Statutes 403.100- 403.380. Covers system failure adjustments and new technological advances, as well as next generation 9-1-1. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F, Sp**

CJ246 Introduction to Public Safety Telecommunications 2
9 lab hr/wk, 3 cr.

Provides specialized hands-on training for individuals wanting to enter the public safety and emergency services telecommunication career field. Introduces computer aided dispatch through console work stations and use of headsets. Covers telephone, computer, radio, and mapping systems of the Dispatch Operations Section. Introduces National Incident Management System. Includes intensive classroom training and skills-based performance on a variety of simulated calls and incident handling scenarios. Contains first aid/CPR/AED certification, and data entry tests with accepted accuracy rates. Includes the use of scenario-based training involving mock police, fire, EMS, and natural disaster responses. Covers team communication, telecommunication ethics, and career survival. Presents both negative and positive examples of dispatch responses and outcomes. Includes a tour of Willamette Valley Communication Center, attendance of Department of Public Safety, Standards and Training Basic Telecommunication graduation ceremony, and completion of a citizen ride-along with either police, fire, or EMS. **Prerequisite:** CJ245 with a grade of C or better; or consent of instructor. **W, 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. **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 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. **Corequisite:** CJ110 or CJ112; and CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Sp**

CJ261 Law Enforcement Related Experience 1**9 lab hr/wk, 3 cr.**

Introduces Law Enforcement Related Experience (L.E.R.E.) sequence of courses required for the AAS degree in Law Enforcement. Focuses on topics, training, and practical application covered in L.E.R.E. coursework that aligns with the Mid-Valley Reserve Academy curriculum and incorporates specific Department of Public Safety Standards and Training (DPSST) content areas. Involves overview of ORS criminal, juvenile, vehicle code, liquor laws and civil liability; ethics; cultural diversity; Oregon Physical Abilities Test preparation and testing; CPR/AED practical training; and HazMat/Blood borne pathogens.

Recommended: CJ110 or CJ112, either with a grade of C or better. **Prerequisite:** Admission restricted to the students chosen through an application process; and CJ103 with a grade of C or better, with criminal history clearance specific to DPSST employment standards. **F**

CJ262 Law Enforcement Related Experience 2**9 lab hr/wk, 3 cr.**

Introduces basic information and practical application of courtroom testimony, Standard Field Sobriety Tests applications, Drug Recognition Expert abilities, intoxilyzer technology, and wet labs. Includes tours of the State of Oregon Department of Public Safety Standards and Training academy and Marion County Correctional Facility complex. **Prerequisite:** CJ261 with a grade of C or better; or consent of instructor. **W**

CJ263 Law Enforcement Related Experience 3**9 lab hr/wk, 3 cr.**

Introduces new skills and practical application of oleoresin-capsicum, baton, tactical knife, taser, and Multiple Interactive Laser Options firearms in order to function safely and effectively as an integral member of a law enforcement team and successfully pass testing for Oregon Physical Abilities Test. Includes information on Oregon Senate Bill 111 (officer-involved shooting(s) protocols), surviving traumatic incidents, family dynamics, death notifications, and use of various recovery services.

Prerequisite: CJ262 with a grade of C or better; or consent of instructor. **Sp**

CJ264 Law Enforcement Related Experience 4**9 lab hr/wk, 3 cr.**

Provides knowledge and skills necessary to investigate motor vehicle crashes, apply correct motor vehicle codes, conduct traffic stops, recognize Emergency Vehicle Operations Course considerations, and liability issues. Also provides skills needed to effectively write police reports, conduct vehicle searches, make high risk stops, and employ K-9s related to vehicle stops and searches. **Prerequisite:** CJ263 with a grade of C or better; or consent of instructor. **F**

CJ265 Law Enforcement Related Experience 5**9 lab hr/wk, 3 cr.**

Covers basic investigations through abbreviated formats on domestic violence, stalking, threat assessments, elder and child abuse, arson and explosives, robbery, burglary, sexual assault, identity theft, cyber-crime, narcotic investigations and informants, emotionally disturbed persons encounters, homicides, scene preservation, the medical examiner role, and sexual asphyxia deaths. Provides students on Oregon Physical Abilities Test probation a final attempt to successfully complete course within required Department of Public Safety Standards and Training time limit for certification as a law enforcement professional in the state of Oregon.

Prerequisite: CJ264 with a grade of C or better; or consent of instructor. **W**

CJ266 Law Enforcement Related Experience 6**9 lab hr/wk, 3 cr.**

Introduces additional skills and knowledge on fitness, nutrition, and stress management specifically related to law enforcement personnel. Includes practical application of building searches, active shooter(s), and consims; and culminates in patrol week. Covers functioning safely and effectively as an integral member of a law enforcement team. Offers preparation on entering the job market and becoming more successful in the competitive entry process. Students completing the Law Enforcement Related Experience (L.E.R.E.) series of courses will participate in L.E.R.E. graduation ceremony held at Brooks Regional Training Center and Brooks' Annual Recruitment Fair involving law enforcement agency stakeholders.

Prerequisite: CJ265 with a grade of C or better; or consent of instructor. **Sp**

CJ267 Introduction to Forensics**3 class hr/wk, 3 cr.**

Presents a survey of basic crime scene-related forensic science and standard evidence collection. Covers physical evidence, glass and soil, hairs, fibers, paint, arson and explosions, serology, blood patterns, DNA, bite marks, fingerprints, automated fingerprint identification system, firearms, tool marks, questioned documents, voice examination, computers, and Internet. Includes emphasis on chain of evidence, and explores future developments in forensic science. Enables limited hands-on application through use of student manual. Introduces a wide variety of reliable evidence retrieval techniques needed for successful prosecution of criminal cases.

Recommended: CJ210 with a grade of C or better. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ268 Law Enforcement Photography**1 class hr/wk, 1 cr.**

Introduces photography specific to the needs of law enforcement personnel for preliminary and follow-up investigations, i.e. crime scenes, injuries, wounds, autopsy, court preparation, and other investigative needs, including intelligence gathering and surveillance. Includes information on extended use of digital features, computer enhancement, and videotaping.

Recommended: CJ210 with a grade of C or better. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

CJ269 Police Ethics and Professional Conduct

3 class hr/wk, 3 cr.

Provides in-depth information related to police ethics, on and off-duty conduct, discipline, and policy formation in varied law enforcement settings. Covers professional expectations as a public servant associated with citizens, media, co-workers, family members, friends, and supervisors. Covers boundaries and accountability involving confidential reliable informants, crime victims, undercover assignments and operations, traffic stops, domestic violence, emotionally disturbed persons, execution of search warrants, evidence collection and handling, reports, and courtroom testimony. Utilizes extensive scenario-based field activities embedded in Law Enforcement Related Experience 1-6 coverage that requires ethical responses and actions for successful task completion. **Recommended:** CJ110 or CJ112, either with a grade of C or better. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ270 Crime Victim Advocacy

1 class hr/wk, 1 cr.

Provides information on the development of local victim advocacy and assistance programs, community resources available to victims including crime victim compensation, the role of the advocate, basic advocacy skills training in the areas of children and juveniles victimization, domestic violence, sexual assault response, and homicide. Includes types of services delivered to victims and commonly used websites that provide current offender status. Covers the impact of crime on victims and their families, safety planning, personal victim story and/or advocate's work experience with specific case(s), or victim panel presentation.

Recommended: CJ200 with a grade of C or better. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ271 Introduction to K-9s

1 class hr/wk, 1 cr.

Provides an introductory orientation to law enforcement K-9s. Covers the history and development of K-9s, common breeds, costs, K-9 anatomy, relationship between dog and handler, location on the force continuum, training and certification, K-9 related policies, specialized equipment, deployment scenarios, injuries, veterinary services, length of career, and retirement. Includes K-9 demonstration.

Recommended: CJ110 or CJ112, either with a grade of C or better. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

CJ272 Recognizing Child Molesters

2 class hr/wk, 2 cr.

Provides specialized training for law enforcement and criminal justice professionals in how to recognize and detect child molesters. Covers the offender's cognitive and behavioral steps, factors in selecting the child victim, and how offenders avoid discovery. Includes basic information on common sexual disorders. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ273 Drugs and Pacific Northwest Street Gangs

3 class hr/wk, 3 cr.

Provides specialized law-enforcement related training and information on commonly used controlled substances found, distributed, and destined for locations in the Pacific Northwest. Includes Schedule I-IV characteristics, drug appearances, associated paraphernalia, "club drugs," and anabolic steroids. Covers surveillance tactics, development of street informants, and use of Confidential Reliable Informants. Includes similar intelligence gathered on Northwest street gangs, growth, recruitment, and geographical movement, related criminal activities, infiltration, involved schools, tagging, associates, tattoo identification, and importance of documentation by both patrol and detectives. Covers networking with local parole and probation, Oregon Department of Justice, county jails, Department of Corrections, other Northwest organizations, and professional contacts.

Recommended for careers in corrections: CJ138 with a grade of C or better.

Corequisite: CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

CJ280B-L Cooperative Work

Experience

See CWE—Cooperative Work Experience

CJ281 Corrections Officer Related Experience 1

9 lab hr/wk, 3 cr.

Introduces Corrections Officer Related Experience sequence of courses. Focuses on topics, training, and practical application of skills including specific Department of Public Safety, Standards and Training content areas. Focuses on Oregon Department of Corrections, Federal Bureau of Prisons, and topics related to local county jails and juvenile facilities. Presents an overview of jobs in corrections; officer mindset; inmate, client, and resident behavior patterns; use of force; ethics; inmate rights; and sanctions. Covers cultural diversity, abbreviated Oregon Physical Abilities Test preparation and completion, defensive tactics, CPR/AED practical training, and HAZMAT/blood-borne pathogens. **Prerequisite:** Admission restricted to students chosen through an application process and who have successfully completed CJ103 including criminal history clearance and drug screening specific to DPSST employment standards for certification of corrections personnel in the state of Oregon. **F, W**

CJ282 Corrections Officer Related Experience 2

9 lab hr/wk, 3 cr.

Introduces basic information on jail environments and procedures, jail structure, intake and booking, inmate risk classification factors, narcotics, inmate supervision, defensive tactics, courtroom testimony, communicable diseases, and tactical communication and safety. Includes continued preparation for the abbreviated Oregon Physical Abilities Test. Introduces Multiple Interactive Laser Option training, and correctional facility tour(s) of the Marion County Correctional Facility complex, including the Parole and Probation office (Community Corrections) and/or Department of Corrections facility and/or Federal Bureau of Prisons in Sheridan, Oregon. **Prerequisite:** CJ281 with a grade of C or better; or consent of instructor. **W**

CJ283 Corrections Officer Related Experience 3

9 lab hr/wk, 3 cr.

Introduces new skills and practical application of both tactical knife and sharp-edged instrument survival. Continues practice in the use of Multiple Interactive Laser Options firearms in order to function safely and effectively as an integral member of a correctional team. Focuses on Oregon prison gangs, use of less lethal force options, jail searches, inmate transports, civil rights investigations, jail services, traumatic incidents in corrections, and Senate Bill 111. **Prerequisite:** CJ282 with a grade of C or better; or consent of instructor. **Sp**

CJ284 Corrections Officer Related Experience 4

9 lab hr/wk, 3 cr.

Covers the role of parole and probation officers as it relates to incarcerated inmates and clients and their transition back into the community. Introduces the Prison Rape Eradication Act, work crew supervision, suicide prevention, and the emotionally disturbed inmate and client population. Also provides initial skills needed to effectively write corrections related reports and documents. **Prerequisite:** CJ283 with a grade of C or better; or consent of instructor. **F**

CJ285 Corrections Officer Related Experience 5

9 lab hr/wk, 3 cr.

Covers misconduct, statutory violations, and revocation of certification specific to adult corrections, parole and probation, and juvenile corrections. Presents an overview of security network and notification systems within county, state, and federal corrections. Reviews differences and similarities between county, state, and federal corrections. Introduces cell extractions, courtroom management, and court services in scenario-based applications. Introduces in-custody death investigations and related facility security protocols, including lock-downs, escape attempts, fleeing inmate, public safety notification, and fugitive apprehension units. **Prerequisite:** CJ284 with a grade of C or better; or consent of instructor. **W**

CJ286 Corrections Officer Related Experience 6

9 lab hr/wk, 3 cr.

Covers fitness, nutrition, and stress management as it relates to corrections and parole and probation personnel and their family members. Provides information on K-9 use in corrections, and Critical Emergency Response Team specialized unit, and riot control. Includes practical application of building searches, confrontational simulations; and culminates in patrol and corrections week. Covers functioning safely and effectively as an integral member of a corrections or parole and probation team. Offers preparation for entering the job market and becoming successful in the competitive entry process. **Prerequisite:** CJ285 with a grade of C or better; or consent of instructor. **Sp**

CJ289 Corrections Ethics and Professional Conduct

3 class hr/wk, 3 cr.

Provides in-depth information related to corrections ethics; on-and-off duty conduct; discipline; and policy formation in city, county, state, and federal correctional institutions. Covers professional expectations associated with citizens, media, co-workers, support staff, administrators, family members, friends, and supervisors. Includes confidentiality issues, inmates' rights, employee accountability, use of force, contraband, gratuities, security measures involving institutional informants, inmates, inmate family members, and visitors. Examines ethics related to duties and responsibilities of a correctional officer, reports, documents, and courtroom testimony. Utilizes Department of Public Safety Standards and Training ethics bulletins, and extensive scenario-based field activities embedded in the Corrections Officer Related Experience courses that require proper ethical responses and actions from a corrections professional. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CLA

Chicano/Latino Studies

CLA201 Introduction to 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**

COMM

Communication

COMM100 Introduction to Communication

4 class hr/wk, 4 cr.

Surveys the areas of communication with emphasis on intrapersonal, interpersonal, group, and mass communication. Explores how factors such as culture, learning, ability, and socioeconomic background can impact communication. **F, W, Sp; CL**

COMM105 Listening and Critical Thinking

4 class hr/wk, 4 cr.

Introduces the concepts and skills involved in listening and critical thinking in a variety of contexts, including work situations, personal and family relationships, and education. Elements covered will include the ethical responsibilities of listening; and the processes of hearing, understanding, remembering, interpreting, evaluating, and responding. Skills used to build and manage relationships will include using critical thinking to analyze specific situations; using persuasion theories to create or critique messages; identifying how values, beliefs, and cultural differences impact the listening and responding process; and encouraging the use of empathy to enhance listening in diverse contexts. **Offered as needed; CL**

COMM111 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.

Recommended: Placement into WR121; or WR115 with a grade of C or better. **F, W, Sp, Su**

COMM112 Persuasive Speaking

4 class hr/wk, 4 cr.

Prepares students to research, organize, and deliver persuasive speeches. Focuses on the ethics of persuasion and shaping speeches for particular audiences. Covers analyzing persuasive speeches, media messages, and other forms of persuasion in arenas including politics, advertising, and business.

Prerequisite: Placement into WR115; or WR090 or higher, with a grade of C or better; or consent of instructor. **F, W, Sp**

COMM115 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.

Recommended: Placement into WR121; or WR115 with a grade of C or better. **F, W, Sp, Su; CL**

COMM130 Business and Professional Speaking

4 class hr/wk, 4 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**

COMM212 Media, Communication, and Society

3 class hr/wk, 3 cr.

Analyzes the social and cultural impact of mass media, including broadcast, print, film, and cyberspace. **Offered as needed**

COMM218 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. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **F, W, Sp, Su**

COMM219 Team Communication and Leadership

4 class hr/wk, 4 cr.

Emphasizes communication skills to participate in team settings. Covers the characteristics of small groups, leadership and conflict management skills. **F, Sp; CL**

COMM227 Nonverbal Communication

4 class hr/wk, 4 cr.

Examines nonverbal behaviors of the self and others to become more effective communicators. Presents nonverbal theories including influential factors such as voice, body movement, eye behavior, touch, space, time, and smell, as well as the impact of physical and social environments. Investigates the implications of nonverbal skills in a variety of settings, including relationships, family, school, and workplace. Explores the influence of cultural differences on nonverbal behavior. **Offered as needed; CL**

COMM237 Communication and Gender

4 class hr/wk, 4 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**

COMM260 Conflict and Communication

4 class hr/wk, 4 cr.

Emphasizes understanding and appreciation of the role communication plays in conflict settings. Covers investigation and application of current research in conflict theory including issues that stretch from the interpersonal to the global (e.g. peace, nonviolent communication, restorative justice). Provides practice in the appropriateness and application of the major types of conflict management in different settings such as academic, business, media, global, intercultural, and interpersonal contexts. **Offered as needed; CL**

COMM285 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.

Recommended: SSP125 with a grade of C or better. **F, W, Sp, Su**

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. Surveys 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: Placement into MTH112 or higher; or MTH111 or higher, with a grade of C or better (or concurrent enrollment); or consent of instructor. **F, Sp**

CS161 Computer Science 1

4 class hr/wk, 4 cr.

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:** Placement into MTH112 or higher; or MTH111 or higher; and CS160 or concurrent enrollment in EGR201; 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, recursive algorithms, algorithm complexity, and an introduction to abstract data types. Emphasizes experiences with professional engineering practices.

Prerequisite: CS161 with a grade of C or better; or consent of instructor. **W, Sp**

CS260 Computer Science 3: Data Structures

4 class hr/wk, 4 cr.

Covers general-purpose data structures and algorithms, their complexity analysis, software engineering of these structures, and the application of these engineering concepts to real world problems. Includes managing complexity, complexity analysis, stacks, queues, lists, trees, heaps, hash tables, sets, maps, and graphs.

Prerequisite: CS162 and MTH231, both with a grade of C or better; or consent of instructor. **Sp**

CS271 Principles of Computer Organization

4 class hr/wk, 4 cr.

Introduces the conceptual organization of digital computers. Covers the digital systems' history, number systems, data encoding, digital logic fundamentals, processor design, instruction execution and addressing. Presents an introduction to assembly language programming and the assembly process, RISC machines, and parallel architectures. **Prerequisite:** CS161 with a grade of C or better; or consent of instructor. **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, either with a grade of C or better; or consent of the instructor. **F**

Cultural Studies

See **CLA–Chicano/Latino Studies**, and **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. **Offered as needed**

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. **Corequisite:** 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:** CVL 143 with a grade of C or better; and concurrent enrollment in MTH082 or higher; or consent of instructor. **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 with a grade of C or better; and concurrent enrollment in MTH082 or higher, and CVL161B; or consent of instructor. **Offered as needed**

Offered as needed

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 with a grade of C or better; and concurrent enrollment in CVL161A; or consent of instructor. **Offered as needed**

CVL162A Plane Surveying 2–Lecture

2 class hr/wk, 2 cr.

Continues Plane Surveying 1. 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. **Offered as needed**

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. **Offered as needed**

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**

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. (All prerequisite courses must be completed with a grade of C or better.) **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 with a grade of C or better; 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. (All prerequisite courses must be completed with a grade of C or better.) **W**

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, both with a grade of C or better; and concurrent enrollment in CVL240B; or consent of instructor. **Offered as needed**

Prerequisite: CVL162A and CVL162B, both with a grade of C or better; 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, both with a grade of C or better; 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 with a grade of C or better; and 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, CVL241, and WR121; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. (All prerequisite courses must be completed with a grade of C or better.) **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, both with a grade of C or better; 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, CVL162B, and DRF245; and concurrent enrollment in CVL263B; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, CVL162B, and DRF245; and concurrent enrollment in CVL263A; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **F, W, Sp, Su**

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. **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. **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. **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. **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, prevention products and their uses, nutritional influences, 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. Two patient full-mouth radiographic series are 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. **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 radiographic images 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 one 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, extra-oral films, and digital radiography. 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 with a grade of C or better; 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.**

A drafting project or problem is identified and a contract is written jointly by the student and instructor. The contract sets forth a proposal to complete the project or solve the problem. It identifies objectives, procedures and equipment needed together with key checkpoints for student-instructor conferences. This course is intended for, but not limited to, second-year drafting or mechanical design students as an elective. Potential areas of consideration for this course include: community development projects, computer programming and applications, machine design, mapping, civil engineering drafting, or any drafting-related field. Consideration and encouragement will be given for an interdisciplinary team of students working on a common problem. **Prerequisite:** Second-year standing and/or 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 with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Sp**

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 with a grade of C or better; 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 and Global Positioning Systems.

