

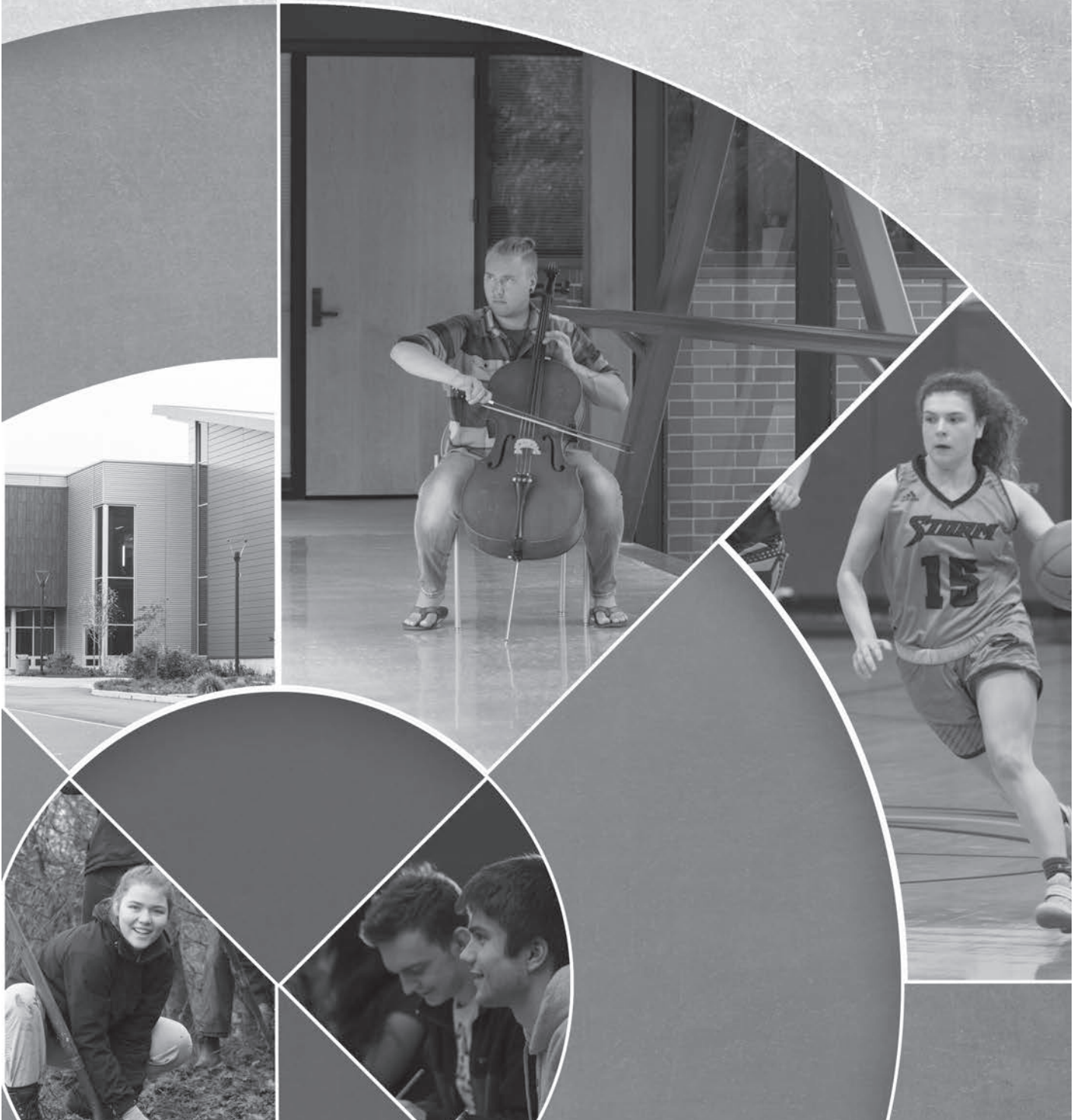
CHEMEKETA

Community College Catalog

2017–2018



Chemeketa Community College Catalog 2017-2018



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
jobplacement@chemeketa.edu	
Chemeketa Online	503.399.7873
online@chemeketa.edu	
College Life	503.399.5116
collegelife@chemeketa.edu	
Community Education	503.399.4949
ceinfo@chemeketa.edu	
Cooperative Work Experience	503.399.5028
cwe@chemeketa.edu	
Copy Center.....	503.399.5166
copycenter@chemeketa.edu	
Disability Services Voice and TTY Access.....	503.399.5192
disability@chemeketa.edu	
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
graduation@chemeketa.edu	
Human Resources.....	503.399.5009
humanresources@chemeketa.edu	
Library.....	503.399.5043
library@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	503.399.5163
4910 Brooklake Rd. NE, Brooks	
Center for Business & Industry	503.399.5181
626 High Street NE	