Prerequisite: DRF131 with a grade of C or better; 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, both with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **W**

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 with a grade of C or better; or consent of instructor. **W, Sp**

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 with a grade of C or better; 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 3-D computer images, incorporating various materials and lights. **Prerequisite:** DRF132 with a grade of C or better; 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 with a grade of C or better; 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:** DRF245 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 with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Offered as needed**

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 with a grade of C or better; 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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Sp**

DRF280B-L Cooperative Work

Experience

See CWE–Cooperative Work Experience

ECE

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. **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 or higher and EC202, both with a grade of C or better; or consent of instructor. **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 or higher; with a grade of C or better; or consent of instructor. **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.

Offered as needed

ECE

Early Childhood Education

See also ED–Education, and 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. **Corequisite:** Any course with an ECE prefix. 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 a survey of professional opportunities within the field and observation in a variety of childcare settings including early childhood education and early childhood special education and venues. **F, Offered as needed**

ECE151 Observing and Guiding Behavior

3 class hr/wk, 3 cr.

Emphasizes the role of the teacher and techniques of individual and group guidance. Approaches guidance from a developmental constructivist perspective. Prepares students to customize guidance strategies through the use of objective observations. Discusses long-term guidance goals that support typically and atypically developing children ages 1-6. Reflects on how teacher/child and family relationships influence guidance. Emphasizes how routines, schedules, and the physical environment support guidance.

Prerequisite: Placement into RD090 and WR090; and ECE150 with a grade of C or better; or consent of instructor. **W, Offered as needed**

ECE152 Creative Activities

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

Focuses on understanding and implementing an inclusive developmental approach to creative activities for young children. Involves hands-on experience with a wide variety of activities as well as discussion on how to present and evaluate activities. Includes observing young children and their interactions during creative activities, understanding and making proper accommodations and support, use of natural materials, cooking experiences, art display, and sewing. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **W, Offered as needed**

ECE153 Music and Movement for Young Children

3 class hr/wk, 3 cr.

Presents the value of music in the preschool setting, the role of the teacher, environments that support music and movement experiences, basic music terminology and concepts, and the use of spontaneous and planned activities for young children. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **Sp, Offered as needed**

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 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. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **Sp**

ECE155 Child Nutrition, Health, and Safety**3 class hr/wk, 3 cr.**

Prepares early childhood educators to meet the nutritional and health and safety needs of young children of all abilities. Considers the developmental abilities and culture of all children and families. Uses a constructivist philosophy to instruct students to implement developmentally appropriate food experiences such as snack and meal times in inclusive early childhood settings or home environments. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **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 with a grade of C or better; 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 with a grade of C or better; 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:** HDF225, HDF247, HDF249, ECE151, and ECE162; and consent of ECE faculty. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

ECE251 Environments for Young Children**3 class hr/wk, 3 cr.**

Focuses on planning, implementing, and evaluating environments for children from infancy to preschool age including accommodations or modifications to support a variety of children's abilities. Includes using observation and facilitating 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; placement into RD090 and WR090; or consent of instructor. **F, Offered as needed**

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:** ECE163 with a grade of C or better; 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:** ECE261 with a grade of C or better; 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, 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; placement into RD090 and WR090; or consent of instructor. **Sp**

ED**Education****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**

ED105 Teacher Cadets**1 class and 2 lab hr/wk, 2 cr.**

Covers practical application of theory and fundamental concepts of preschool, elementary, and secondary education, including history, development, and organization. **Offered as needed**

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 with a grade of C or better; or consent of instructor. **W, Sp**

ED169 Overview of Inclusion in the Classroom of Students with Special Needs**3 class hr/wk, 3 cr.**

Introduces the concept of inclusion of children with disabilities in the classroom. Discusses and identifies historical, philosophical, and legal issues related to special education. Includes specific study of the disability categories covered under IDEA (Individuals with Disabilities Education Act) with special attention to the diverse population of today's schools. **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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ED235 Technology for Educators**3 class hr/wk, 3 cr.**

Introduces current advanced technology available in education. Emphasizes the tools to evaluate, select and implement appropriate technology in the instructional setting. **Offered as needed**

ED258 Introduction to Multicultural Education and English Language Learners

3 class hr/wk, 3 cr.

Explores the history and philosophy of multicultural education. Examines second language development, including an overview of culturally and linguistically appropriate teaching strategies. Discusses the value of integrating families and communities in multicultural education. **F, W, Su**

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, both with a grade of C or better; 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. (All prerequisite courses must be completed with a grade of C or better.) **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. (All prerequisite courses must be completed with a grade of C or better.) **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, both with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **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 parametric modeling software. **Prerequisite:** DRF130 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Corequisite:** MTH111 or MTH081. **F, Offered as needed**

ELT132 Electronic Concepts 2

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

Covers atomic and alternating current electrical theory applicable to resistors, capacitors, and inductors. Stresses reactive circuit theorems used for circuit analysis. **Prerequisite:** ELT131 with a grade of C or better; or consent of instructor. **Corequisite:** MTH112 or MTH082. **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. Promotes and supports sustainable and green technologies. **Corequisite:** 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. 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. 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. 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. Promotes and supports sustainable and green technologies. **Prerequisite:** ELT253 with a grade of C or better; and DOS experience; and a high level programming language; or consent of instructor. **Offered as needed**

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. 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. 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. Promotes and supports sustainable and green technologies. **Prerequisite/Corequisite:**

ELT281 with a grade of C or better; 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 course 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. 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. 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, Part 1

4 class and 3 lab hr/wk, 5 cr.

Provides instruction at the level of Emergency Medical Technician, a vital link in the chain of the health care system. Includes all skills necessary to provide emergency medical care as outlined by scope of practice established by the Oregon Medical Board. 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 courses.

Prerequisite: Placement into WR080 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. Must meet standards as set by the Oregon State EMS Office for certification which includes health, driving, immunization and criminal record check. **F, W, Su, Offered as needed**

EMT152B Emergency Medical Technician, Part 2

4 class and 3 lab hr/wk, 5 cr.

Continues instruction at the level of Emergency Medical Technician, a vital link in the chain of the health care system. Includes all skills necessary 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 courses. **Prerequisite:** EMT151 with a grade of C or better. Must meet standards as set by the Oregon State EMS Office for licensure which includes health, driving, immunization, and criminal record check.

Offered as needed

EMT163 Advanced Emergency Medical Technician, Part 1

3 class and 2 lab hr/wk, 4 cr.

Covers AEMT emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (ECG) 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 ambulance. 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 AEMT sequence. **Prerequisite:** Placement into WR080 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 license, verification of EMT skills, and 80% or better on pre-test. **Offered as needed**

EMT164 Advanced Emergency Medical Technician, Part 2

3 class and 2 lab hr/wk, 4 cr.

Covers AEMT emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (ECG) 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 ambulance. Students successfully completing this course will be recommended to the Oregon State EMS Office for the licensure process. Failure of this course will require retaking the full AEMT sequence. **Prerequisite:** EMT163 with a grade of C or better. **Offered as needed**

EMT167A Oregon Emergency Medical Technician Intermediate, Part 1
4 class and 3 lab hr/wk, 5 cr.

Covers Oregon 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 licensure process. Failure of this course will require retaking the full Oregon EMT-Intermediate sequence. **Prerequisite:** Placement into WR080 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 licensure exams. Current Oregon EMT license, letter of endorsement from medical advisor, verification of EMT skills, and 80% or better on pre-test. **Offered as needed**

EMT167B Oregon Emergency Medical Technician Intermediate, Part 2
4 class and 3 lab hr/wk, 5 cr.

Covers Oregon 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 licensure process. Failure of this course will require retaking the full Oregon 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. **Prerequisite:** Must possess valid Oregon Driver's License. **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 Paramedic, Part 1
12 class and 6 lab hr/wk, 14 cr.

Offers first term of a three-term sequence, 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 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 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**

English

ENG100 Literature Appreciation**4 class hr/wk, 4 cr.**

Introduction to literature, comprising appreciation and comprehension of notable works in short fiction, novels, drama, creative non-fiction, film, and poetry, with emphasis on understanding the relationship between form and content and on formulating criteria for artistic judgment. Explores connections between literature, our culture, ourselves, and the human condition. At least three genres will be covered in each course. **Offered as needed**

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, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Prerequisites:** Placement into WR115 and RD090; or WR090, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Prerequisites:** Placement into WR115 and RD090; or WR090, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 or higher, with a grade of C or better; or consent of instructor. **W**

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 or higher, with a grade of C or better; or consent of instructor. **Sp**

ENG204 Survey of English Literature: Beowulf to Milton**4 class hr/wk, 4 cr.**

Surveys selected representative English literature from its beginnings in the Anglo-Saxon period through Milton (c. 1660). 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 and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; CL**

ENG205 Survey of English Literature: Restoration to Romantics**4 class hr/wk, 4 cr.**

Surveys selected representative readings of English literature from the mid-17th century to 1832. 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 and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; CL**

ENG206 Survey of English Literature: Victorian to Postcolonial**4 class hr/wk, 4 cr.**

Surveys selected, representative readings of English literature from 1832 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 and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed; CL**

ENG216 Comic Books as Literature**4 class hr/wk, 4 cr.**

Explores the graphic novel/comic book as a literary art form by examining and analyzing literary techniques, cultural context, history, and the development of the genre. Encourages students to use contemporary and traditional forms of literary analysis and critical thinking to better understand the text and its influence on pop culture. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **Offered as needed**

ENG220 Introduction to Literature for Children and Young Adults**4 class hr/wk, 4 cr.**

Introduces themes and conventions of literature written for children and adolescents from at least three different genres, such as picture books, folktales, fairytales, fables, comics, short stories, novels, poetry, film, and drama. Examines the gendered, political, cultural, and ideological dimensions of literature written for children. Engages discussion as to influences that determine what's appropriate and inappropriate for children and youth to read. Course may be organized historically, chronologically, thematically, culturally, or ideologically. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; CL**

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. **Prerequisite:** Placement into WR121; or WR115 or higher, 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 or higher, 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 or higher, 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 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; 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 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; 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 or higher, 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.**

Surveys a wide spectrum of Indian verbal arts from oral narratives to contemporary fiction, poetry, to cinema. Explores the ways Native writers from many distinct cultures engage thematic issues such as identity, stereotypes, tribal sovereignty or cultural continuity. Also looks at ways writers incorporate humor, ceremony, and traditional narratives into the structure of their contemporary works. Improves critical reading, thinking, and writing skills while introducing academic literary study. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **Offered as needed; 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. **Offered as needed; 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 or higher, with a grade of C or better; or consent of instructor. **Offered as needed; 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 or higher, with a grade of C or better; or consent of instructor. **Offered as needed**

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:** Completion of XELL0722X and XELL0722Y; and a score of 34 or higher on the CELSA; or placement by an ESL 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; and successful completion of XELL0722L; or placement by ESL program specialists. **F, W, Sp**

ENL031M Intermediate Reading C1
4 class hr/wk, 4 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:** Placement according to established criteria; or XELL0722R or XELL0722Z; or consent of instructor. **F, W, Sp**

ENL031N Intermediate Writing C1
4 class hr/wk, 4 cr.

Introduces simple enumerative paragraphs using transition words, correct spelling, and punctuation. Introduces writing as a multi-step process. Designed for intermediate non-native speakers of English. **Prerequisite:** Placement according to established criteria; or XELL0722X or XELL0722Z; or consent of instructor. **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:** ENL022S, ENL022L, ENL022R and ENL022W; and placement by ESOL program specialist; or consent of the instructor. (All prerequisite courses must be completed with a grade of C or better.) **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; and successful completion of XELL0722R; or placement by ESL 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 ESL 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 ESL 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:** ENL31G with a grade of C or better; 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; and ENL031L with a grade of C or better; or placement by ESL program specialists. **F, W, Sp**

ENL032M Intermediate Reading
4 class hr/wk, 4 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 high intermediate non-native speakers of English. **Prerequisite:** Placement according to established criteria; or ENL031M or ENL031R, either with a grade of C or better; or XELL0731M or XELL0731R; or consent of instructor. **F, W, Sp**

ENL032N Intermediate Writing
4 class hr/wk, 4 cr.

Introduces multi-step academic writing with a focus on simple enumerative essays. Continues to develop proficiency with English writing conventions. Designed for high intermediate non-native speakers of English. **Prerequisite:** Placement according to established criteria; or ENL031N or ENL031W, either with a grade of C or better; or XELL0731N or XELL0731W; or consent of instructor. **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:** ENL031P with a grade of C or better; 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; and ENL031R with a grade of C or better; or placement by ESL 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; and ENL031S with a grade of C or better; or placement by ESL program specialists. **Offered as needed**

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; and ENL031W with a grade of C or better; 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; and ENL032L and ENL032S, both with a grade of C or better; 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:** ENL032L, ENL032R, ENL032S, and ENL032W; or ENL032G; and a score of 47 or higher on the CELSA; or placement by an ESOL specialist; or consent of instructor. (All prerequisite courses must be completed with a score of C or better.) **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; and successful completion of XELL0732L; or placement by ESOL program specialists. **Offered as needed.**

ENL041M Introduction to College Reading
4 class hr/wk, 4 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 low advanced, non-native speakers of English. **Prerequisite:** Placement according to established criteria; or ENL 032M or ENL 032R, either with a grade of C or better; or XELL0732M or XELL 0732R; or consent of instructor. **F, W, Sp**

ENL041P Introduction to English Pronunciation 1
3 class hr/wk, 3 cr.

Develops principles of 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:** ENL032S, ENL032L, ENL032R and ENL032W (or corresponding non-credit courses); and placement by ESOL program specialist; or consent of the instructor. (All prerequisite credit courses must be completed with a grade of C or better.) **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; and 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.**

ENL041V Academic Vocabulary Building**3 class hr/wk, 3 cr.**

Focuses on the Academic Word List the vocabulary students need to be successful in college. Designed for high intermediate to advanced ESOL students. **Prerequisite:** ENL041R or ENL041G, either with a grade of C or better; or XELL0741R or XELL0741G; or consent of instructor. **F, W, Sp**

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; and 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; and a score of 50 or above on the CELSA; and ENL031G with a grade of C or better; or placement by an ESOL specialist; or consent of instructor. **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:** ENL041P with a grade of C or better; or successful completion of 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; and ENL041R with a grade of C or better; 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; and ENL041W with a grade of C or better; or placement by ESOL program specialists. **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; and ENL040C, ENL041L, ENL041S, ENL042L or ENL042S; or placement by ESOL program specialist. (All prerequisite courses must be completed with a grade of C or better.)

Offered as needed.

ENL151A Jumpstart Your Academic Language Skills**3 class hr/wk, 3 cr.**

Develops the 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; ENL040, ENL041 or ENL042; or placement by ESOL program specialist. (All prerequisite courses must be completed with a grade of C or better.) **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: ENL042L with a grade of C or better; or placement by ESOL program specialists. **Offered as needed.**

ENL151P Advanced English Pronunciation 1**3 class hr/wk, 3 cr.**

Focuses on development of the principles of American English pronunciation including correct production of English vowels and consonants, word stress, and rhythm.

Designed non-native speakers of English at the advanced level. **Prerequisite:** ENL042P with a grade of C or better; 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:** ENL042R with a grade of C or better; 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:** ENL042W with a grade of C or better; or placement by an 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 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:** ENL151P with a grade of C or better; 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 non-native speakers of English at the advanced level. **Prerequisite:** ENL151R with a grade of C or better; 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:** ENL151W with a grade of C or better; or placement by an ESOL program specialist. **Offered as needed**

ENT

Entrepreneurship

See also BA–Business Administration

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.

Begins the process of researching, developing, and writing a detailed business plan for a specific business. Develops the foundational product and service, plus management and organization sections of the business plan. First of a three-course sequence. **F, W, Sp, Su**

ENT150B Planning Your Business 2
3 class hr/wk, 3 cr.

Continues the research, development, and documentation of the detailed business plan started in ENT150A. Focuses on elements of marketing, including industry analysis, target market identification, market penetration, and product and service pricing. **Prerequisite:** ENT150A with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ENT150C Planning Your Business 3
3 class hr/wk, 3 cr.

Concludes the research, development, and documentation of the business plan. Focuses on financial management, including revenue, expenses, inventory, equity and debt, and financing through the use of integrated spreadsheets. **Prerequisite:** ENT150B with a grade of C or better; and basic mastery of Excel; or consent of instructor. **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**

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 WR115; or WR090 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 WR115; or WR090 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 WR115; or WR090 with a grade of C or better; or consent of instructor. **Sp**

FE

Field Experiences

FE120 Career Jump Start
3 class hr/wk, 3 cr.

Introduces the realities of the world of work for undecided students and students in any chosen academic program. Emphasizes gaining an understanding of careers and internships; and creating an effective educational and career plan through graduation, making the most of college education to prepare for future employment. **F, W, Sp**

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

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. **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. **Offered as needed**

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:** FLM266 with a grade of C or better; or consent of instructor. **Offered as needed**

FLM268 Independent Filmmaking

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

Allows students with skills acquired either through personal experience or in previous course work to work on an independent film. **Prerequisite:** FLM265 or FLM266, either with a grade of C or better; or consent of instructor. **Offered as needed**

Food Service

See HTM—Hospitality Management

Foods and Nutrition

See NFM—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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) 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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed in a grade of C or better.) 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. **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 NFPA Fire Apparatus Driver/Operator certification and driving portions of NFPA Apparatus Equipped with Fire Pump. **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 NFPA Fire Apparatus Driver/Operator and NFPA Apparatus Equipped with Fire Pump certification. Students completing the course will take written and task performance tests for NFPA Fire Apparatus Driver/Operator. **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 NFPA Apparatus Equipped with Fire Pump. **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.).

Corequisite: 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 and FRP152, both with a grade of C or better; or consent of instructor. **Offered as needed**

FRP159 Fire Behavior and Combustion**3 class hr/wk, 3 cr.**

Explores the theories and fundamentals of how and why fires start, spread, and are controlled. **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. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed.****FRP256 Emergency Services Rescue Practices****2 class and 4 lab hr/wk, 4 cr.**

Presents technical information on various emergency services rescue situations. Covers tools and personal protective equipment, ropes and knots, trench rescue, confined space rescue, water rescue, building searches, outdoor searches, rescue in situations involving elevation differences, package patients, and vehicle extrication.

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**

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 NFPA Firefighter I. Includes a practicum NFPA Fire Apparatus Driver/Operator and NFPA Apparatus Equipped with Fire Pump certifications. Students completing the course will take written and task performance tests for NFPA Firefighter I and NFPA Fire Apparatus Driver/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 Fire Apparatus Driver/Operator and NFPA Apparatus Equipped with Fire Pump certifications. Students completing the course will take written and task performance tests for NFPA Firefighter I and NFPA Fire Apparatus Driver/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 NFPA Firefighter II, NFPA Fire Apparatus Driver/Operator and NFPA Apparatus Equipped with Fire Pump certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. **Prerequisite:** FRP261 with a grade of C or better. **Offered as needed.**

FRP262H Fire Incident Related Experience 5: Honors**9 lab hr/wk, 3 cr.**

Introduces new skills and provides a practicum for NFPA Firefighter II, NFPA Fire Apparatus Driver/Operator, and NFPA Apparatus Equipped with Fire Pump 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 NFPA Firefighter II, NFPA Fire Apparatus Driver/Operator, and NFPA Apparatus Equipped with Fire Pump 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 NFPA 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 NFPA Firefighter II, NFPA Fire Apparatus Driver/Operator, and NFPA Apparatus Equipped with Fire Pump 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 NFPA 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, wildland, 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, wildland, 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**

FYE

First Year Experience

FYE105 Creating College Success

2 class hr/wk, 2 cr.

Focuses on strategies for achieving success in college and in life. Covers campus resources, learning preferences, personal responsibility, self-motivation, and self-management. Recommended for all first year students. **Prerequisite:** Placement into RD080 or higher, and WR080 or higher; or completion of RD080 and RD085, or RD090 or higher; and WR080 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

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:** Placement into MTH112 or higher; or MTH111, MTH112, or MTH251 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

GE102 Engineering Computations

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

Acquaints engineering students with the use and operation of the microcomputer, 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:** Placement into MTH112 or higher; or MTH111, or MTH112, or MTH251 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 with a grade of C or better; 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

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 Development, Resources, and Sustainability

4 class hr/wk, 4 cr.

Introduces economic aspects of cultural geography worldwide, including the study of development, agriculture, industry, services, settlement, urban landscapes, and natural resource issues. Special emphasis is placed on the unequal distribution of power in the U.S. with regard to employment, income, settlement patterns, urban land use, and natural resource management. **W, Sp; CL**

GEG140 Map Reading and Interpretation

4 class hr/wk, 4 cr.

Introduces basic concepts in reading, interpreting, and analyzing diverse social, cultural, and physical information from a variety of maps. Topics include map projections, map misuse, propaganda maps, 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

4 class hr/wk, 4 cr.

Studies the causes, characteristics, and geographic distribution of natural hazards, as well as societal responses to natural hazards affecting the Pacific Northwest, including earthquakes, tsunamis, volcanoes, debris flows, landslides, floods, wildfires, 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 Geography of the Middle East

4 class hr/wk, 4 cr.

Examines the physical and cultural environments of the Middle East, including climate, landforms, natural resources, livelihoods, ethnic groups, languages, population, and settlement patterns. Emphasizes recent geopolitical disputes in the Middle East, giving special attention to the Arab-Israeli conflict, including the formation of a Palestinian state. **Offered as needed**

GEO

Geology

GEO142 Geology of Pacific Northwest Volcanoes, Mountains, and Earthquakes

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

Studies plate tectonics, volcanoes, earthquakes, tsunamis, mountain-building processes, and geologic hazards, with emphasis on the Pacific Northwest. Includes plate tectonic theory, types and effects of volcanism and other geologic activity on humans, seismic waves and faults, accreted terranes, geologic maps, and Oregon's geomorphic provinces. **Offered as needed**

GEO143 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 and economically valuable minerals, and the most important igneous, sedimentary, and metamorphic rocks of the Pacific Northwest. Covers natural processes that form rocks and minerals; relationships of rock types to environments of formation, including plate tectonic settings; classification and laboratory identification of minerals and rocks; important uses of minerals and rocks in society; the rock cycle; and the geologic time scale. **Offered as needed**

GEO144 Geology of Northwest Rivers, Glaciers, and Deserts

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

Studies surficial geology of the Pacific Northwest, including streams, groundwater, coastlines, landslides, glaciers, lakes, and deserts. Includes geomorphic provinces of Oregon, topographic maps and profiles, Ice Age floods, Geologic Time, and geologic cross-sections. **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. **Prerequisite:** MTH070 or higher with a grade of C or better; or consent of instructor. **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**

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 couples). Emphasizes understanding the role of the family and its consequent role in the development of the individual. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **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, for typically and atypically developing children. Emphasizes physical, intellectual, emotional, and social growth and development of young children. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor. **F, Offered as needed**

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.**

Examines the principles of development as they apply to children ages 6 through 12 years. Emphasizes typical and atypical development in the physical, intellectual, social, and emotional domains.

Prerequisite: Placement into RD090 and WR090; or consent of instructor. **Sp, Offered as needed**

HDF247 Preschool Child Development**3 class hr/wk, 3 cr.**

Examines the principles of development as they apply to the young child ages 2 ½ to 6 years. Emphasizes typical and atypical development in the physical, intellectual, social, and emotional domains.

Prerequisite: Placement into RD090 and WR090; or consent of instructor. **W, Offered as needed**

HDF248 Learning Experiences for Young Children**4 class hr/wk, 4 cr.**

Covers theories of intellectual development and how development analysis, presentation, and evaluation of learning activities support development in all domains (physical, social, emotional, and intellectual). Emphasizes activities and materials which support open-ended, child-directed play and discovery in science (physics, chemistry, and biology) and language and literacy (representational and social knowledge), in an inclusive environment. **Prerequisite:** HDF225 and HDF247, both with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

HDF249 Introduction to Working with Infants and Toddlers**3 class hr/wk, 3 cr.**

Assists childcare practitioners who work with infants and toddlers in child development centers and home settings. Focuses on understanding, facilitating, and respecting the brain development of infants and toddlers. Provides opportunities for discussion, demonstration, and practice in the areas of environmental and material planning, and interaction, curriculum, and observation skills development.

Prerequisite: Placement into RD090 and WR090; or consent of instructor. **F, Offered as needed**

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; placement into RD090 and WR090; 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.

Prerequisite: Placement into RD090 and WR090; or consent of instructor. **W, Sp**

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 Information Management, and 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**

HE252 First Aid and CPR

3 class hr/wk, 3 cr.

Provides accepted safety, first aid, and cardiopulmonary resuscitation, philosophy, techniques, and procedures that will enable students to appropriately cope with emergency situations ranging from minor to life-threatening. Upon successful completion, students may earn a certification from the American Heart Association. **F, W, Sp, Su**

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 Information 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. Introduces students to privacy, security, confidentiality, legal policies and procedures, and ethical issues. An interactive class using case studies, independent and group projects, and personal reflection to identify common legal and ethical problems. **F, W, Sp, Su**

HM112 Health Information Systems and Procedures
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. **Sp**

HM113 Healthcare Financing, Insurance, and Reimbursement
3 class hr/wk, 3 cr.

Provides the foundation skills required for understanding healthcare financing, medical insurance billing, and reimbursement. Covers local and national insurance programs and offers a practical approach to medical insurance billing and reimbursement procedures. **W**

HM114 CPT 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:** Admission into the Health Information Management or the Medical Administrative Assistant programs; and BI171 and BI172, or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

HM115 ICD-10-CM Coding/Diagnosis
3 class and 3 lab hr/wk, 4 cr.

Introduces basic differences between nomenclature and classification systems: basic coding system, and ICD-9-CM and ICD-10-CM; basic abbreviations and description of format of coding manual; fundamental application of coding in basic forms, computerized billing, and state and federal agencies. **Prerequisite:** BI171 and BI172, or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

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, cardiovascular, respiratory, and Circulatory/Blood system. Provides practical application in the workplace using case studies, operative, autopsy, diagnostic and laboratory reports. **F, W, Sp, Su**

HM121 Medical Terminology 2

4 class hr/wk, 4 cr.

Focuses on the digestive, integumentary, urinary, female and male reproductive, endocrine, and nervous systems; sensory organs; cancer medicine; radiology and nuclear medicine; and psychiatry. 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**

HM123 Essentials of Pathophysiology

3 class hr/wk, 3 cr.

Builds on understanding normal structure and function of the human body. Introduces basic processes of pathophysiology, including cell function; inflammation; infection; immunity; and neoplasia, fluid, and electrolytes; and acid-base balance. Relates genetics and aging processes to pathophysiology. Uses a body systems approach to apply pathophysiological concepts to major disorders. **Prerequisite:** HM120 and HM121, both with grade of C or better; or consent of instructor. **Sp**

HM150 Professional Development and Communication for Health Information Management

3 class hr/wk, 3 cr.

Provides a comprehensive environment for students to become proficient in skills required of a healthcare office professional develop leadership qualities, enhance awareness of diversity in the healthcare workplace, develop interpersonal communication skills, and provides a setting for self-improvement. Introduces social networking for healthcare professionals, resume development, and gives practical experience for phone and in-person employment interviews. Presents information concerning employment rights, and provides a setting for self-improvement and continuing education. **Prerequisite:** Admission into the Health Information Management program. **W**

HM160 ICD-10-PCS/Procedures

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

Introduces the use of the ICD-10-PCS procedural coding system, with emphasis on skill development in correct code assignment based on clinical information, documentation and coding guidelines.

Prerequisite: Admission into the Health Information Management program; and BI171 and BI172, or higher. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

HM161 Computer Technology and Systems for Health Information Management

3 class hr/wk, 3 cr.

Provides a comprehensive survey of the interconnections of information technology (IT) and health care. Teaches computer literacy and introduces students to the uses of IT in health care delivery. Includes discussions of hardware and software, communications and networking, ethical issues, and privacy concerns. Discusses how IT is transforming every aspect of health care, from administrative applications to clinical systems involved in direct patient care, to special purpose applications.

Prerequisite: Admission into the Health Information Management program. **F**

HM210 Introduction to Health Services

3 class hr/wk, 3 cr.

Provides an overview of the nation's health system. Introduces use of health services, history of the health care system, hospitals and other health services 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. **Sp**

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 and HM121, or basic knowledge of medical terminology as determined by instructor. (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 and HM121, or basic knowledge of medical terminology as determined by instructor. (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 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, and minimum and universal data sets used in all accredited organizations. **Prerequisite:** Admission into the Health Information Management program. **F**

HM230 Health Information Management Practicum

15 lab hr/wk, 5 cr.

Provides workplace experience in a healthcare-related setting. Covers policies and procedures, work site organization, quality assessment, and job seeking tools.

Prerequisite: Admission into the Health Information Management program; and HM231 with a grade of C or better. **W**

HM231 Health Information Management Seminar

1 class hr/wk, 1 cr.

Studies the relationship between the health information setting and theoretical course content. Includes student preparation and expectations for a successful practicum experience. **Prerequisite:** Admission into the Health Information Management program. **Sp**

HM250 Health Information 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 care organization and the health care delivery system. Emphasizes the area of human resource management in health care organizations. Explores the concepts of motivation, communication, dynamics of change, and labor relations within the context of the health care organization. **Prerequisite:** Admission into the Health Information Management program. **Prerequisite/Corequisite:** WR227 with a grade of C or better; or consent of instructor. **F**

HM251 Health Information Management 2

3 class hr/wk, 3 cr.

Emphasizes the area of financial and resource management in health care facilities. Provides an understanding of the essential components of financing, compliance, and the revenue cycle in health care facilities. Explores the concepts of leadership, teams, legal, ethical, and technological issues in the health care setting. **Prerequisite:** Admission into the Health Information Management program; and HM250 and WR227, both with a grade of C or better. **W**

HM252 Health Information 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:** Admission into the Health Information Management program; and HM251 with a grade of C or better. **Sp**

HM280B-L Cooperative Work Experience
See **CWE—Cooperative Work Experience**

HOR

Horticulture

HOR110 Bees and Other Pollinators **2 class hr/wk, 2 cr.**

Examines the contribution of pollinators and the impacts of pollinator loss to global agriculture. Provides basic biological and ecological information on important pollinators in Oregon. Emphasizes habitat requirements and conservation tactics for individual pollinator types. Covers principles and mechanics of beekeeping. Investigates threats to pollinators and potential solutions. **Sp**

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. **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. **Offered as needed**

HOR201 Growing Vegetables in the Willamette Valley

3 class and 2 lab hr/wk, 4 cr.

Introduces important vegetable crop production in the Willamette Valley. Discusses history and current status of the Oregon vegetable industry. Presents essential cultural practices for vegetable production, including soil and fertility management, pest identification and control, and unique production aspects of individual vegetable crops. **Offered as needed**

HOR202 Growing Fruit in the Willamette Valley

3 class and 2 lab hr/wk, 4 cr.

Introduces important fruit crop production in the Willamette Valley for both commercial and personal use. Presents management systems and cultural practices of fruit crops, including raspberries, blackberries, blueberries, grapes, strawberries, hazelnuts, apples, pears, and stone fruits. Covers pruning and training principles for each fruit crop, as well as nutritional requirements and fertilization practices, and pest identification and management. **Offered as needed**

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 with a grade of C or better; 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 **1 class and 6 lab hr/wk, 4 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, pesticide calibration, pest management, and growth regulation. Provides skills and experience in retail nursery management.

Prerequisite: HOR111, HOR211, and MTH070; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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**

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**

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**

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**

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**

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**

HOR280B-L Cooperative Work Experience
See **CWE-Cooperative Work Experience**.

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, Su**

HS103 Ethics for Human Service and Traditional Health 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; HS150 with a grade of C or better; or consent of instructor. Addiction Studies and ACCP students who have not previously completed an ethics course, must pass HS103 with a grade of C or better prior to starting the first term at the first site of practicum. Social Services students must complete HS103 (or concurrent enrollment) with a grade of C or better prior to starting their first practicum. **W, Sp**

HS105 Cultural Elements in Providing Services to Latino Populations

1 class hr/wk, 1 cr.

Increases cultural understanding and develops personal and professional clinical skills in working effectively with Latino clients in addiction and other treatment settings. Provides participants with an opportunity to learn and practice incorporating information into everyday clinical processes through activities and case study scenarios. **Sp**

HS120 Alzheimer's Disease: Coping and Caring

3 class hr/wk, 3 cr.

Presents information about Alzheimer's Disease and other dementias, exploring the disease process including the stages of Alzheimer's 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. **W, Su**

HS141 Nicotine Dependence Treatment

1 class hr/wk, 1 cr.

Provides an overview of the science of nicotine addiction, how it is similar and different to other addictions, and the assessment tools and treatment planning suggested in integrating treatment. Covers pharmacological supports available to aid in treatment. Designed for the chemical dependency treatment professional and students in the Addiction Studies Program. **Sp**

HS150 Personal Effectiveness for Human Service and Traditional Health 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. **Recommended:** Concurrent enrollment in HS154 and HS170 for Human Services program students. **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 with a grade of C or better; 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 and Advocacy**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 and provides information about making appropriate referrals for services. Introduces application of basic research techniques.

Recommended: Concurrent enrollment in HS150 and HS170. **Prerequisite:** Enrollment in the Human Services program. **F, W**

HS155 Wellness Coaching, Interviewing, and Advocacy**3 class hr/wk, 3 cr.**

First of a two-course sequence for students in the Human Services degree programs and the Addiction Counselor Certificate program. Students in the Non-Traditional Health Workers Certificate take this course in term three. Provides the theory and specific techniques required for entry-level advocacy, coaching and interviewing in human service and non-traditional health worker 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, W**

HS158 Trauma Informed Theory, Practice, and Crisis Management**3 class hr/wk, 3 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 retraumatization of victims by the social service system. Introduces crisis management strategies in the context of a trauma-informed practice. Discusses policy and advocacy issues. Provides framework for crisis recognition/response and intervention with people experiencing trauma symptoms. Students will analyze and practice using a trauma-informed framework designed to work successfully with trauma survivors in multiple settings, including how to recognize and respond to crisis. Examines key elements necessary to provide trauma-informed interventions and examples of trauma-informed services. **Sp**

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. **Recommended:** Concurrent enrollment in HS150 and HS154.

Prerequisite: Enrollment in the Human Services program. **F, W**

HS171 Traditional Health Workers**5 class hr/wk, 5 cr.**

Designed to meet most of the training requirements necessary to work in traditional health care roles such as peer wellness support, health system navigation, and community health. Focuses on the areas of outreach and mobilization, community and cultural outreach and liaising, case management, care coordination, system navigation, and health promotion and coaching. **F**

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:** HS101 with a grade of C or better; 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 with a grade of C or better; or consent of instructor.

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

HS207 Adult Children of Alcoholics/Addicts**1 class hr/wk, 1 cr.**

Explores the relationship between growing up in a chemically-dependent or dysfunctional family and ensuing problems in adulthood. Discusses family dynamics, denial, relationships, work, social skills and feelings. **Offered as needed**

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; and HS266 or HS216; or consent of instructor (All prerequisites must be completed with a grade of C or better.) **Sp**

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. **Recommended:** HS101, HS150, and HS155. **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. **F, W**

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:** HS103 and HS155, both with a grade of C or better; or consent of instructor. **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. **Offered as needed**

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. **Recommended:** Concurrent enrollment in HS284-288. **Prerequisite:** HS214 with a grade of C or better; or consent of instructor. **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. **Recommended:** Concurrent enrollment in HS284-288. **Prerequisite:** HS155 and HS260, both with a grade of C or better; or consent of instructor. **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.

Recommended: Concurrent enrollment in HS284-288. **Prerequisite:** Enrollment in the Human Services program; and HS155 and HS260, both with a grade of C or better; or consent of instructor. **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.

Recommended: Concurrent enrollment in HS284-288. **Prerequisite:** Enrollment in the Human Services program; and HS218A with a grade of C or better; or consent of instructor. **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.

Recommended: Concurrent enrollment in HS284-288. **Prerequisite:** Enrollment in the Human Services program; and HS218B with a grade of C or better; or consent of instructor. **Sp**

HS219 Client Records, Case Management, and Care Coordination

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, using medical/behavioral health terminology and other client-related data and care coordination.. Applies State, HIPAA, ASAM, and other professionally relevant standards. **Prerequisite:** HS150, HS154, and HS170; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

HS223 Aging: Theory and Practice

3 class hr/wk, 3 cr.

Introduces the field of social gerontology. Explores the relationship between the aging individual and society. Presents information on theory and practice, including: behavioral responses to the normal aging process, healthy adaptation to aging, and diagnosis and treatment of common organic and functional mental disorders. Examines how discrimination of the aging population arises from culturally defined meanings attributed to difference. **Sp**

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. **Offered as needed**

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. **F**

HS266 Case Management, Care Coordination, and Systems Navigation

3 class hr/wk, 3 cr.

Provides theory and application in care coordination, systems navigation, casework 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 with a grade of C or better for Human Services degree students; or consent of instructor. **W**

HS284-288A Practicum: Human Services - Addiction Studies**12-24 lab hr/wk, 4-8 cr.**

Provides experience working on-site in a human service agency to integrate field and classroom experiences. Offers Social Services students two different practicum sites, each at least two terms in length, during the Associate of Applied Science degree acquisition. The second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. **Prerequisite:** HS150, HS154, and HS170; or consent of instructor. Students in the Social Services degree option must either take HS103 concurrently with or prior to starting their first practicum. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, S**

HS284-288S Practicum: Human Services - Social Services**12-24 lab hr/wk, 4-8 cr.**

Provides experience working on-site in a human service agency to integrate field and classroom experiences. Offers Social Services students two different practicum sites, each at least two terms in length, during the Associate of Applied Science degree acquisition. The second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. **Prerequisite:** HS150, HS154, and HS170 for; or consent of instructor. **F, W, Sp, S**

HS284-285T Practicum: Human Services - Traditional Health Workers**12-15 lab hr/wk, 4-5 cr.**

Provides experience working on-site in a human service agency to integrate field and classroom experiences. Offers Traditional Health Worker students a one-term practicum in the third term of the program. **Prerequisite:** HS150, HS154, and HS171. Students in the Traditional Health Worker Certificate of Completion program must take HS103 prior to starting their first practicum; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, S**

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. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

HST157 History of the Middle East and North Africa**4 class hr/wk, 4 cr.**

Surveys human cultural, social, and economic and political developments in the Middle East and North Africa. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

HST158 Special Projects in Latin America**3 class hr/wk, 3 cr.**

Surveys cultural, social, and economic and political developments in Latin America. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 present. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su; CL**

HST228 History of Modern Europe**4 class hr/wk, 4 cr.**

Introduces the history and culture of Europe from 1900 to the present. Analyzes the impact of war and revolution, the end of colonialism and the decline of European empires, and the search for European unification. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

HST257 Native American History**4 class hr/wk, 4 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. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp; CL**

HST262 Women in U.S. History**4 class hr/wk, 4 cr.**

Studies the transformation of the role of women in American society. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Sp, Su; 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. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Sp; CL**

HST270 History of Latin America**4 class hr/wk, 4 cr.**

Surveys Latin American history, encompassing the political theory, class structure and economic organization, culture, and religion from pre-Colombian times to the present. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

HOST279 Soviet and Contemporary Russia

4 class hr/wk, 4 cr.

Surveys and analyzes human cultural, social, economic, and political developments of Soviet and Contemporary Russia.

Covers 1917 to the present. **Prerequisite:** Placement into RD115; or RD080 and RD085; or RD090 or higher, or concurrent enrollment; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

HTM

Hospitality and Tourism Management

(All courses in this section are offered online.)

See also NFM–Nutrition and Food 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. **W**

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. **W**

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. **W, 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. **W, Sp**

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, 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. **Recommended:** HTM131 with a grade of C or better. **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. **Recommended:** HTM103 with a grade of C or better; 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. Recommended **Prerequisite:** HTM143 with a grade of C or better. **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. **Recommended:** HTM105 with a grade of C or better; or second-year standing in Hospitality Management or Tourism and Travel Management program. **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/ Corequisite:** HTM127 with a grade of C or better. **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:** Second-year standing in Hospitality Management or Tourism and Travel Management program. **W**

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. **Recommended:** HTM105 with a grade of C or better; or second year standing in Hospitality Management. **F**

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**

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 program. **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**

HUM225 Effective International Development: Theory to Practice

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

Continues an in-depth examination of a specific area of international community development in impoverished global regions. Focus of the course may include the areas of education, micro-finance, business, or human trafficking. Encourages critical thinking about global forces and the interaction of converging factors such as culture, philosophy, history of a country, literature, economics, and the processes that occur in community building in specific areas. Prepares students to participate thoughtfully and authentically in community development field work (service learning), and provides direct cross-cultural experience by living and working in another country with emphasis on unequal distribution of wealth and power as key factors in social justice. **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. Course may be repeated for a maximum of 12 credits. **F, W, Sp**

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. **Offered as needed**

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. **Offered as needed**

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 others. **Offered as needed**

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; open to others. **Offered as needed**

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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **JPN101, F; JPN102, W; JPN103, Sp**

JPN120 Introduction to Japanese Prosody

3 class hr/wk, 3 cr.