Chemeketa Polk	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	

Chemeketa Community College prohibits unlawful discrimination based on race, color, religion, national origin, sex, marital status, disability, protected veteran status, age, gender, gender identity, sexual orientation, pregnancy, whistleblowing, or any other status protected by federal, state, or local law in any area, activity or operation of the College. The College also prohibits retaliation against an individual for engaging in activity protected under this policy, and interfering with rights or privileges granted under federal, state or local laws.

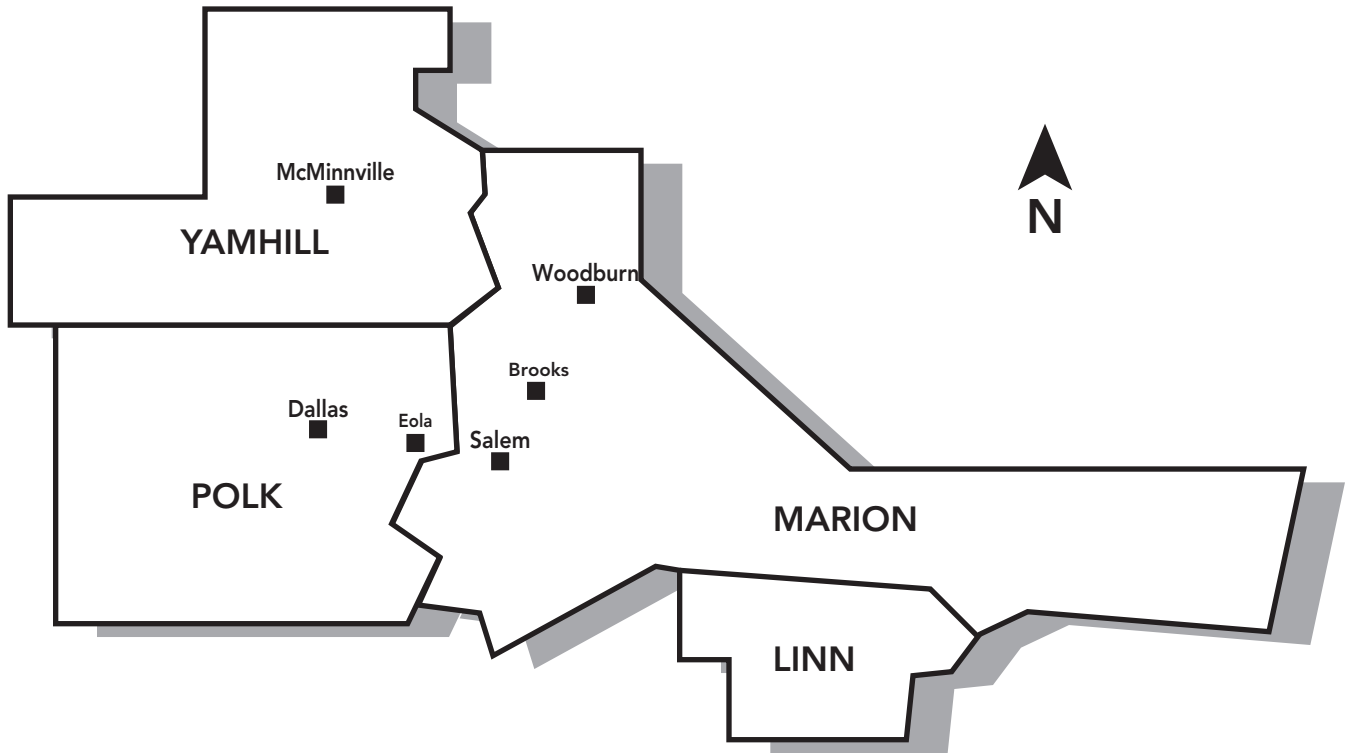
Under College policies, equal opportunity for employment, admission, and participation in the College's programs, services, and activities will be extended to all persons, and the College will promote equal opportunity and treatment through application of its policies and other College efforts designed for that purpose.