Presents the segmentation and pitch accent patterns of Japanese words from a linguistic perspective. Compares Japanese patterns to those of other languages, particularly English. **Prerequisite:** JPN103 with a grade of C or better or concurrent enrollment; or consent of instructor. **Offered as needed**

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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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

MED

Medical Assisting

MED124 Medical Assisting, Basic Procedures

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

Surveys the requirements and qualities for success as a medical assistant. Covers medical assisting techniques, methods, and procedures for assisting the physician with numerous examinations, medical and surgical aseptic procedures, obtaining vital signs, care of equipment and supplies, and quality assurance. Integrates legal and ethical implications in a medical care setting. **Prerequisite:** Admission into the Medical Assisting program. **Corequisite:** MED125, MED130, and MED131. **F, Sp**

MED125 Medical Assisting, Advanced Procedures

4 class and 3 lab hr/wk, 5 cr.

Surveys advanced clinical/laboratory knowledge and skills required of the medical office assistant. Emphasizes electrocardiography, hematology, urinalysis, microbiology, respiratory testing, clinical pharmacology, as well as, administration of medications, phlebotomy, and assisting the physician with procedures. Covers diet modification, radiology, principles of heat and cold application, and common emergencies. **Prerequisite:** Admission into the Medical Assisting program. **Corequisite:** MED124, MED130, and MED131. **F, Sp**

MED130 Medical Assisting Practicum

16 lab hr/wk, 5 cr.

Prepares students to begin their practical experience in a health care setting. Includes medical office assisting methods, procedures and techniques, effective communication, and clinical- and work-practice skills. **Prerequisite:** Admission into the Medical Assisting program.

Corequisite: MED124, MED125, and MED131. **F, Sp**

MED131 Medical Assisting Seminar

1 class hr/wk, 1 cr.

Studies the relationship of practice in a healthcare setting with theoretical course content, as well as its application to career and personal goals. Prepares students to take the NCCT certification examination.

Prerequisite: Admission into the Medical Assisting program. **Corequisite:** MED124, MED125, and MED130. **F, Sp**

MED132 Medical Assisting Clinical Practice

2 class and 27 lab hr/wk, 11 cr.

Introduces students to clinical practice experience with patients in a work setting. Includes clinical procedures, infection control, specimen collection and testing, medication administration, communication, and work-practice skills. **Prerequisite:** Admission into the Medical Assisting program; and MED124, MED125, MED130, and MED131. (All prerequisite courses must be completed with a grade of C or better.) **W, Su**

MT

Industrial

See also ELT–Electronics Technologies

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. **Offered as needed**

MT105 Introduction to Robotics

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

Provides an introduction to robot mechanisms, dynamics, and intelligent controls. Topics include kinematics, motions, manipulators and mobility, body dynamics, simulation, control design, actuators, sensors, wireless networking, task modeling, and embedded software. Develops communication and teamwork through documentation and collaborative project design. Robotic systems will be designed and fabricated as group-based term project. **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. **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.) **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.) **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.) **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.

Explains high vacuum concepts, theory, and the various types of vacuum systems. Subjects include vacuum pumps, seals, gauges, valves, power supplies, leak detecting equipment, and related hardware. Covers the set-up, operation, troubleshooting and monitoring of vacuum systems. **Prerequisite:** MTH070 with a grade of C or better; 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 with a grade of C or better; 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.)

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.) **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. **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.) **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:** MT101 (or concurrent enrollment); second-year standing in the Process Control Technology program; or proof of technical proficiency as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **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. **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. **Corequisite:** SSP060. **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:** Placement into MTH052; or MTH020 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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:** MTH052 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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:** Placement into MTH060; or MTH020 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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:** Placement into MTH070; or MTH060 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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: Placement into MTH070; or MTH060 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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:** MTH075 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** MTH070, MTH075, and MTH076, or equivalent courses as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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: MTH078 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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: MTH070 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor.

Offered as needed**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:** MTH081 with a grade of C or better; or consent of instructor. **Offered as needed**

MTH095 Intermediate Algebra**4 class hr/wk, 4 cr.**

Introduces the study of functions with a focus on linear (including arithmetic sequences), quadratic (including an introduction to complex numbers), and exponential functions (including geometric sequences). Also covers converting rates using dimensional analysis. Uses a variety of methods including logarithms to solve equations. Explores topics using a graphing calculator (required) as well as traditional approaches. **Prerequisite:** Placement into MTH095 or higher; or MTH070 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, W, Sp, Su**

MTH105 Math in Society**4 class hr/wk, 4 cr.**

Provides a solid foundation in quantitative reasoning, symbolic reasoning, and problem solving techniques needed to be a productive, contributing citizen in the 21st century. Designed for liberal arts and humanities majors. **Prerequisite:**

Placement into MTH105 or higher; or MTH095 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:**

Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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. **Recommended:** High School Geometry or MTH075.

Prerequisite: Placement Into MTH112; or MTH111 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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:** Placement into MTH111 or higher; or MTH095 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, W**

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:** MTH211 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **W, Sp**

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:** MTH212 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, 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:** Placement into MTH112 or higher; or MTH111 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** MTH231 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** Placement into MTH241 or higher; or MTH111 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** Placement into MTH243 or higher; or MTH105 or higher, with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** MTH243 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, W, Sp**

MTH251 Differential Calculus

5 class hr/wk, 5 cr.

Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers limits, continuity rates of change, and derivatives with applications. Introduces the indefinite integral. **Prerequisite:** Placement into MTH251 or higher; or MTH112 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **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 or higher 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 or higher 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 or higher 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:** MTH254 or higher with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **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:** MTH254 or MTH255, either with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **Sp**

MUP AND MUS

Music

MUP100 Individual Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the instrument being studied, including fundamentals of music, reading and theory, beneficial practice habits, repertoire for the instrument, interpretation, and performance techniques. Course may be repeated for a maximum of nine credits per instrument. **F, W, Sp**

MUP174 Voice

1 class hr/wk, 1 cr.

Gives individual instruction in fundamentals of theory, melodic contouring and phrasing, vocal production, and body mechanics incorporated into basic singing skills and music reading. Open to students of all levels and interests. May be repeated for a maximum of nine credits. **F, W, Sp**

MUS100 Music Fundamentals

3 class hr/wk, 3 cr.

Covers the basics of music, including pitch, rhythm, notation, intervals, scales, harmony, the keyboard, key signatures, the circle of fifths, and triads. Develops basic aural skills through listening, singing, and clapping. Intended for non-music majors and students with little or no experience in music.

Offered as needed

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**

MUS111 Introduction to Music Theory
3 class and 2 lab hr/wk, 4 cr.

Introduces Western European music practices, including fundamentals of music notation, terminology, analysis, sight-singing, and listening. Covers clefs, intervals, scales, modes, circle of fifths, triads, and more. Emphasizes terminology and basic musical concepts. **Offered as needed**

MUS112 Music Theory 1
3 class and 2 lab hr/wk, 4 cr.

Focuses on the detailed exploration of Western European music practices, including music notation, terminology, analysis, sight-singing, aural dictation, part-writing, and aural analysis. Covers clefs, intervals, scales, modes, circle of fifths, triads, and more. Emphasizes terminology and basic musical concepts. **Prerequisite:** MUS111 with a grade of C or better; or consent of instructor. **Offered as needed**

MUS113 Music Theory 2
3 class and 2 lab hr/wk, 4 cr.

Continues detailed exploration of Western European music practices, including music notation, terminology, analysis, sight-singing, aural dictation, four-part writing, and aural analysis. Covers advanced musical practices, including figured bass realization, harmonic progressions, modulation, cadences, transposition, and Twelve-tone Theory. Emphasizes advanced terminology and compositional concepts. **Prerequisite:** MUS112 with a grade of C or better within the year; or consent of instructor. **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. **Recommended:** Previous experience singing with a school, civic, or church choir. **Prerequisite:** Consent of instructor. **F, W, Sp**

MUS201 Introduction to Music 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 Hayden, Mozart, and Beethoven. **Offered as needed**

MUS202 Music History 1: Medieval to Classical
3 class hr/wk, 3 cr.

Focuses on the elements of music, musical instruments and ensembles, significant composers and their works, and the development of heightened listening skills from the Medieval Era through the Classical Era (c. 476 C.E. to 1825 C.E.). **Offered as needed**

MUS203 Music History 2: Romantic to Present Day
3 class hr/wk, 3 cr.

Focuses on the elements of music, musical instruments and ensembles, significant composers and their works, and the development of heightened listening skills from the Romantic Era through the present (1825 C.E. to present). **Offered as needed**

NET

Network Technology

See also ELT–Electronics Technologies

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 with a grade of C or better; or equivalent experience as determined by instructor. **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 with a grade of C or better; 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 e-mail services, web space, and authenticated access. Lab exercises provide practical hands-on experience. **Prerequisite:** CIS101 with a grade of C or better; 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 and Open Shortest Path First protocol. Hands-on exercises, including configuration, installation, and troubleshooting, reinforce student learning. **Prerequisite:** CIS101 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

NET171 Fundamentals of Wireless LANs
3 class and 4 lab hr/wk, 5 cr.

Introduces the fundamentals of wireless LANs. Focuses on the design, planning, implementation, operation and troubleshooting. Includes a comprehensive, hands-on overview of wireless LAN technologies, security, and design best practices. Prepares students to achieve the Cisco Wireless LAN Support Specialist designation. **Offered as needed**

NET261 Fundamentals of Network Security

3 class and 4 lab hr/wk, 5 cr.

Explains network security processes and equipment with a hands-on emphasis. Covers security policy design and management; security technologies, solutions, and products; security appliance firewalls and secure router design; and AAA and VPN implementation. Intended for people currently employed in the computer industry or computer technology instructors. **Prerequisite:** NET154 with a grade of C or better; or current CCNA certification; or consent of instructor. **W**

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 and Quality of Service concepts as they apply to the Cisco CallManager Express environment. **Offered as needed**

NFM

Nutrition and Food Management

NFM215 Nutrition for Food Service and Culinary Professionals

3 class hr/wk, 3 cr.

Focuses on nutrition as it relates to foodservice 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 with a grade of C or better; or consent of instructor. **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, skills, and attitudes 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; and BI232 and PSY201, both with a grade of C or better (or concurrent enrollment). **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, patient assessment, vital signs, specimens, and medication administration. **Corequisite:** 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, skills, and attitudes necessary to implement the roles of a practical nurse in providing care in long term care and acute care settings across the lifespan. Theoretical concepts focus 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 maternal-child and the care of developing families. **Prerequisite:** NUR106; and BI233 and PSY237, or concurrent enrollment. (All prerequisite courses must be completed with a grade of C or better.) **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; sterile gloving; changing intravenous bags and tubing; sterile dressing changes; urinary catheterization; and medication administration. **Corequisite:** 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, skills, and attitudes necessary to implement the roles of a practical nurse in providing care to patients across the lifespan. Theoretical concepts focus 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 perinatal complications. **Prerequisite:** NUR108; and BI234 and WR121, or concurrent enrollment. (All prerequisite courses must be completed with a grade of C or better.) **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, wound care, nasogastric tube insertion and removal, suctioning, and tracheostomy care, and introduction to the Patient Control Analgesia. **Corequisite:** NUR109. **Sp**

NUR150 Introduction to Advanced Wound Care

1 class hr/wk, 1 cr.

Introduces the principle of advanced wound care, including assessment, development of a plan of care, and coordination of care with the health care team. Emphasizes evidence-based practices in wound care including current standards of practice.

Prerequisite: Current nursing student; or current licensure as a LPN or RN. **W, Offered as needed**

NUR171 Strategies for Success in the Nursing Program

1 class hr/wk, 1 cr.

Reinforces the basic skills that are built on in the nursing curriculum. Includes a review of the Nursing program, study skills, coping strategies, testing, the nursing process, medical terminology, documentation, lab and diagnostic testing, pharmacology, and simulation. Takes a hands-on approach to learning through application of concepts within the Nursing Program. **Corequisite:** 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, skills, and attitudes necessary to implement these roles in giving care to clients/patients. Theoretical concepts focus on the care of patients with complex physical and mental health problems. **Prerequisite:** NUR109; and CIS101 (or concurrent enrollment); or consent of instructor. **(All prerequisite courses must be completed with a grade of C or better.) 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, skills, and attitudes that are necessary to implement the roles of an associate degree registered nurse in a variety of settings. Theoretical concepts focus on the care of 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 knowledge, skills, and attitudes inherent in the beginning practice roles of an associate degree registered nurse. Theoretical concepts focus on the first-level management skills necessary for providing nursing care to groups of patients in a variety of settings. As the culmination of the Nursing program clinical sequence, NUR209 incorporates a clinical preceptorship during which students demonstrate achievement of program outcomes. **Prerequisite:** NUR208 with a grade of C or better. **Corequisite:** Arts and Letters 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 settings. Gains 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. **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; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

NUR280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience

Occupational Skills Training

See ST—Occupational Skills Training

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, and 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.

Offered as needed

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

Focuses on maintaining or improving fitness through participation in a regular schedule of bicycle riding. Examines cycling techniques, basic bicycle maintenance, and safety factors. **F, W, Sp, Su**

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 and 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**

PE185PR, PS, PT Backpacking - Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

An Introductory course in backpacking. **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**

PE185SN, SP, SQ Salsa Dancing - Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Prepares students to perform basic, intermediate, and advanced dance steps and common variations of Salsa, Cumbia, and Merengue. Beginning class covers basic dance terminology and techniques. Intermediate and Advanced includes advanced terminology, techniques, and combinations. **Offered as needed**

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**

PE185UA, UB, UC Ultimate Games—Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Offers a high level fitness and recreation program through participation in various sports and group games. May improve some or all of the areas of physical fitness, including cardiovascular, muscular, body composition, and flexibility. Games may include Ultimate Frisbee, Soccer, Flag Football, Volleyball, Basketball, European Handball, or other. **Offered as needed**

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**

PE194RA Racquetball—Professional
1 class and 2 lab hr/wk, 2 cr.
Designed to teach Health and Human Performance majors how to instruct racquetball. Includes skill progressions, racquetball and conditioning knowledge, successful application, strategy, practice, conditioning, rules interpretations, and teaching and coaching techniques. **Offered as needed**

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. **Recommended:** PE185BJ, BK, and BL. **F**

PE294FD Professional Activities—Soccer
1 class and 2 lab hr/wk, 2 cr.
Designed to prepare students how to teach or coach soccer. Class time will be spent on discussions and practical application of basic soccer skills, rules and regulations, strategy, and coaching techniques. Students will apply the information during class physical participation, as well as practice teaching and coaching situations. **Prerequisite:** PE185FD with a grade of C or better; or instructor consent. **Sp**

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. **Prerequisite:** PE185VJ, PE185VK, or PE185VL; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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.
Presents basic physical science concepts, including Newton's laws, energy, and momentum as they apply to mechanical, fluid, electrical, and thermal systems in automotive and industrial programs. **Prerequisite:** Placement into MTH052 or higher; or consent of instructor. **F**

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:** Placement into MTH095 or higher; or MTH070 or higher with a grade of C or better; 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:** Placement into MTH081 or higher; or MTH081 or higher with a grade of C or better; 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 higher with a grade of C or better; or consent of instructor. **Offered as needed**

PH201 General Physics
4 class and 3 lab hr/wk, 5 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:** Placement into MTH251 or higher; or MTH112 or higher, with a grade of C of better; or consent of instructor. **F, Su**

PH202 General Physics
4 class and 3 lab hr/wk, 5 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 or higher with a grade of C or better; or consent of instructor. **W**

PH203 General Physics
4 class and 3 lab hr/wk, 5 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 or higher with a grade of C or better; or consent of instructor. **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:** Placement into MTH095 or higher; or MTH070 or higher 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 spectroscope, and the birth and death of stars. **Prerequisite:** Placement into MTH095 or higher; or MTH070 or higher 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:** Placement into MTH095 or higher; or MTH070 or higher 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:** Placement into MTH252 or higher; or MTH251 or higher with a grade of C or better; or consent of instructor. **F**

PH212 Physics for Engineers 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, both with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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. **Recommended:** Placement into WR121; or completion of WR115 with a grade of C or better. **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. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **F, W, Sp**

PHL205 Biomedical Ethics**4 class hr/wk, 4 cr.**

Covers ethical decision-making regarding health and well-being across a variety of cultural contexts, informed by the historical development of bioethics as a discipline. Investigates ethical questions triggered by contemporary developments such as changing technology, along with those questions which have persisted since antiquity. 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. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **Offered as needed; CL**

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. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **F, W, Sp; 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:** 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:** Second-term standing in the Pharmacy Technician program. **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:** Enrollment in 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: First-term standing in the Pharmacy Technician program. **F**

**PHM130 Pharmacy Information/ 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: Third-term standing in the Pharmacy Technician program. **Sp**

**PHM150 Pharmacy Technician
Practicum****12 lab hr/wk, 4 cr.**

Provides pharmaceutical workplace experience in a healthcare or related setting. **Prerequisite:** Third-term standing in the Pharmacy Technician program. **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:** Third-term standing in the Pharmacy Technician program. **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: Second-term standing in the Pharmacy Technician program. **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 Compounding/
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:** Second-term standing in the Pharmacy Technician program. **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. **W**

**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; pathophysiology of various systemic body systems; variables that affect drug actions including contraindications and drug interactions; prescription abbreviations and interpretations; drug marketing; and drug approval processes. **F, Sp, W**

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 endocrine, nervous, gastrointestinal, and respiratory systems, as well as oncology principles. 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.

Prerequisite/Corequisite: PHM230 with a grade of C or better; or consent of instructor. **F**

PHM232 Pharmacology 2**5 class hr/wk, 5 cr.**

Provides a close examination of structure and function of certain biological systems within the human body, including the skeletal-muscle, circulatory/hematology, cardiovascular, renal, integumentary, and lymphatic/immune systems. Continues pharmacological principles which involve therapeutic medications and diseases/pathophysiology within said body systems.

Prerequisite: PHM231 with a grade of C or better; or consent of instructor. **W**

**PHM280B-L Cooperative Work
Experience****See CWE—Cooperative Work Experience****PLP****Prior Learning Portfolio****PLP121 Introduction to Prior Learning
Portfolio****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. **Recommended:** WR115 or WR121, either with a grade of C or better. **F, W, Sp**

**PLP122 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.

Recommended: WR115 or WR121, either with a grade of C or better. **Prerequisite:** PLP121 with a grade of C or better; or consent of instructor. **F, W, Sp**

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. **Recommended:** PS201 with a grade of C or better. **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**

PS207 Trial Advocacy 1

4 class hr/wk, 4 cr.

Introduces the components of a trial in the American judicial system, and the role that the advocate plays. Examines basic trial advocacy techniques: direct and cross examination, opening and closing statements, and objections. Also provides an analysis of the proper use of evidence and exhibits in trial. **Prerequisite:** PS201 with a grade of C or better; or consent of instructor. **F**

PS208 Trial Advocacy 2

4 class hr/wk, 4 cr.

Provides an advanced examination of trial advocacy techniques. Affords students the opportunity to develop and refine trial advocacy skills through drafting of documents, creation of exhibits, and participation in demonstrations and simulations. **Prerequisite:** PS207 with a grade of C or better; or consent of instructor. **W**

PSY

Psychology

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, resolving conflicts, and managing stress. **F, W, Sp, Su**

PSY104 Workplace Psychology

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 behavior, problem solving and decision making, becoming an effective leader, motivation, goal planning, diversity, stress management, improving career management skills, enhancing ethical behavior, and managing various work conditions. Covers important workplace laws and regulations in the United States. **F, W, Sp, Su**

PSY201 Introduction to Psychology: Mind and Body

4 class hr/wk, 4 cr.

Focuses on psychology as a natural science stressing history, methodology, the biological foundations of behavior, human development, sensation, perception, consciousness, learning, and memory.

Prerequisite: Placement into RD115 and WR115; or completion of (or concurrent enrollment in) RD080 and RD085; or RD090; and WR090 or higher; or consent of instructor. (All prerequisites must be completed with a grade of C or better.) **F, W, Sp, Su**

PSY202 Introduction to Psychology: Mind and Society

4 class hr/wk, 4 cr.

Focuses on psychology as a social science stressing language, thinking, emotion, motivation, intelligence, personality, health, abnormal behavior, therapy, and social thinking. **Prerequisite:** Placement into RD115 and WR115; or completion of (or concurrent enrollment in) RD080 and RD085; or RD090; and WR090 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su; CL**

PSY213 Behavioral Neuroscience

4 class hr/wk, 4 cr.