Persons having questions or concerns about: Title IX, which includes gender-based discrimination, sexual harassment, sexual violence, interpersonal violence, and stalking, contact the Title IX coordinator at 503.365.4723, 4000 Lancaster Dr. NE, Salem, OR 97305, or go.chemeketa.edu/titleix. Individuals may also contact the U.S. Department of Education, Office for Civil Rights (OCR), 810 3rd Avenue #750, Seattle, WA 98104, 206.607.1600.

Equal Employment Opportunity or Affirmative Action should contact the Affirmative Action Officer at 503.399.2537, 4000 Lancaster Dr NE, Salem OR 97305

To request this publication in an alternative format, please call 503.399.5192.

Chemeketa Community College District



LEGEND

■ Communities with Chemeketa locations

Chemeketa Locations

Salem Campus

4000 Lancaster Dr. NE Salem, OR 97305-1453

Chemeketa Polk

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

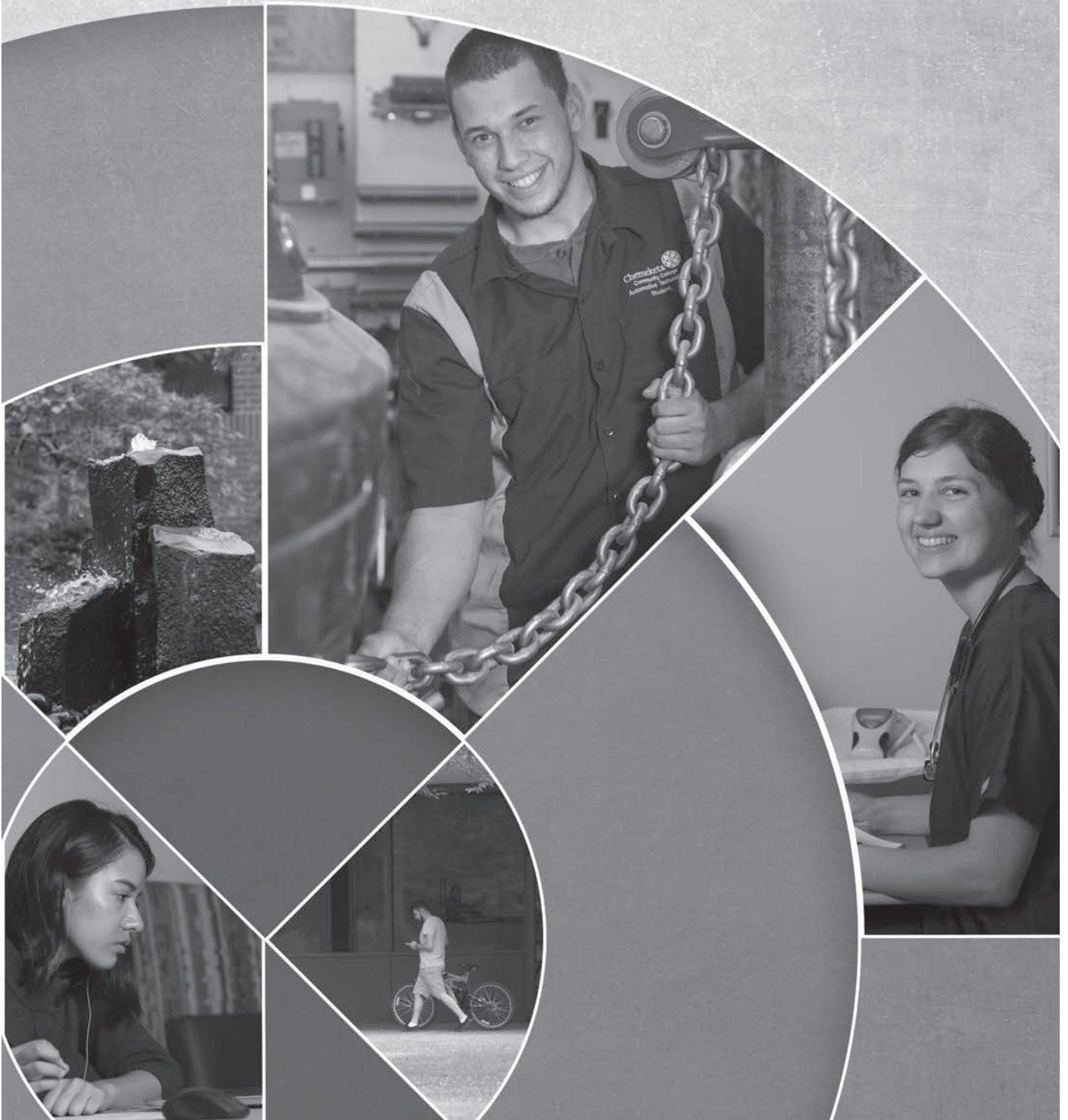
High School Partnerships

4071 Winema Place, Salem, OR 97305

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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.

At Chemeketa, you can finish your first two years of college, take the career and technical training you need to qualify for a job, or finish your high school education. You can also explore career ideas, retain or add job skills, get professional help on how to run a business, pursue a special interest, or broaden your education.

You can pursue your educational goals in a format that fits your needs. As a full-time student, you can finish a one or two-year program, or, as a part-time student, you can 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.

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.

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

In addition to vocational classes, Chemeketa's career and technical education programs include general education courses. The aim of these courses is to help you become more competent in writing and mathematics and gain knowledge of the humanities, communications, sciences, and social sciences. See page 50 for general education information.

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

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

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.

Chemeketa Community College Guiding Principles

Vision *Chemeketa will be a catalyst for individuals, businesses, and communities to excel in diverse and changing environments.*

Mission *Chemeketa provides opportunities for students to explore, learn, and succeed through quality educational experiences and workforce training.*

Values