Surveys the role of the brain and nervous system in behavior, psychological functioning, and the neurophysiological processes that underlie human development. **Prerequisite:** PSY201; or BI212; or BI171; or BI231; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

PSY218 Educational Psychology

4 class hr/wk, 4 cr.

Surveys psychological topics relevant to educational settings. Topics may include child and adolescent development, language, group difference, learning, memory, behavior management, motivation, and assessment. Intended for Education majors. **Prerequisite:** Placement into RD115 and WR115 or higher; or completion of (or concurrent enrollment in) RD090 and WR090, each with a grade of C or better; or consent of instructor. **F, W, Sp; CL**

PSY227 Animal Behavior

4 class hr/wk, 4 cr.

Covers the fundamental aspects of animal behavior. Includes how animal behavior research is conducted, the evolution of behavior, biological influences on behavior, learning, aggression, play, foraging behavior, predation, habitat selection and migration, animal communication, kinship, cooperation, and sexual selection and mating. **Prerequisite:** Placement into RD115 and WR115; or RD080 and RD085 (or concurrent enrollment); or RD090 and WR090 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp, Offered as needed**

PSY234 Social Psychology

4 class hr/wk, 4 cr.

Provides an overview of the major concepts and questions in the field of social psychology. Emphasizes diverse ways in which people's thoughts and actions are influenced by social stimuli. Illustrates theories and research on such topics as the self, relationships, conformity, helping behavior, impact of a diverse world, intercultural differences, and aggression.

Prerequisite: PSY201 with a grade of C or better; or consent of instructor. **F, W, Sp, Su; CL**

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 Abnormal Psychology

4 class hr/wk, 4 cr.

Provides a broad overview of abnormal psychology. Includes 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**

PSY280 Psychology of Media

4 class hr/wk, 4 cr.

Introduces the role of media on human behavior and cognition. Explores history of psychology of media, influence on social behavior, audience dynamics, propaganda, and linguistics. Media examined include, but are not limited to, radio, television, film, video, newsprint, magazines, video games, Internet, and social networking. Examines how media is used to perpetuate unequal distribution of power and discrimination including how media is used to influence perception of similarities and differences between or within social/cultural groups. Focuses on the United States, but discusses how media is used around the globe and how the United States is portrayed in news media around the world. **Prerequisite:** PSY201 with a grade of C or better; or consent of instructor. **Sp, Offered as needed; CL**

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, Su**

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 text organization. Introduces outlining, concept mapping, and informal summarizing to improve learning. **Prerequisite:** Placement into RD080; or consent of instructor. Corequisite: Linked section of RD085. **F, W, Sp**

RD085 College Reading

2 class hr/wk, 2 cr.

Prepares students to comprehend and apply information from college-level textbooks through a study-reading process. Includes application of study reading skills to specific academic disciplines and career fields. **Prerequisite:** Placement into RD080; or consent of instructor. Corequisite: Linked section of RD080. **F, W, Sp**

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:** Placement into RD090. **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 print and digital 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:** Placement into RD115; or RD080 and RD085; or RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp**

RD120 Critical Thinking and Reading

3 class hr/wk, 3 cr.

Explores the structure of critical thinking and how to evaluate thinking, including that of other perspectives, and using a systematic and disciplined approach. Examines critical concepts, questions, and ideas that lead to further development of critical and ethical reasoning skills and abilities. Develops an appreciation for curiosity, imagination, objectivity, sensitivity, and intellectual honesty as characteristics of successful thinkers. Applies critical and creative thinking skills to consideration of issues of Difference, Power and Responsibility (DPR) within American society. **Prerequisite:** Placement into RD120 and WR115; or RD115 and WR090, each with a grade of C or better; or consent of instructor. **F, Offered as needed**

REL

Religious Studies

REL160 World Religions

4 class hr/wk, 4 cr.

Surveys the major world religions, including a look at their founders and their theology in terms of their views of God, self, society, purposes of life, traditions, and rituals. Includes the Abrahamic religions (Judaism, Christianity, and Islam) and the primary Asian religions of Hinduism and Buddhism. Also includes attention to religious offshoots of (and precursors to) the mainstream religions (e.g., Zoroastrianism, Jainism, Sikhism, and Bhakti faiths). Uses reflective and critical reading, thinking, writing, and discussion to explore the principal components of the world's dominant wisdom traditions. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **Offered as needed; CL**

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. **Recommended:** Placement into WR121; or completion of WR115 with a grade of C or better. **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. **Recommended:** Placement into WR121; or completion of WR115 with a grade of C or better. **F, W, Sp, Su**

REL203 Religion in U.S. Culture

4 class hr/wk, 4 cr.

Explores the varieties of religious experience in the U.S., both contemporary and historical, along with the roles played by religion in public discourse. Asks critical questions about how faith traditions have responded to the challenges of colonial and post-colonial American life, with particular attention to the impact of secularism on religious belief and practice in the modern United States. **Recommended:** Placement into WR121; or WR115 with a grade of C or better. **Offered as needed; CL**

RNW

Renewable Energy Management

See also ELT–Electronics Technologies

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. **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.

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. **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. **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. **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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

RUS201, **F**; RUS202, **W**; RUS203, **Sp**

Secretarial

See **BT–Business Technology**

SLP

Speech-Language Pathology Assistant

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. **F, Sp, 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. **W, 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, and SLP183; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 and SLP181, both with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **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:** Completion of all SLPA courses with a grade of C or better; or consent of instructor. **W**

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 with a grade of C or better; or consent of instructor. **W**

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 and SLP183, both with a grade of C or better; or consent of instructor. **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**

SOC223 Sociology of the Environment and Sustainability**4 class hr/wk, 4 cr.**

Introduces the sociological study of the environment and sustainability. Explores environmental and sustainability issues associated with natural resource utilization, energy consumption, and globalization. Focuses on the impact of social systems, social processes, and public policy. Examines environmental ideologies, collective behavior, and social change in relation to environmentalism and sustainability efforts. **Offered as needed; CL**

SOC224 Sociology of Violence, Terrorism, and War**4 class hr/wk, 4 cr.**

Introduces the sociological study of violence, terrorism, and war. Explores violence within the context of domestic and international terrorism and war. Focuses on the role of social institutions, issues of power and inequality, social interaction, and cultural components as they relate to violence, terrorism, and war. Examines emerging strategies in prevention, responses, and engagement as well as the social costs of violence, terrorism, and war.

Offered as needed; CL**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 afterlife. **F, W, Sp, Su; CL**

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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, 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/ Corequisite:** SPN150: None. SPN151: SPN150 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**

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:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **SPN201, F; SPN202, W; SPN203, Sp, Offered as needed**

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**

SPN214, 215, 216 Spanish for Native Speakers 1, 2, 3

4 class hr/wk, 4 cr. each

Develops reading, writing, speaking and grammar skills for students whose first language is Spanish. Fosters critical thinking and deepens understanding and appreciation of Hispanic cultures worldwide. All classroom interaction takes place in Spanish. **Prerequisite:** Native Spanish speaker (grew up speaking Spanish at home). Students are expected to be familiar with the written language. SPN214, **F, Offered as needed**; SPN215, **W, Offered as needed**; SPN216, **Sp, Offered as needed**

SPN250, 251 Second Year Spanish - Accelerated, Terms 1, 2

6 class hr/wk, 6 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 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 concurrently. SP250: SPN103 with a grade of C or better; or three years of high school Spanish; or consent of instructor. **Su, Offered as needed**

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**

SSC285 Dynamics of a Diverse Workplace

1 class hr/wk, 1 cr.

Focuses on building diversity knowledge, intercultural experiences, and preparing for career entry in an increasingly diverse workplace. Introduces a broadly defined conceptualization of diversity, the vocabulary of difference, and fundamental core concepts associated with intercultural competency. Examines demographic trends, our changing communities, and employer expectations for intercultural competency. **Offered as needed**

SSP

Study Skills

See also–Reading

SSP051 Studying for College

3 class hr/wk, 3 cr.

Focuses on effective learning strategies that are important for success in college. Covers getting organized, studying for and taking tests, and utilizing college resources. **Prerequisite:** Placement into RD080; or consent of instructor. **F, W, Sp**

SSP060 Study Strategies for Learning Math

1 class hr/wk, 1 cr.

Develops study skills critical for success in math courses. **Corequisite:** Enrollment in a math course. **F, W, Sp, Su**

SSP112 Effective Learning

3 class hr/wk, 3 cr.

Develops active and efficient participation skills in the learning process. Encourages 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 completion of RD080 and RD085, or RD090 (or concurrent enrollment); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

Prerequisite: Placement into RD115; or completion of RD080 and RD085, or RD090 (or concurrent enrollment); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

SSP115 Applied Time Management

1 class hr/wk, 1 cr.

Develops practical and efficient time management strategies. **Prerequisite:** Placement into RD090 or higher; or consent of instructor. **F, W, Sp**

SSP116 Applied Textbook Reading

1 class hr/wk, 1 cr.

Develops practical and efficient textbook study reading strategies. **Prerequisite:** Placement into RD090 or higher; or consent of instructor. **F, W, Sp**

SSP117 Applied Note Taking

1 class hr/wk, 1 cr.

Develops practical and efficient textbook and lecture note taking as well as listening strategies. **Prerequisite:** Placement into RD090 or higher; or consent of instructor. **F, W, Sp**

SSP118 Applied Test Taking

1 class hr/wk, 1 cr.

Develops practical and efficient test taking strategies. **Prerequisite:** Placement into RD090 or higher; or consent of instructor. **F, W, Sp**

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

ST100A-Q Occupational Skills Training

1-16 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

VC111 Introduction to Visual Communications

4 class hr/wk, 4 cr.

Presents an overview of the graphic arts and the Visual Communications program and potential careers. Includes creative exercises, ethics, and professional practices. **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 raster and vector image editing software for graphic artists. Includes instruction in professional software used in photo editing and vector illustration. **Prerequisite:** Enrollment in the Visual Communications program; or consent of instructor. **F**

VC115 Introduction to Digital Layout

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

Introduces students to digital layout software in both print and Web design for graphic artists. Includes instruction in page layout for creating print publications, and design and development software and techniques used in the creation of basic Web sites. **Prerequisite:** VC114 with a grade of C or better; or consent of instructor. **W**

VC130 PhotoShop 1**1 class and 2 lab hr/wk, 2 cr.**

Introduces the concepts and techniques of digital image manipulation and correction. **Prerequisite:** Previous computer experience; or consent of instructor. **F, W, Sp, Su**

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 with a grade of C or better; or consent of instructor. **Sp**

VC133A InDesign 1**1 class and 2 lab hr/wk, 2 cr.**

Introduces Adobe InDesign, the industry-standard for page layout and design.

Prerequisite: Previous computer experience. **Offered as needed**

VC134 Dreamweaver**1 class and 2 lab hr/wk, 2 cr.**

Introduces Adobe Dreamweaver web development software to create basic web pages and maintain an online presence. **Prerequisite:** Previous computer experience; 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; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **Offered as needed**

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 with a grade of C or better; or equivalent experience as determined by instructor; or consent of instructor. **Offered as needed**

VC147 Cascading Style Sheets**1 class and 2 lab hr/wk, 2 cr.**

Introduces the theory and use of Cascading Style Sheets, the presentation language for layout and styling of Web pages.

Covers creating basic layouts, formatting text, implementing background images, applying simple animations and visual effects, and targeting designs for different devices. **Prerequisite:** Previous computer experience; or consent of instructor. **Offered as needed**

VC151 Graphic Production**2 class and 2 lab hr/wk, 3 cr.**

Introduces graphic production knowledge and processes for both print and online applications. Includes theory and hands-on work with digital color and color management, raster and vector images, transparency and masking, task automation, and output processes. **Prerequisite:** VC114 with a grade of C or better; or consent of instructor. **W, Offered as needed**

VC171-173 Special Projects**3-9 lab hr/wk, 1-3 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. **Prerequisite:** Enrollment in the Visual Communications program; or consent of instructor. **Offered as needed**

VC224 Layout 1: Page Design**2 class and 4 lab hr/wk, 4 cr.**

Introduces the basics of page, layout emphasizing the grid. Includes assignments focusing on common challenges in digital page layout, and developing both technical and creative thinking skills. **Prerequisite:** VC114 and ART224, both with a grade of C or better; or consent of instructor. **Sp**

VC225 Layout 2: Intermediate Page Design**2 class and 4 lab hr /wk, 4 cr.**

Further develops the skills required in design and page layout. **Prerequisite:** VC224 with a grade of C or better; or consent of instructor. Corequisite: VC246. **F**

VC226 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:** VC225 with a grade of C or better; or consent of instructor. **W**

VC235 Interface Design**2 class and 2 lab hr/wk, 3 cr.**

Introduces students to interface design for desktop and mobile browser-based platforms. Course approaches interface design problems from both visual design and usability perspectives. Includes requirements analysis, design process, grid and hierarchy, usability, and basic technical features and limitations of the medium.

Prerequisite: ART224 and VC224, both with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **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 with a grade of C or better; or consent of instructor. **F**

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 Web standards including Cascading Style Sheets and HTML, and on the study of web hosting, web statistics, content management systems, and other advanced topics in web design. **Prerequisite:** VC238 with a grade of C or better; or consent of instructor. **W**

VC241 Interactive Media**2 class and 4 lab hr/wk, 4 cr.**

Presents an exploration of creating and implementing interactive experiences to communicate narratives and information on digital devices. Focuses on the principles and application of graphic design, user interaction design, and user feedback methods as they apply to digital experiences on touch devices (tablet and mobile) and desktop devices. **Prerequisite:** CIS133SC and VC238, both with a grade of C or better; or consent of instructor. **Sp**

VC246 File Prep**2 class and 2 lab hr/wk, 3 cr.**

Builds knowledge of readying digital files for offset printing. Presents common file problems and their solutions, including issues with page geometry, vector and raster files, application of color, font use, PDF files, and final proofing and output. Corequisite: VC225. **Prerequisite:** VC151 with a grade of C or better; or consent of instructor. **F**

VC271-3A Design Studio**1-3 class hr/wk, 1-3 cr.**

Provides the opportunity to work with an instructor on the design and production of graphic design projects for real clients. Any combination of the courses may be repeated for a maximum of six credits.

Prerequisite: Second year standing in the Visual Communications program; or consent of instructor. **Offered as needed**

VC271-3B Web Studio**1-3 class 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; or consent of instructor. **Offered as needed**

VC271-3C Photo Studio

1-3 class 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 best practices of creative businesses for both freelancers and small organizations. Includes project management, production schedules, estimating and billing, client and supplier communications, record keeping, and asset management. **Prerequisite:** Second-year standing in the Visual Communications program; or consent of instructor.

Corequisite: VC284, and VC285A or VC285B. **Sp**

VC284 Portfolio

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

Serves as a capstone course for all students in the Graphic Design program. Includes portfolio building, job markets, résumés, business stationery, and mock interviews. Participation in a class portfolio show is a graduation requirement. **Prerequisite:** Second-year standing in the Visual Communications program. **Corequisite:** VC283, and VC285A or VC285B. **Sp**

VC285A Design Portfolio Preparation

1 class and 2 lab hr/wk, 2 cr.

Serves as a capstone course for all students pursuing a Graphic Design degree in the Visual Communications program. Includes the analysis and reworking of previous projects and the development of new pieces to include in a portfolio to assist students in getting started on a career path. **Prerequisite:** Second-year standing in the Visual Communications program.

Corequisite: VC283 and VC284. **Sp**

VC285B Web Portfolio Preparation

1 class and 2 lab hr/wk, 2 cr.

Serves as a capstone course for all students pursuing an Interactive Media degree in the Visual Communications program. Includes the analysis and reworking of previous projects and the development of new pieces to include in a portfolio to assist students in getting started on a career path. **Prerequisite:** Second-year standing in the Visual Communications program.

Corequisite: VC283 and VC284. **Sp**

VMW

Wine Studies

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:** SPN101 or higher, with a grade of C or better; or consent of instructor. **Offered as needed**

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:** VMW115 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:** VMW116 with a grade of C or better; or consent of instructor. **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. **F, W, Sp**

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. **F, W, 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 with a grade of C or better; 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 with a grade of C or better; or consent of instructor. **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. **F, Sp**

VMW222 Science of Winemaking

4 class hr/wk, 4 cr.

Focuses on the scientific principles of wine production. Covers 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:** VMW 122 with a grade of C or better; or consent of instructor. **W**

VMW223 Fundamentals of Chemistry for Winemaking

3 class and 4 lab hr/wk, 5 cr.

Introduces the fundamentals of chemistry for students majoring in Wine Science. Examines the interrelationships of chemistry in winemaking. Covers matter and atoms; bonding; molar concepts; chemical equations; solutions and solubility; acids, bases, and salts; oxidation-reduction; chemical equilibrium; carbohydrates and proteins; and introduction to organic chemistry and functional groups common in wine. **Prerequisite:** Placement into MTH111 or higher; or MTH095 or higher; and VMW222; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

VMW224 Chemical Analysis of Must and Wine

3 class and 2 lab hr/wk, 4 cr.
Introduces vineyard and winery laboratory practices. Covers basic chemical principles, laboratory techniques, and analytical procedures for musts and wines. **Prerequisite:** CH123 or VMW223, either with a grade of C or better; or consent of instructor. **Su**

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. **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. **Sp**

VMW244 Wine Production

4 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, VMW224, and VMW222; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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, VMW224, and VMW244; or consent of instructor. Students must be 21 years of age. (All prerequisite courses must be completed with a grade of C or better.) **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, VMW224, and VMW245; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

VMW254 Winery 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 Direct to Consumer Wine Sales 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**

VMW258 Wine E-Marketing

4 class hr/wk, 4 cr.
Focuses on understanding and using the Internet to engage, brand-build, and market and sell products and services of wine-related organizations. Covers both the theory and practice of using the Internet to build and leverage online relationships, facilitate transactions, track competition, monitor performance, and understand the trade-offs of using different online channels and tools. Presents strategies to keep up with and evaluate new channels, trends, methods, and technologies as they emerge and evolve in the field of E-marketing. **Prerequisite:** VMW170 with a grade of C or better; or consent of instructor. **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**

VMW262 Vineyard Pest Management (IPM)

3 class hr/wk, 3 cr.
Covers the identification and management of all relevant pests, diseases, and weeds in vineyard systems. Develops pest monitoring and decision-making skills for vineyard management. Investigates integrated pest management approaches, including cultural, biological, chemical, and other methods. Reviews relevant pest management regulations. **Sp**

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 with a grade of C or better; 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 with a grade of C or better; 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: VMW272 with a grade of C or better; or consent of instructor. **Sp**

VMW274 Global Wine Markets

4 class hr/wk, 4 cr.

Introduces the structure and players in the international wine marketplace and how trade takes place. Covers wine export market research, assessment and selection; tariffs and other barriers to entry; export documentation and the role of intermediaries; trade terms, financing practices, and risk management; and leveraging federal and state export development agencies and services. Stresses the importance of research-based business decisions, planning, collaborative partnerships, and culturally-appropriate international promotion strategies.

Prerequisite: VMW170 with a grade of C or better; or consent of instructor. **Offered as needed**

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 with a grade of C or better; 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 program; or consent of instructor. **Sp**

WFB280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience

WLD

Welding

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**

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. **Sp**

WLD151 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 basic technical and related information concerning other welding processes, in comparison to the shielded metal arc welding process. **F**

WLD152 Intermediate Arc Welding

2 class and 9 lab hr/wk, 5 cr.

Continues WLD151. Covers ferrous and nonferrous alloys and welding procedures. Includes demonstration and supervised practice of techniques on various metals applied in fabrication and repair concurrently with related information concerning the use and structure of these metals. **Prerequisite:** WLD151 with a grade of C or better; or consent of program chair. **W**

WLD153 Advanced Arc Welding

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

Prepares for welding under code-type procedures and on plate. Studies 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:** WLD152 with a grade of C or better; or equivalent industrial experience as determined by program chair; or consent of program chair. **Sp**

WLD155 Fabrication Procedures

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

Introduces shop equipment, including plate shear, press brake, hydraulic ironworker, drill press, and grinder. Review and application of the welding, layout, and fabrication processes and procedures covered in Terms 1 and 2. Includes study and practice using selected welding fabrication projects in a job shop environment. Covers job search techniques. **Prerequisite:** Third term standing in the Welding Fabrication program; or consent of program chair. **Sp**

WLD156 Blueprint Reading and Sketching

2 class and 6 lab hr/wk, 4 cr.

Covers basic sketching techniques and reading for three-view drawings for welders. Includes dimensioning practices, scaling, line alphabet, notes, and symbols. Emphasizes developing skills in reading detail and weldment drawings. **F**

WLD157 Introduction to Layout and Fabrication

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

Studies layout tools and procedures used to fabricate welded metal products. Includes alignment, joint fitting, and tack welding procedures and methods. **Prerequisite:** WLD156 with a grade of C or better; or consent of Program Chair. **W**

WLD161 Basic MIG Welding

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**

WLD162 Intermediate MIG Welding

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

Builds upon WLD161 and includes a study of and practice in welding of carbon steel. Emphasizes production in welding situations, using large diameter electrodes (solid and flux-core) with mixed shielding gases in flat or horizontal positions. **Prerequisite:** WLD161 with a grade of C or better; or consent of program chair. **W**

WLD163 Advanced MIG Welding

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

Continues WLD162. Includes welding mild steel, aluminum, stainless steel, and steel pipe. 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:** WLD162 with a grade of C or better; or equivalent industrial experience as determined by the program chair; or consent of program chair. **Sp**

WLD170 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**

WLD173 Basic TIG Welding**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.

Prerequisite: Second-term standing in the Welding program; or consent of program chair. **W**

WLD177 Welding Processes**2 class and 6 lab hr/wk, 4 cr.**

Introduces the fundamentals of shield metal arc welding, oxyacetylene welding and cutting, metallic inert gas welding (MIG), and arc-air procedures. **W**

WLD197 Welding**1 class and 3 lab hr/wk, 2 cr.**

Covers the fundamentals and application of arc welding, oxyacetylene welding, brazing, and cutting, as they pertain to the automotive industry. **Prerequisite:** Sixth-term standing in the Automotive Technology program; or consent of program chair. **Sp**

WLD250 Fabrication Practices 1**1 class and 6 lab hr/wk, 3 cr.**

Studies of metal fabrication technology, including a comprehensive overview of economic and cost factors that relate to this field (equipment and consumable costs, labor costs), and time studies regarding various welding processes. **Prerequisite:** Fourth-term standing in Welding Fabrication program; or consent of program chair. **F**

WLD251 Fabrication Practices 2**1 class and 6 lab hr/wk, 3 cr.**

Studies of metal fabrication technology, including understanding weld distortion and control measures used in industry, and the use/design of positioning and fixturing equipment commonly used in industry. **Prerequisite:** Fifth term standing in the Welding Fabrication program; or consent of program chair. **W**

WLD258 Welding Shop Problems**2 class and 15 lab hr/wk, 7 cr.**

Offers a review and application of the 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:**

Third-term standing in the Welding program; or equivalent industrial experience as determined by the program chair; or consent of program chair. **Sp**

WLD273 Advanced TIG Welding**9 lab hr/wk, 3 cr.**

Continues WLD173. Provides additional practice to build and refine skills with the TIG welding process. Practical application of the TIG welding process to include welding on various thicknesses and shapes of aluminum, stainless, and carbon steel alloys. **Prerequisite:** Sixth term standing in the Welding Fabrication program or consent of program chair. **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: Placement into WR080; or consent of instructor. **F, W, Sp, Su**

WR088 Introduction to Technical Writing 1**3 class hr/wk, 3 cr.**

Improves writing skills. Focuses on writing intended to replicate projects in occupational and technical fields. Can be used as an option for meeting writing requirements for some CTE programs.

Prerequisite: Placement into WR088 or higher; or consent of instructor. **F, W, Sp**

WR089 Introduction to Technical Writing 2**3 class hr/wk, 3 cr.**

Serves as the report writing class for 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 reports. Can be used as an option for meeting writing requirements for some CTE programs. **Prerequisite:** WR088 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **W, Sp**

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. **Prerequisite:** Placement into WR090; or WR080 with a grade of C or better; or consent of instructor. **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**

WR101 Editing Strategies**1 class hr/wk, 1 cr.**

Covers 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:** Placement into WR115; or WR090 or higher, with a grade of C or better; or consent of instructor.

Offered as needed**WR102 APA Style Source Integration and Citation****1 class hr/wk, 1 cr.**

Covers APA style paper format, clear source integration, and citation as a supplement to upper level college writing and writing intensive courses requiring research papers.

Prerequisite: Placement into WR115; or WR090 or higher with a grade of C or better; or consent of instructor. **Offered as needed**

WR103 MLA Style Source Integration and Citation**1 class hr/wk, 1 cr.**

Covers MLA style paper format, clear source integration, and citation as a supplement to upper level college writing and writing intensive courses requiring research papers.

Prerequisite: Placement into WR115; or WR090 or higher, with a grade of C or better; or consent of instructor. **Offered as needed**

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:** Placement into WR115; or WR090 with a grade of C or better. **F, W, Sp, Su**

WR121 The College Essay**4 class hr/wk, 4 cr.**

Emphasizes clear, detailed writing that employs critical reading and thinking and basic research skills. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better. **F, W, Sp, Su; IL**

WR122 Argument 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.

Prerequisite: WR121 with a grade of C or better. **F, W, Sp, Su; IL**

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:** WR121, WR122, or BA214. (All prerequisite courses must be completed with a grade of C or better.) **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. Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR121, WR122, or WR227; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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.) Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR121, WR122, WR227, or WR240; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Sp**

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. Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR121, WR122, WR227, WR240, or WR241; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR121, WR122, WR227, WR240, WR241, or WR242; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

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. Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR241, WR242, or WR243; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. Course may be repeated for a maximum of 8 credits. **Prerequisite:** WR242, WR243, or WR244; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

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, WR122, WR227, WR240, WR241, WR242, WR243, WR244, or WR245; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed.**

WR262 Screenwriting: Feature Films

4 class hr/wk, 4 cr.

Introduces the basic elements of the screenplay, the process of writing screenplays for feature-length films, and the workshop system used to share and discuss the work of peers. Includes reading a breadth of representative works, creating and revising the first act of a feature-length screenplay, and writing formal critical analyses. Course may be repeated for a maximum of eight credits. **Prerequisite:** Placement into WR121 or higher; or WR115 with a grade of C or better; or consent of instructor. **W**

WR263 Screenwriting: Short Films

4 class hr/wk, 4 cr.

Introduces the basic elements of the screenplay, the process of writing screenplays for short films, and the workshop system used to share and discuss the work of peers. Includes reading and viewing a breadth of representative works, writing formal critical analyses, and creating and revising at least two short screenplays, at least one of which could be used as the basis for a low-budget, independently produced short film. Course may be repeated for a maximum of eight credits. **Prerequisite:** Placement into WR121 or higher; or WR115 with a grade of C or better; or consent of instructor. **F**

WS

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—**Neva Hutchinson**

Zone Four—**Ken Hector**

Zone Five—**Jackie Franke**

Zone Six—**Diane Watson**

Zone Seven—**Betsy Earls**

Faculty and Administration as of July 2015

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.

Check website for most current information.

Adams, Michael—Instructor, Wine Business/Marketing
MA, Wine Business University of Adelaide

Adicho, Eileen F—Instructor, Adult Basic Education
MED, ESOL The College of New Jersey
MA, Education University of California-Santa Barbara
BA, Physical Education California State University-Fresno

Aebi, Eric M—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

Aguirre, Blanca A—Counselor, Student Services
MS, Counseling Oregon State University
BA, Psychology Western Oregon University

Alvarez, Maria E (Cleo)—Counselor
MS, Counseling Western Oregon University

Anderson, Kenneth R (Ken)—Instructor, Mathematics
MS, Systems Analysis Air Force Institute of Technology
BS, Mathematics Western Oregon University
BS, Secondary Education Western Oregon University

Antoine, Patricia L—Instructor, Sociology/Diversity
MS, Sociology Portland State University
BS, Sociology Portland State University
AA, Lower Division Collegiate Chemeketa Community College

Bagnall, Marcia W—Coordinator, Small Business
Development Center
MBA, Administration
California State Polytechnic University
MA, Education California State Polytechnic University
BA, History Occidental College

Ballard, Justus D—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 G—Instructor, Mathematics
MS, Teaching: Mathematics University of Oregon
BS, Mathematics University of Oregon

Barrera, Adriana—Instructor, Adult Basic Education
BS, Business Administration/Human Resources University of Oregon
AAOT, Transfer Degree Chemeketa Community College
License, Drug & Alcohol Counseling
Chemeketa Community College

Beach, Natalie D—Director, Library & Tutoring Services
MLS, Library Science Rutgers
MA, Humanities: History of Ideas University of Texas-Dallas
BA, English Rutgers

Bean Joseph S—Instructor, Life Science
MD, Medicine University of Virginia
BS, Interdisciplinary Studies College of William & Mary

Beavert, Karie L—Instructor, Reading/Study Skills
MAT, Reading Education George Fox University
BA, Law University of California-Santa Barbara

Behnard, Sheeny L—Instructor, Mathematics
MS, Math Science: Statistics Eastern Kentucky University
MS, Statistics Oregon State University
BA, Mathematics Berea College
BA, Physics Berea College

Belmodis, Cassie S—Dean, Health, Human Performance & Athletics
BA, Physical Education Willamette University
BA, Psychology Willamette University

Benvenuto, Gianluigi—CAMP, Latino Outreach Coordinator
BA, Public Policy and Administration Western Oregon University

Bernhisel, Donna J—Instructor, English/Writing
MA, English Utah State University
BS, Social Work Brigham Young University

Blankenship, Matthew A (Matt)—Coordinator, General Education & Transfer
MSE, Education Portland State University
BS, Psychology Pacific University
CERT, Education Portland State University
AAOT, Lower Division Transfer Portland Community College

Bledsoe, Karen E—Instructor, Life Science-Biology
PHD, Science Oregon State University
MAT, Teaching Program Willamette University
BS, Biology Willamette University

Bolante, Rebecca—Coordinator, Disability Services
PHD, Counseling, Oregon State University
MS, Rehabilitation Western Oregon University
BS, Psychology Western Oregon University

Bone, Andrew J—Vice President-Governance & Administration
MA, Humanities California State University at Dominguez Hills
MS, Business California State University-Fresno
BS, Business Administration Saint Mary's College of California

Borden, Tiffany E—Counselor
MS, Counseling Western Oregon University
BA, Liberal Arts Stephens College

Brase, Donald L (Don)—Dean, Humanities & Communications
MA, English University of Montana
BA, English University of Washington

- Buckholz, Cheryl J**—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 LH**—Reference Librarian
 MLS, Library Science Emporia State University
 BA, Philosophy Portland State University
- Burns, Barbara A**—Instructor, Nursing-Clinical
 BSN, Nursing Oregon Health Science University
- Cammack, Janice H (Jan)**—Instructor, Physical Science
 PhD, Chemistry Oregon State University
 BS, Chemistry George Fox University
- Campbell, Kathleen L (Kathy)**—Dean, Enrollment Services
 BA, Human Resources Management George Fox University
 AA, Transfer Coursework Lane Community College
- Canoy, David W**—Instructor, Life Science
 MS, Zoology Oregon State University
 BS, Biology Western Oregon University
 BS, Secondary Education Western Oregon University
- Cegon, Lori A**—Instructor, CCBI Small Business Management
 BS, Public Administration Western Oregon University
- Chou, Cerbrina**—Instructor, Speech
 MA, Communications Central Michigan University
 BA, Speech Communications Shih Hisn University
- Christensen, Benjamin DJ**—Instructor, Life Science
 MS, Geology Central Washington University
 BA, Chemistry/Geology Gustavus Adolphus College
- Clark, Amy J**—Coordinator, Enrollment Services
 BA, History Oregon State University
- Claysmith, Christopher S**—Instructor, Astronomy-Planetarium
 MA, Astronomy Boston University
 BS, Physics Oregon State University
- Cobb, Nolan (Nol)**—Associate Dean, Career & Technical
 Education & Health Sciences
 MBA, Human Resources Management University of Phoenix
 BA, Information Technology University of Phoenix
- Cogswell, Megan**—Instructor, Geography
 MS, International Studies University of Oregon
 BA, Geography Oregon State University
- Colantino, Kimberly A (Kim)**—Instructor, Composition/
 Literature
 MS, English Washington State University
 BA, Literature George Fox University
- Collins, Aileen M**—Instructor, Psychology
 MS, Psychology University of Georgia
 BA, Psychology University of Georgia
- Colon-Cortes, Eric I**—Instructor, Physical Education
 MS, Exercise and Sport Science Oregon State University
- Cortell, Jessica M**—Instructor, Vineyard Management
 PHD, Food Sciences & Technologies Oregon State University
 MS, Horticulture Oregon State University
 BS, Horticulture Oregon State University
- Cortez, Julio**—Counselor
 MS, Counseling-Rehabilitation Western Oregon University
 BA, Psychology Western Oregon University
- Cotter, Kerry N**—Instructor, Chemistry
 MS, Chemistry Arizona State University
 BS, Chemistry University of Puget Sound
- Couch, Daniel E**—Instructor, English
 MA, English Portland State University
- Crawford, LeAnna R**—Instructor, English
 MA, Creative Writing Antioch University
 BA, English University of Northern Colorado
- Crossler-Laird, Janice (Jannie)**—Instructor, English as a
 Second Language
 MED, Adult Education Oregon State University
 BA, German Pacific Lutheran University
 BA, Social Sciences Pacific Lutheran University
- Cruse, Maria T**—Instructor, Political Science
 MA, Political Science University of Texas-Arlington
 JD, Law Cornell University
- Cudmore, Wynn W**—Instructor, Life Science
 PHD, Life Sciences: Ecology Indiana State University
 BS, Biology Northeastern University
- Darby, Sydney L**—Instructor, English
 MA, English Boston College
 BA, English Portland State University
- Davis, Cheryl M**—Instructor, Health Services Management
 MBA George Fox University
 BS, Health Education University of Oregon
- Dennison, Sara R**—Instructor, English
 MA, English Bemidji State University
 BFA, Creative/Professional Writing Bemidji State University
 BA, Spanish Bemidji State University
- Dishong McCormack, Michele D**—Instructor, Speech
 MA, Communications Washington State University
 BA, English and Speech Communication Chadron State College
- Ditterick, Pamela (Pam)**—Instructor, Early Childhood
 Education
 MA, Early Childhood Education Concordia University-St. Paul
 BA, Psychology-Family Studies Corban College
 AA, Early childhood Education Chemeketa Community College
- Drapela, Nicholas E**—Instructor, Physical Science
 PHD, Chemistry Oregon State University
- Duarte, Moises E**—Instructor, Alternative High School
 MA, English California State University-Long Beach
 BA, English (Literature) California State University-Long Beach
- Duncan, Nancy**—Executive Director, Chemeketa Foundation
 MSC, Counseling Oregon State University
 BS, Home Economics University of Wisconsin-Madison
- Dye, Kevin R**—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

- Eagles, Shannon C**—Coordinator, Library Technology Services
MLIF, Library and Information Studies
International Colleges
BA, Arts and Letters; French Portland State University
- Edwards, Karen D**—Instructor, Business Management
MBA, Business & Administration Willamette University
BA, History Willamette University
- Ellis, Jane B**—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 M**—Instructor, Physical Science
MS, Chemistry Portland State University
BS, Chemistry Portland State University
- Ensminger-Stapp, Colin W**—Instructor, Learning Technologies
Facilitator
BA, Telecommunications Pacific University
AAS, Television Production Technology
Mt. Hood Community College
- Eustrom, James L (Jim)**—Vice President-Instruction & Student
Services, Campus President—Yamhill Valley Campus
MED, College Student Services Administration
Oregon State University
BA, Sociology Willamette University
- Evans, Michael A (Mike)**—Coordinator, TRIO/SSS
MS, Counseling Western Oregon University
BS, Psychology Corban College
AA, Refrigeration/Heating/Air Conditioning
Linn-Benton Community College
- Evans, Paul**—Instructor, Communications
MAT, Teaching Lewis and Clark College
MA, English Portland State University
BA, English University of Arizona
- Everitt, Lindsay L**—Instructor, GED Options/High School
Programs
MAT, Teaching Willamette University
BS, English & Mathematics Willamette University
- Fallow, Gary L**—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
- Fifer, Pamela J**—Instructor, Nursing
MS, Nursing University of Portland
BS, Nursing University of Portland
- Finholt, James A**—Instructor, Computer Information Systems
MBA, International Business
Our Lady of the Lake University
BA, Economics Luther College
- Fleming, Garth A**—Instructor, Mathematics
MAT, Mathematics Portland State University
MS, Education-Secondary University of Western Sydney
BS, Industrial Mathematics University of Western Sydney
- Frank, Andrew J (Andy)**—Instructor, Physical Science/
Geology
PHD, Geology University of Texas- Austin
MS, Geology Northern Arizona University
BA, Geology University of the Pacific
- Frank, Andrew S (Andy)**—Instructor, Drafting-Structural
BS, Engineering Oregon State University
AAS, Civil Engineering Technology
Chemeketa Community College
- Frankamp, Benjamin L (Ben)**—Instructor, Chemistry
PHD, Chemistry University of Massachusetts/Amherst
BS, Chemistry George Fox University
- Freeman, Jeremiah S (Sage)**—Media Production Specialist
BS, Fine Arts University of Oregon
- Frey, Melissa A**—Director, Enrollment Services/Registrar
EDM, College Student Services Administration
Oregon State University
BS, Business Administration Oregon State University
- Friedman, Esther J**—Special Education Diagnostician
MA, Special Education Western Oregon University
MA, Bilingual Education Western Oregon University
BA, Elementary Education/Interpreting
Western Oregon University
- Friel, Jessica M**—Instructor, Biology
MS, Molecular Genetics and Biophysics
University of Colorado Health Sciences Center
BS, Zoology University of Colorado-Denver
CERT, Secondary Science Teaching Licensure
University of Colorado-Denver
- Furey, Kevin P**—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
- Galey-Oldham, Denise**—Director, First Year Programs
EDM, College Student Services Administration
Oregon State University
BA, Liberal Studies
California State University Fullerton
- Gastoni, William J (Bill)**—Instructor, Corrections
Ed- Automotive
CERT, 1000 hrs. Specialist: Masters Pro
Ford Motor Credit Technical School
CERT, 200 hrs. Corrections Oregon Police Academy
- Gentile, Benedict J (Ben)**—Instructor, Hospitality & Tourism
Management
BA, Geography University of Illinois at Chicago
- George, Lynnette J (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 R**—Instructor, Reading/Study Skills
MED, Education Purdue University
BA, Education Purdue University