Collaboration – We collaborate to ensure purposeful, effective programs and services that support all students. We welcome diverse perspectives and encourage the free exchange of ideas.

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.

Equity – We promote a just and inclusive environment in which all individuals receive equitable support to reach their full potential. We do this through fair treatment, access, opportunity, and advancement for all, aiming to identify and eliminate barriers that have prevented the full participation of some groups.

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

Stewardship – We act with personal and institutional accountability for the responsible use of environmental, financial, and human resources to meet the needs of current students without compromising the needs of future generations of students.

Core Themes/Promises *The areas of work that express essential elements of the mission and collectively encompass our role.*

Academic Quality – Quality programs, instruction, and support services are provided to students.

Access – A broad range of educational opportunities and workforce training is provided to students in pursuit of their goals.

Community Collaborations – Instruction, training, and workforce development are provided through collaboration with education partners, businesses, and community groups.

Student Success – Students progress and complete their educational goals.

Academic Calendar

	Summer 2017			Fall 2017	Winter 2018	Spring 2018
	Intensive courses Five weeks June 26–July 29	Standard Eight weeks June 26–Aug 19	Specific programs* Ten weeks June 26–Sept. 2	Sept 25–Dec 9	Jan 8–Mar 24	April 2–June 16
College-wide Inservice (College closed to public)				Sept 12		
Employee Inservice				Sept 11–22		
Student registration: Check registration status on My Chemeketa						
Beginning of Term	June 26	June 26	June 26	Sept 25	Jan 8	April 2
Academic Year and other Holidays	July 4	July 4	July 4	Sept 4 Nov 10 Nov 23–24 Dec 25 & 26 Jan 1 & 2	Jan 15 Feb 19 classified	May 28
College Closure				Dec 21–22	Feb 19	
Summer Friday Closure	Closed Fridays, July 7–Sept 1					
Winter Break/Spring Break				Dec. 11–Jan. 5	Mar 26–30	
Review & Final Exams	Final exams given during last class period			Dec 4–8	Mar 19–23	June 11–15
End of Term	July 29	Aug 19	Sept 2	Dec 9	Mar 24	June 16
Graduation	Tuesday, June 19, 2018					
* 10-weeks for specific programs:	Brooks Center: Fire and EMT Yamhill Valley Campus: Medical Assisting, Hemodialysis and Certified Nursng Assistant CCBI: non-credit classes ineligible for financial aid, veteran’s benefits and receive no grade					

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.