- Goodyear, John M**—Executive Director, Cooperative Regional Library Service
MS, Instruction Systems Technology Indiana University-Bloomington
BA, Telecommunications Indiana University-Bloomington
- Graham, Jerry L**—Instructor, Center for Individualized Learning
MA, Education Alliant International University
BS, Elementary Education Northern Arizona University
AA, General Studies Palomar College
- Grassman, Gary M**—Instructor, Welding/Fabrication
AAS, Manufacturing Engineering Technology Chemeketa Community College
AAS, Welding Fabrication Chemeketa Community College
- Greco, Stephen D (Steve)**—Instructor, Electronics
MS, Engineering-Mechanical Virginia Polytechnic Institute
BS, Engineering-Mechanical Virginia Polytechnic Institute
- Green, Nancy L**—Executive Director, Corrections Education
BS, Management & Communication Corban College
AAOT, Lower Division Transfer Chemeketa Community College
- Guerra, Manuel**—Dean, Student Retention & College Life
AA, Social Sciences Mendocino College
- Hale, Elizabeth E (Beth)**—Learning Technologies Facilitator
MA, Education-Curriculum & Instruction University of Washington
CERT, ESL Initial Teaching Certificate
BS, Political Science Seattle University
University of Washington
- Hallett, David J**—Executive Dean, General Education & Transfer Studies
JD, Law University of Akron
BA, English State University of New York
AAS, Communications Cayuga Community College
- Hammer, Peggy J**—Instructor, Business Technology
MED, Education University of Portland
BS, Liberal Studies Oregon State University
- Hardesty, David S**—Instructor, Adult Basic Education
MS, Education: Policy Foundation & Administration Portland State University
BA, Psychology Southern Methodist University
- Harris, Gregory S (Greg)**—Dean, Marketing & Student Recruitment/PIO
MBA, Business Administration University of Southern California
BA, Asian Studies University of Oregon
- Hayes, Dan**—Counselor
MS, Education: Rehabilitation Counseling: Deafness Western Oregon University
BS, Pre-Med Loyola University
- Healey, Lisa M**—Instructor, Mathematics
MAT, Teaching Program Willamette University
BS, Mathematics Willamette University
AB, Physics Bard College
- Heater, Kelsey J**—Instructor, Mathematics
MED, Curriculum & Instruction University of Phoenix
BS, Mathematics Portland State University
- Herman, Silvia C**—Instructor, Spanish
MA, Spanish University of Oregon
BA, Linguistics University of Oregon
AAOT Mt. Hood Community College
- Herrera, Herlinda (Linda)**—Diversity and Equity Officer
BS, Liberal Studies Eastern Oregon University
AS, General Studies Clackamas Community College
- Hibbeler, Duane M**—Instructor, CAD/CAM
AS, Industrial Mechanical Technology Chemeketa Community College
- Hillis, H. David**—Instructor, Mathematics
MS, Mathematics Colorado School of Mines
BS, Engineer Physics Colorado School of Mines
- Hillyer, Rebecca L**—Director, Legal Resources
JD, Law Willamette University
BS, Social Studies Education Oregon State University
BS, Psychology Western Oregon University
- Hodgson, Traci A**—Instructor, History
PHD, History Boston University
MA, History Boston University
BA, History University of Kansas Main Campus
- Hoelter, Peter L**—Instructor, Visual Communications
BS, Psychology Oregon State University
- Hoerauf, Kate M**—Coordinator, Financial Aid
BS, Sociology Western Oregon University
- Hoffar, Abigail (Abby)**—Dean, High School Partnerships
BS, Social Sciences Western Oregon University
- Hornibrook, Debra K (Debbie)**—Instructor, Speech
EDD, Educational Leadership: Curriculum & Instruction
MS, Speech Communication Portland State University
BS, Psychology Portland State University
- Houghton, Stanley R (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 L**—Counselor
MS, Rehabilitation Counseling: Deafness Western Oregon University
BS, Interdisciplinary Studies Western Oregon University
AAS, Finishing Optical Technician Rochester Institute of Technology
- Huckestein, Julie M**—President/Chief Executive 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 L**—Instructor, Nursing
MS, Gerontological Nursing Oregon Health Science University
BSN, Nursing Oregon Health Science University
AA, Nursing College of San Mateo
- Iseda, Ann E**—Dean, Academic Development
EDD, Educational Leadership, Curriculum & Instruction University of Phoenix
MA, Elementary Education University of Phoenix
BA, Organizational Communication University of Toledo

- Jabin, Tammy I**—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 C**—Instructor, Nursing
 MSN, Parent-Child Nursing Vanderbilt University
 BSN, Nursing Vanderbilt University
- Jensen, Erik L**—Instructor, Physical Science
 MS, Physics Oregon State University
 BS, Physics Portland State University
- Johansen, Barbara W**—Instructor, Business Technology
 MBA, Business Administration Portland State University
 BA, Economics and Business Westmont College
- Johns, Jennifer S**—Instructor, Life Science
 PHD, Ecology and Evolution Rutgers
 BA, Biology and German Duke University
- Johnson, Bradley D (Brad)**—Instructor, Adult Basic Education
 MMUS, Music University of Maryland College
 BA, Music Oregon State University
- Johnson, Kara M**—Instructor, Dental Assisting
 BS, Human Services University of Phoenix
 AAOT, Lower Division Transfer
 Chemeketa Community College
 CERT, Dental Assisting
 Chemeketa Community College
- Jones, Jason W**—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 E**—Instructor, Computer Information
 Systems
 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
- Kato, Christopher T (Chris)**—Academic Transfer Pre-College
 Coordinator
 MA, Linguistics University of New England
 MA, Education University of Phoenix
 BS, Biology Brigham Young University-Hawaii
- Keebler, Joel F**—Director, Agricultural Sciences
 MS, Ornamental Horticulture and Land Design
 University of Tennessee-Knoxville
 BS, Ornamental Horticulture and Land Design
 University of Tennessee-Knoxville
 BA, History University of Tennessee-Knoxville
 AA, General Studies Roane State Community College
- Kellogg, Sandra (Sandi)**—Dean, Health Sciences
 MSN, Nursing University of Phoenix
 BSN, Nursing Boise State University
- Kelly, Michael P (Mike)**—Instructor, Architecture Drafting
 AS, Drafting Chemeketa Community College
- Klein, William R (Bill)**—Instructor, Fire Protection Technology
 AAS, Fire Protection/Fire Suppression
 Chemeketa Community College
- Knofler, Betty J (BJ)**—Instructor, Hemodialysis Technician
 CERT, Teaching Early Childhood Education
 Washington DC Teaching Consortium
 CERT, Nursing Aide
 Antelope Valley Community College
- Kohlmeyer, William (Bill)**—Director, Public Safety
 AA, Law Enforcement Chemeketa Community College
 CERT, School of Staff and Command
 NW Traffic Institute
 CERT, Executive Development
 OEDI DPSST Certificates
- Kraus, Donald D (Don)**—Instructor, Computer Information
 Systems
 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 D**—Cooperative Work Experience Coordinator
 MS, Teaching & Training Online Capella University
 BS, Speech Communication
 Southern Oregon University
- Lander, Gregg W**—Instructor, Emergency Medical Technology
 BS, Liberal Studies Oregon State University
 CERT, Paramedic Training
 Oregon Health Sciences University
- Lanning, Erika P**—Instructor, Early Childhood Education
 MA, Marriage & Family Therapy
 Northwest Christian University
 BS, Psychology University of Oregon
- Larsen, Melissa R (Raschel)**—Instructor, Physical Education
 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 A**—Instructor, Automotive
 BA, Practical Theology Advantage College
 CERT, Automotive Technology
 Universal Technical Institute
- Lazzara, Edward J (Ed)**—Instructor, Spanish
 MA, Romance Linguistics & Literature
 University of California-Los Angeles
 BS, Mathematics Montclair State College
- Limbird, Marty W**—Instructor, Physical Education
 MAT, Education University of Portland
 BA, Athletic Training Linfield College
- Linder, Christine A**—Instructor, Visual Communications
 BAE, Art University of Wisconsin-Oshkosh
- Liss, Layli**—Instructor, Reading/Study Skills
 MED, Education University of St. Thomas
 BA, International Studies DePaul University

- Lopez, Carlos A**—Instructor, Sociology
 MA, Sociology University of Georgia
 BA, Sociology University of North Carolina
 AA, General Studies Asheville-Buncombe Technical Community College
- Lyell, Kiva M**—Instructor, Emergency Medical Technology
 BS, Law Enforcement Western Oregon University
 CERT, Emergency Medical Technician Chemeketa Community College
 AAOT, General Studies Chemeketa Community College
- Mack, Johnny L**—Executive Dean, Career & Technical Education
 BS, Fire Services Administration Eastern Oregon University
 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 L**—Instructor, Psychology
 MA, Psychology University of Georgia
 BS, Psychology University of Georgia
- Malley, Bret**—Instructor, Visual Communications
 MA, Computer Art and Transmedia Syracuse University
 BA, Film and Digital Media University of California-Santa Cruz
- Marquez, Bartolo**—Coordinator, HEP
 BA, Corrections Western Oregon University
- Marrow, Taylor A**—Instructor, History
 MA, History Ball State University
 BA, History Indiana University
 BA, Telecommunications Indiana University
- Martin, Kimberly G (Kim)**—Counselor
 MS, Counseling: Rehabilitation Counseling with the Deaf Western Oregon University
 BA, Education of Hearing Impaired University of Northern Colorado
- Martinez, Eduardo F**—Instructor, Adult Basic Education
 BA, Liberal Studies Loyola Marymount University
 AA, General Studies Marymount College
- Martinez, Yolanda T**—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/Study Skills
 MA, Reading Education University of South Florida
 BA, Elementary Education Stetson University
 PMSC, Post Masters Coursework Georgia State University
- Masters, Christa K**—Instructor, Adult Basic Ed
 BA, Education: Special Education Eastern Washington University
- McCaffrey, Susan L**—Coordinator, Talent Search & Upward Bound
 MPA, Public Administration Portland State University
 BS, Management & Communication Corban College
 AA, Lower Division Transfer Chemeketa Community College
- McDaniel, Heather M**—Assistant Director, Human Resources
 MA, Conflict Resolution Portland State University
 BA, Humanities Western Oregon University
- McKenzie, Brian S**—Instructor, Mathematics
 MS, Mathematics Oregon State University
 BS, Mathematics Oregon Institute of Technology
- McLaran, Diane L**—Executive Director, Center for Business & Industry
 BA, Management & Organizational Leadership Northwest Christian College
 AS, Early Childhood Education Lane Community College
- McLearn, Brian M**—Instructor, Automotive
 AAS, Automotive: Ford Asset Mt Hood Community College
- Meiner, Karl J**—Instructor, High School Programs
 MAT, Teaching Lewis and Clark College
 MA, English Portland State University
 BA, English University of Arizona
- Merzenich, Timothy A (Tim)**—Instructor, Mathematics- Learning Center
 BS, Mathematics Oregon State University
- Mickel, Rebecca A**—Instructor, Nursing
 MSN, Nursing University of Phoenix
 BS, Nursing Oregon Health Sciences University
 ADN, Nursing Linn-Benton Community College
- Milburn, Carolyn W**—Instructor, Nursing
 MSN, Nursing Walden University
 BSN, Nursing Oregon Health Sciences University
- Milhausen, Michael J**—Dean, Math, Science, & Technology
 PHD, Biology Syracuse University
 BS, Biology Le Moyne College
- Miller, Angela G (Angie)**—Coordinator, Library Services
 Course Work, Travel Operations Chemeketa Community College
- Miller, Glen A**—Dean, Applied Technologies
 MED, College Student Services Administration Oregon State University
 BS, Psychology/Human Services Corban College
 CERT, Career Development/Facilitator Training Chemeketa Community College
- Miller, Mark W**—Instructor, Engineering & Mathematics
 MS, Engineering: Mechanical Oregon State University
 BS, Engineering: Mechanical Oregon State University
- Mitchell, Nolan E**—Instructor, Mathematics
 MA, Mathematics Oregon State University
 BS, Mathematics Western Oregon University
- Mohn-Brown, Elaine L**—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 R**—Instructor, Business Technology
 MED, Education Oregon State University
 BS, Secondary Education Eastern Oregon University
- Montgomery, Jennifer R**—Instructor, Anthropology
 MA, American Indian Studies University of Arizona
 BS, Anthropology University of Oregon

- Monto, Cecelia C**—Dean, Evening, Weekend & Education Programs
MS, Education Portland State University
BA, English Lewis and Clark College
- Moore, Dorothy**—Education Assessment Coordinator
PHD, Curriculum & Instruction University of Nevada-Reno
BS, Education University of Nevada-Reno
- Morrison, Peggy S**—Coordinator, High School Programs
MA, Christian Counseling Psychology Western Evangelical Seminary
- Mosher, Brian S**—Instructor, English
MA, English Oregon State University
BA, English Western Oregon University
- Moxley, Douglas J (Doug)**—Manager, Web Services
BS, Psychology Western Oregon University
AA, General Studies Chemeketa Community College
AS, Food Sciences & Technologies Chemeketa Community College
- Munson, Clifford W (Cliff)**—Instructor, Fire Protection Technology
BED, Vocational Education California State University-Long Beach
AS, Fire Science Long Beach City College
- Murphy, Kathryn E**—Instructor, Nursing
DNS, Nursing Science Breyer State University
MSN, Nursing University of Illinois
BSN, Nursing University of Illinois
- Murray, Susan**—Executive Dean, Academic Progress & Regional Education Services
EDD, Education Oregon State University
BA, English Willamette University
CERT, Teaching Program Portland State University
- Myers, Michael J (Mike)**—Instructor, Welding/Fabrication
AS, Welding Chemeketa Community College
- Naas, Fauzi A**—Coordinator, Institutional Research & Planning Graduate Course Work, Education Technology Leadership
George Washington University
BS, Computer Sciences Western Oregon University
AS, Mathematics Chemeketa Community College
- Nelson, Christian L (Chris)**—Instructor, Physical Science
MS, Chemistry: Organic University of Illinois Urbana
BA, Chemistry Central University of Iowa
- Nelson, Holly D**—Dean, Instructional Programs-Yamhill Valley Campus
MAT, Health Education Western Oregon University
BA, Health Education Western Oregon University
- Newton, Kristi K**—Instructor, Business Management
MBA, Business Administration University of Portland
BS, Business Administration Oregon State University
- Nielsen, Alissa S**—Instructor, Developmental Writing
MA, English Literature Portland State University
MFA, Writing Pacific University
BA, Literature & Writing Evergreen State College
- Noah, Mark W**—Occupational Skills Training Coordinator
AS, Biology Lane Community College
BS, Biology University of Oregon
CERT, Vocational Rehabilitation Counselor Oregon Worker's Compensation Division
- Nord, Christopher M (Chris)**—Instructor, Mathematics
MS, Mathematics Oregon State University
BA, Mathematics Goshen College
- Northam, Ashley A**—Instructor, Speech-Language Pathology Assistant Program
MS, Speech & Hearing Science Portland State University
BS, Speech & Hearing Science Portland State University
AA, General Studies Sierra College
- O'Hara, Richard K (Rick)**—Instructor, Life Science
PHD, Zoology Oregon State University
MS, Zoology Michigan State University
BS, Zoology Michigan State University
- Olheiser, Samuel T (Sam)**—Instructor, Automotive
AAS, Automotive Technician Chemeketa Community College
- Oliveros, D. Claire**—Executive Dean, Student Development and Learning Resources
PHD, Education: Community College Leadership Oregon State University
MS, Educational Policy, Foundations & Administrative Studies Portland State University
BS, Speech Communication Western Oregon University
- Olson, Kevin J**—Instructor, GED Options/High School Programs
MAT, Teaching Western Oregon University
BA, English Western Oregon University
- Orchard, Sue**—Dean, Counseling & Student Support Services
PSYD, Clinical Psychology Pacific University
MS, Mental Health Counseling Eastern Washington University
BA, BS Psychology and Communication Studies Eastern Washington University
- Padilla, Aspen**—Tutoring Center Coordinator
MS, Museum and Field Studies University of Colorado
MS, Ecology and Evolutionary Biology Iowa State University
BS, Geosciences The University of Arizona
- Park, Joyce A**—Instructor, Nursing—Clinical
MBC, Business George Fox University
MIM, Human Resources Management University of Phoenix
BS, Nursing Idaho State University
- Patterson, Steven J (Steve)**—Director, Community Education
MED, Recreation & Leisure Studies University of Minnesota
BS, Park & Recreation Resources Michigan State University
- Payne, Eva M**—Instructor, Communication Skills
MA, English Oregon State University
BA, English Oregon State University
- Petschauer, Denise M**—Instructor, GED Options/HS Programs
MA, Education Concordia University
BA, Mathematics California State University-LA
Credential, Mathematics California State University-LA
Certificate, Cross-Cultural, Language & Academic Development California State University-LA

- Pierce, Samuel L (Sam)**—Instructor, Psychology
 PSYD, Psychology George Fox University
 MA, Psychology: Clinical George Fox University
 BS, General Studies Oregon State University
- Pillette-Stephens, Debra A**—Instructor, Criminal Justice
 MS, Corrections Western Oregon University
 BS, Physical Education & Health Western Oregon University
 BS, Secondary Education Western Oregon University
- Pintler, Michael A (Mike)**—Instructor, Welding/Fabrication
 AS, Welding Fabrication Chemeketa Community College
- Plaisance, Ricky N (Doc)**—Instructor, Adult Basic Ed
 MFA, Theater Arts Louisiana State University
 MS, Educational Administration National University
 BS, Mass Communications McNeese State University
 BS, General Studies United States Naval Academy
- Powers, Kristina C (Kris)**—Instructor, Hospitality & Tourism
 Management
 MA, Counseling Psychology Lewis & Clark College
 BS, Business Administration Oregon State University
- Powers, Magdalen F**—Instructor, Composition/Literature
 MFA, Creative Writing University of Florida
 BA, English Reed College
- Prange, Teresa M**—Instructor, Accounting
 MBA, Business Administration Maharishi International University
 BA, Interdisciplinary Studies Maharishi International University
 CERT, Secretarial Studies Chemeketa Community College
- Pratt, Nathan C**—Instructor, Physical Education
 MS, Health Education Western Oregon University
 BA, Social Studies St. Martin's University
 AAOT Lane Community College
- Prentice-Craver, Cynthia A (Cindy)**—Instructor, Life Science
 MS, Education Curriculum & Instruction Portland State University
 BS, Physical Education Oregon State University
- Privitera, Adam J**—Instructor, Psychology
 MA, Psychology State University of New York-Buffalo
 BA, Psychology State University of New York-Buffalo
- Prothero, Marylin I**—Instructor, English as a Second Language
 MED, Adult Education Oregon State University
 BA, Foreign Languages University of Oregon
- Protiva, Karen W**—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
 MED, Education Linfield College
 MS, Mathematics: Teacher's Program University of Oregon
 BA, Mathematics Linfield College
- Read, Russell A**—Instructor, Life Science
 MED, Education Oregon State University
 BS, Secondary Education Eastern Oregon University
- Reed, Eric**—Instructor, American Sign Language
 MED, Early Childhood Education Lewis & Clark College
 BA, Education of Hearing Impaired University of Tulsa
- Reed, Marilyn Hart**—Coordinator, Apprenticeship
 BS, Humanities Oregon State University
- Reeves, David J**—Instructor, English as a Second Language
 MA, Sociology University of California—Los Angeles
 MA, Linguistics California State University—Northridge
 BS, Economics University of London
- Reininger, Mandy E**—Instructor, Computer Information
 Systems
 MSM, Information Systems Management Keller Graduate School of Management
 BA, Communications State University of New York- Genesco
 CED, Networking Systems University of Phoenix
- Reyna, Lupe**—Coordinator, Veteran's Services
 BBA, Business Administration Gonzaga University
- Richardson, Steven R (Steve)**—Instructor, Composition/
 Literature
 MFA, Literature: Creative Writing University of Oregon
 BA, Literature: Creative Writing University of California-Santa Cruz
- Rieman, Richard E**—Instructor, Mathematics
 MS, Mathematics University of Texas-San Antonio
 BS, Mathematics University of Texas-San Antonio
- Roache, Marshall M**—Dean, Life Safety
 MA, Liberal Studies Fort Hays State University
 BA, English University of Oregon
- Rogers, Timothy E (Tim)**—Associate Vice President/Chief
 Information Officer
 MS, Educational Leadership and Policy Portland State University
 BS, Administration of Justice Portland State University
- Rollins, Bryan D**—Instructor, Adult Basic Education
 MA, TESOL Portland State University
 BA, Spanish Western Oregon University
- Rozin, Miriam R**—Director, Business Services
 MA, Education: Policy Foundation & Administration Portland State University
 BS, Business Western Oregon University
- Rupert, Jill N**—Instructor, English
 PHD, English Tulane University of Louisiana
 MA, English Tulane University of Louisiana
 BA, English Whitman College
- Sadouk, Jennifer J**—Instructor, Learning Center-Dallas
 Campus
 MA, Continuing and College Education Western Washington University
 TESOL Certificate Western Washington University
 BA, History University of Texas-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
- Sandrock, Jessica H**—Instructor, Winemaking
 MS, Horticulture Science Oregon State University
 BS, Horticulture Science Oregon State University
- Scanlon, Bruce G**—Coordinator, Dual Credit
 MS, Education Western Oregon University

- Schellenberg, Kellie S**—Dean, Distance Learning & Academic Technology
BA, Psychology University of Regina
- Schilling, Joleen M**—Instructor, Horticulture
MS, Environmental Science Oregon State University
BS, Horticulture Oregon State University
- Schloeman, Keith D**—Instructor, Mathematics
MS, Mathematics Oregon State University
BS, Mathematics Western Oregon University
- Schnider, Sheldon J**—Instructor, CAD/CAM
AA, Manufacturing Engineering Technologies
Chemeketa Community College
- Scholer, Andrew**—Instructor, Computer Science
MS, Computer Sciences
University of Southern California
BS, Science University of California-Los Angeles
- Scholz, Alba M**—Supervisor, Distance Education
BA, Psychology University of Minnesota-Twin Cities
- Schramm, Jennifer E**—Instructor, Life Science
PHD, Biology: Plant University of California-Berkeley
BA, Biology Knox College
- Schreiber, Meredith A**—Director, Auxiliary Services
BA, History Oregon State University
- Schultze, David E**—Instructor, Nursing
DE Candidate, Organizational Leadership
Northeastern University
MSN, Nursing Education Gonzaga University
BSN, Nursing University of Portland
BS, Social Science Marylhurst University
- Scott, Laura L**—Instructor, Developmental Writing
MA, Anglo-Irish Literature Trinity College-Dublin
BA, English Literature/Spanish Language
Pacific University
CERT, TEFL College of Ireland
- Sekafetz, Charles O (Chuck)**—Instructor, Electronics
MBA, Master of Business Administration
Marylhurst University
BS, Business Management Marylhurst University
AAS, Electronic Engineering
Chemeketa Community College
- Sessions, Patricia M (Patti)**—Instructor, Business Technology
PMSC, Computers in Education University of Oregon
MS, Business Education Montana State University
BS, Business Montana State University
- Sharpe, Michie**—Instructor, Japanese
MA, Japanese Language & Pedagogy University of Oregon
BA, Music Education University of Oregon
- Short, Jared M**—Instructor, Communication
MA, Interdisciplinary Studies Oregon State University
BS, Speech Communication Oregon State University
- Sipe, Deborah M**—Dean, Teaching and Learning
PHD, Education Oregon State University
MS, Speech Communication: General
Portland State University
MA, International Studies University of Oregon
AB, Political Science University of California-Berkeley
- Skirvin, Charles (Chuck)**—Counselor
MED, Education Oregon State University
BS, General Science Oregon State University
- Smith, Kevin D**—Instructor, English
PHD, English University of Illinois-Chicago
MA, English University of Illinois-Chicago
- Sprague, Alice M**—Director, Human Resources
BS, Social Sciences Portland State University
AA, Lower Division Transfer
Chemeketa Community College
- Steiger Morris, Christina R**—Instructor, Human Services
MED, Counseling University of Oregon
BS, Psychology Oregon State University
AAOT Linn-Benton Community College
- Stevens, Karen F**—Counselor
MSW, Social Work Portland State University
BS, Psychology Western Oregon University
AAOT, Lower Division Transfer
Chemeketa Community College
- Sullivan, Geraldene A (Gerry)**—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 H**—Instructor, Farm Business Management
MS, Agriculture Economics New Mexico State University
BS, Animal Science Brigham Young University
- Tardiff, Bryan C**—Instructor, Mathematics
MS, Mathematics Oregon State University
BS, Mathematics Oregon State University
- Taylor, R**—Dean, Social Science, Human Services, Business & Technology
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 Program
MBA, Business Administration University of Hartford
BS, Business Management University of Maryland
AAS, Accounting Northern Virginia Community College
- Terpin, Mark E**—Instructor, English as a Second Language
BA, Linguistics University of Oregon
- Tobey, Allison S**—Instructor, English
MFA, Creative Writing Antioch University
BA, Psychology Grinnell College
- Trabue, Jeremy G**—Instructor, English
MA, Psychology State University of West Georgia
MA, English State University of West Georgia
BA, Humanities New College of California
- Trattner, Tamara L**—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 D**—Instructor, Adult Basic Education
MA, Educational Administration
California State University-Los Angeles
BA, Speech Communication
California State University-Long Beach
AA, Humanities Cerritos College

- Tuss, Lana L**—Instructor, Accounting
 MS, Taxation Golden Gate University
 MM, Management Southern Oregon University
 BS, Business Administration-Accounting Portland State University
- Underwood, Elizabeth L**—Instructor, Human Services
 MSW, Social Work New York University
 BM, Music in Vocal Performance University of Montana
- Urban, Wanda E**—Instructor, Human Services
 MS, Counseling University of Oregon
 BA, Special Education University of Oregon
- Valdivia, Armandina (Dina)**—Instructor, English as a Second Language
 MED, Adult Education Oregon State University
 BA, Art Oregon State University
- Valentine, Friday**—Curator, Digital Assets
 MLS, Library Science Emporia State University
 AS, Theater Arts Rio Hondo College
- VanDyke, Melissa L**—Instructor, Medical Assisting
 BA, Health Care Administration George Fox University
 AGS, General Studies Chemeketa Community College
 CERT, Medical Administrative Assistant Chemeketa Community College
- VanHouten, Debra L**—Instructor, Life Science
 MS, Physiology University of California-San Francisco
 BS, Animal Science California Polytechnic State University
- VanSlyke, Timothy J (Tim)**—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 E**—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 P**—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 D**—Instructor, Physical Science
 MS, Chemistry Oregon State University
 BS, Engineering: Civil Oregon State University
- Wagner, Aaron T (Toby)**—Instructor, Mathematics
 MA, Mathematics California State University-Fullerton
 BA, Mathematics Walla Walla College
- Watkins, Carmen R**—Instructor, Mechanical Design
 BS, Mechanical Engineering University of Alaska Fairbanks
- Wenzig, Theresa L (Terri)**—Instructor, Nursing
 MSN, Nursing University of Phoenix
 BSN, Nursing Lewis-Clark State College
 AS, Nursing North Idaho College
- West, Ryan M**—Associate Dean, Yamhill Valley Campus
 MED, College Student Services Administration Oregon State University
 BS, Business Western Oregon University
- White, Roger C**—Instructor, Electronics
 AS, Electronic Engineering Chemeketa Community College
- Whitney, John R**—Instructor, English as a Second Language
 MA, English Northern Arizona University
 BS, English Northern Arizona University
- Whygle, Leanne J**—Instructor, Nursing
 MSN, Nursing Grand Canyon University
 BSN, Nursing Grand Canyon University
- Williams, B. Patrick**—Instructor, Philosophy/Religion
 MAIS, Interdisciplinary Studies Oregon State University
 BS, History Oregon State University
 BS, Philosophy Oregon State University
- Williams, Jack D**—Instructor, Nursing
 MSN, Nursing University of Phoenix
 BS, Nursing National University
 AS, Nursing Imperial Valley College
- Willis, Monica S**—Instructor, Adult Basic Education
 MED., Education University of Portland
 BA, International Studies Willamette University
 BA, Spanish Willamette University
- Wolfe, Steven O (Steve)**—Instructor, Geography
 MA, Geography University of Missouri—Columbia
 BS, Geography Oregon State University
 AA, Geography Central Oregon Community College
- Wood, Josie M**—Instructor, Speech
 MAIS, Interdisciplinary Studies Oregon State University
 BA, Speech Communication Western Oregon University
 AA, Transfer Coursework Central Oregon Community College
- Wood, Rhonda S**—Instructor, Emergency Medical Technology
 BS, Nursing California State University
 AA, Nursing: Registered Fullerton College
- Woods, Edward A (Ed)**—Coordinator, Mid-Willamette Education Consortium/Perkins
 MED, Education Oregon State University
 BS, Elementary Education Western Oregon University
 BA, Business/Economics George Fox University
- Wright, Phillip**—Director, Facilities and Operations
 BS, Civil Engineering Technology University of Idaho
- Wu, Jack**—Instructor, Accounting/Business Management
 MBA, Business Administration—Finance University of Connecticut
- Yancey, Theresa C**—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. Respect the diversity and dignity of all persons.

- 1) Students are encouraged to demonstrate respect for all persons.
- 2) Students shall not participate in physical abuse or verbal abuse that is severe, pervasive, and objectively offensive towards any individual so to create a hostile or adverse educational or work environment.

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 shall abide by federal, state, and local laws.
- 2) Students have an ethical obligation to confront, challenge or report destructive or abusive behavior.
- 3) Students shall not abuse alcohol or other drugs.
- 4) Smoking is prohibited on or in all properties owned and/or controlled by Chemeketa, including smoking in private vehicles while on property

owned and/or controlled by Chemeketa.

5) The possession of any firearm, knife with a blade exceeding four (4) inches, or illegal weapon, is prohibited on college property, or college controlled property, in accordance with both State and Federal Law (ORS 166.360- 166.380). Law enforcement officers are exempt from this policy. The college president/chief executive officer may grant other exemptions for training purposes or safety purposes.

6) Chemeketa's Appropriate Use and Software Copyright policies prohibit the use of the Chemeketa network or computer systems for the unauthorized duplication, use, or distribution of copyrighted digital materials, movies, music, and videos, regardless of the method employed (e.g. web pages, peer-to-peer (P2P) file sharing, e-mail, etc.).

III. **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, 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.
- 4) If a student is charged with a violation of law not related to his/her activities on campus, the matter shall be of no disciplinary concern to the college, unless the student is incarcerated and cannot comply with educational requirements.
- 5) 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 Procedure # 5140 and corresponding Guidelines.
- 2) Information about student views, beliefs, private activities, and political associations which is acquired or learned by college employees in the course of work is to be treated with professional judgment and confidentiality.
- 3) 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.
- 2) 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.
- 3) In the classroom, students may take exception to the information and may reserve judgment about matters of opinion, but they are responsible for learning the content of the course.
- 4) Chemeketa Community College, as publisher, bears in conjunction with the staff of student publications, the responsibility for the content of the publications. The publications shall adhere to all applicable Oregon statutes, such as those regarding mass communications.
- 5) The student newspaper shall be governed by the Student Newspaper Guidelines and shall follow the Canons of Journalism of the American Society of Newspaper Editors.
- 6) 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.

Each of the dispute types listed here in sections 4.A.–4.F., shall be subject to a specific conflict resolution process:

A. Grade Appeals. Students are encouraged to maintain frank and open communication with their instructor 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 Executive Dean of Students office and online at: http://www.chemeketa.edu/forms/documents/registrar_gradeappeal.pdf
 - b. The form should be submitted to the Executive Dean of Students office where it will be forwarded to the appropriate Academic Dean/Director.
 - c. The Academic Dean/Director 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 Academic Dean/Director will contact the student with their decision. The Academic Dean/Director'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 Academic Dean/Director 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, the Academic Dean or Director, may be requested. The purpose of the meeting is for the student to hear the charges and present his/her side of the case.
- 2) The Academic Dean determines if the action recommended by the faculty member is appropriate. The decision of the Academic Dean or Director is final.
- 4) Further consequences may be imposed by the Executive Dean of Students in cases of grievous violations of academic honesty or for a continued pattern of violations.
- 5) Consequences for violations of academic dishonesty are detailed in Procedure # 5020.
- 6) 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. 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.c or issues involving Sexual Harassment which are covered in section 4.e.** 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 submit a written complaint to the Executive Dean of Students. The complaint may be submitted via e-mail or in hard copy format, but must be in writing.
- 2) The student whom the complaint is filed against will be notified in writing of the charges and the penalty which might result from consideration of the complaint. (See Section 5.A. 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 Executive 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 Executive 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 Executive 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 Executive 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 Executive 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. Sexual Harassment, Discrimination and Misconduct. 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. See College Policies and Procedures # 1750 and 1751.

The college has established a Harassment Network of staff who can assist students with these issues.

F. 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 Executive 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 which may be necessary for college review of the complaint.
- 2) Upon receipt of the complaint, the Executive Dean of Students will schedule a meeting with the student filing the complaint. At that meeting, the Executive Dean of Students shall attempt a resolution of the complaint.
- 3) In the event that the resolution proposed by the Executive 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 Executive 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 Executive 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. Types of disciplinary action which may be imposed and authorization for such action are:

- 1) Temporary Exclusion is the removal of a student from a class or service area, not to exceed one class session, one day, or removal from a college-sponsored function for the duration of 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. 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 Academic Dean/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 Executive 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) At the Yamhill Valley campus, the campus Dean, or designee, may impose disciplinary probation or suspension from classes in a program or service area, or from college-sponsored functions.
- 5) Expulsion is the permanent separation of a student from a program or service area or conditional separation from the college. The Executive Dean of Students may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.

B. The Executive 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

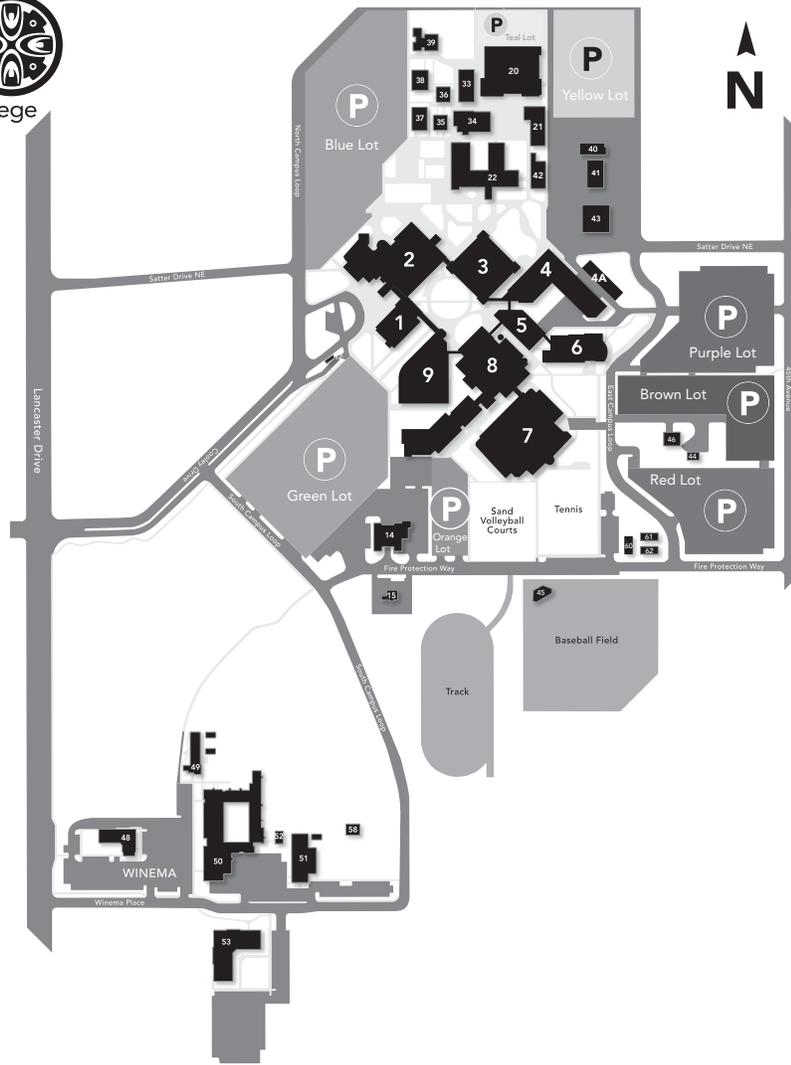
- A. The Ombudsperson/Executive Dean may decide, at his/her discretion, to take any issue involving student misconduct to a hearing before the College Appeals Committee. A hearing before the College Appeals Committee occurs in situations which may require a summary decision on an unresolved conflict or may result in the permanent expulsion of a student.
- B. The college Ombudsperson/Executive Dean, in consultation with the Executive 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 Executive 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 Executive 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.



Campus Map Legend

- | | | |
|---|--|---|
| 1 Bookstore; Faculty Offices | 7 Gymnasium; Physical Education Classrooms. | 41 Classrooms |
| 2 Student Services: Advising & Counseling; Business Office; Career Center; College Assistance Migrant Program; Convenience Store; Disability Services; Enrollment Center, Financial Aid; Food Court; Multicultural Center, Occupational Skills Training; Planetarium; Public Safety; Student Retention and College Life; Testing Services; TRiO, Student Support Services, Talent Search, Upward Bound; Tutoring Services; Veterans' Services, Information Center. Other Offices: College Support Services; Grants; Human Resources; President's Office; Public Information, Marketing and Student Recruitment. | 8 Dental Clinic; Health and Science Classrooms; Massage Clinic. | 43 Copy Center; Shipping and Receiving. |
| 3 Student Services: Art Gallery; Classrooms; Math Learning Center. Other Offices: Extended Learning, Instruction and Student Services. | 9 Student Services: Classrooms; Distance Education; Library; Writing Center. Other Offices: Curriculum Resource Center; Opportunity Center; Television Studio. | 45 Activity Field |
| 4 Career-Technical Classrooms. | 12 Information Kiosk | 46 Greenhouse |
| 5 Art Classrooms; Career-Technical Classrooms. | 14/15 Burn Tower; Fire Station. | 48 Conference Rooms; MaPS Credit Union; Winema Market & Deli. |
| 6 Auditorium; Computer Labs; Testing Center; Employee Development Center. | 16 High School Equivalency Program (HEP) | 49 Mid-Willamette Education Consortium, Youth GED Options |
| | 20 Machining; Drafting. | 50 Early College High School |
| | 21 Engineering; Welding | 51 Apprenticeship Programs; Winema High School. |
| | 22 Academic Transitions; Information Technology | 52 Classrooms |
| | 23 Classrooms | 53 Department of Human Services |
| | 33 Northwest Innovations. | 60 Agricultural Sciences |
| | 34 Catering Kitchen and Conference Rooms. | 61 Classrooms |
| | 35 Classrooms; SOAR | 62 Classrooms |
| | 36 Classrooms | |
| | 37 Faculty Offices | |
| | 38 Faculty Offices | |
| | 39 Child Development Center | |
| | 40 Physical Plant Operations | |

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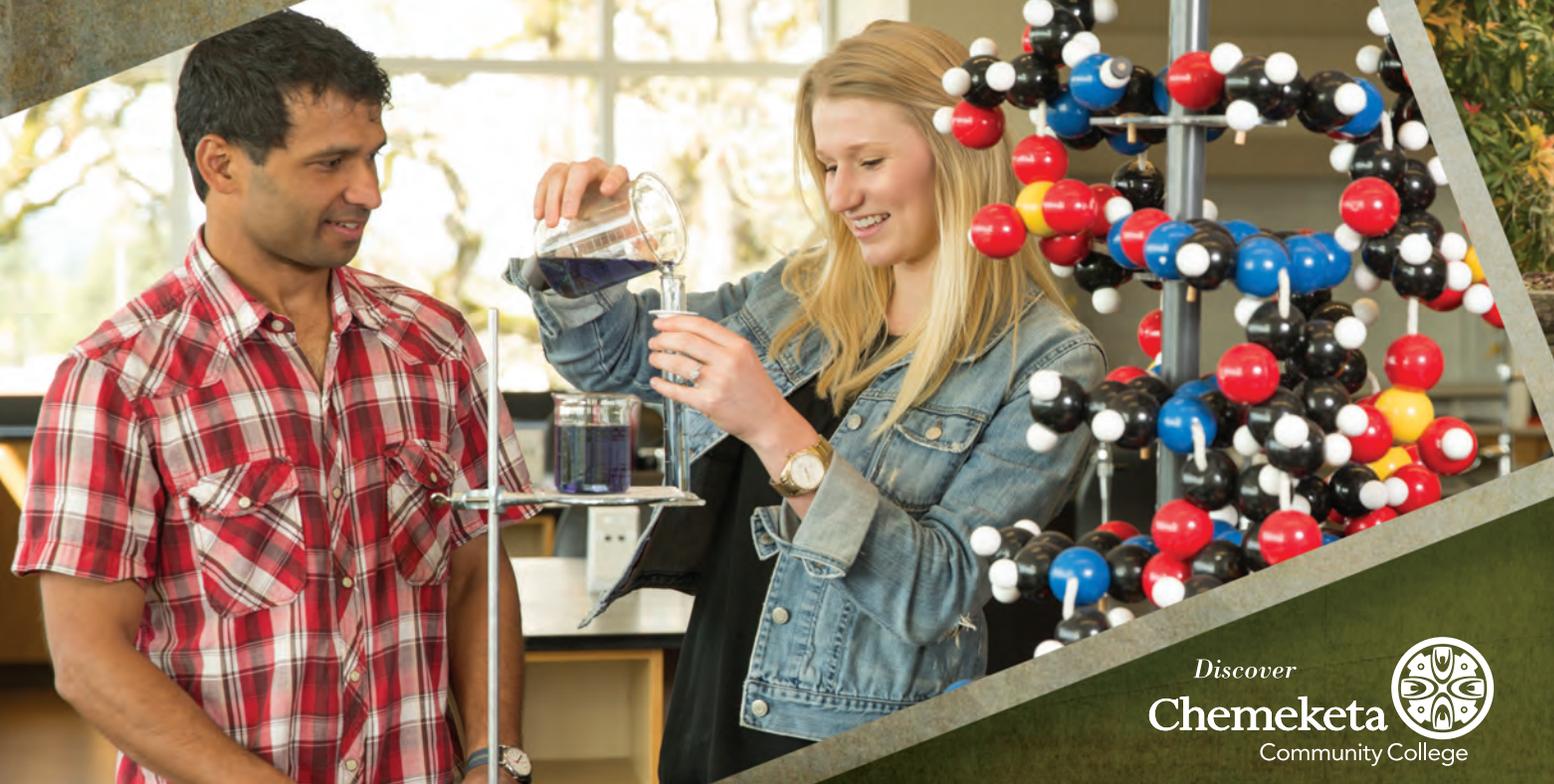
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