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 experienced, professional 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. The college began operation on July 1, 1970.

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 assessment of institutional quality evaluated through a peer review process. An accredited college or university is one that 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.

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 email 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 email 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 Academic Development Office, Building 22, Rm. 100, Salem Campus; or the college's Dallas, Yamhill Valley or Woodburn locations. 1. Submit a free online admissions application at go.chemeketa.edu/apply 2. Contact the Academic Development office at 503.399.5224. Bldg. 22, Rm. 100.	Contact the Academic Development Office, Building 22, Rm. 100, Salem Campus; or the college's Dallas, Yamhill Valley or Woodburn locations.	Contact the Academic Development Office, Building 22, Rm. 100, Salem Campus; or the college's Dallas, Yamhill Valley or Woodburn locations.	Contact the Academic Development 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.

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 NE in Salem, with an additional campus located at 288 Norton Lane NE in McMinnville. The College also has academic outreach centers in Dallas and Woodburn; and specialized centers at three other locations, which provide specialized education and training services to employers and the community: 1) Chemeketa's Center for Business and Industry (CCBI), located at 626 High Street NE in Salem, provides training programs and resources to help create high-performing employees, managers and organizations. 2) Brooks Regional Training Center (Chemeketa Brooks), located at 4910 Brooklake Road NE, provides training for fire districts and law enforcement throughout the region, and is home to the College's Criminal Justice, Law Enforcement, Fire Science and EMT/Paramedic programs. 3) The Northwest Wine Studies Center (Chemeketa Eola), located at 215 Doaks Ferry Road NW in Salem, provides instruction and hands-on training required for successful

employment in the wine industry. Credit and non-credit classes, workshops, seminars, and special programs are also scheduled in more than 25 locations throughout the College district. These classes meet days, evenings and weekends; in schools, businesses, churches and homes.

Chemeketa's campuses and centers all include classrooms, meeting spaces, student resources and administrative offices; most also have computer labs, resource centers and technical classrooms.

Facilities

In 2008, voters approved a \$92-million bond levy, which resulted in dramatic changes and enhancements of the college's facilities through 2015. The college constructed four exceptionally energy efficient buildings including two passively cooled buildings, expanded outreach locations and program offerings at McMinnville and Brooks, and performed numerous other improvements designed to improve the performance, quality and sustainability of college facilities.

Chemeketa's Salem Campus is comprised of three primary zones: main, north and south campus.

The main campus zone, comprised of Buildings in the 1–14 number series, contains many of the College's administrative and academic support services, as well as the bulk of the college's academic spaces. Building 2 is home to the college's primary administrative functions, including: Advising and Counseling Services, Enrollment Services, Financial Aid, Cashier's Office, Tutoring Services Center, Student Center, Public Safety, Food Services and the Planetarium. Building 9 is home to the College's library, equipped with a computer lab for support of research and study activities. It also houses a television studio and other facilities for multimedia production and communications. Building 6 houses

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 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 Harassment and Misconduct Statement

Chemeketa is also committed to preventing sexual harassment, discrimination, 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 the Title IX Coordinator, Vivi Caleffi Prichard, 503.365.4723 or Manuel Guerra, 503.365.4684.



the bulk of the College's computer lab and training resources, as well as a 440-seat auditorium where conferences, lectures and performances are scheduled throughout the year. Building 8, often referred to as the Health and Science Complex, is equipped with specialized laboratories including a working dental hygiene clinic that serves the local community. Building 7, often referred to as the College's Health and Wellness

Center, is home to the Physical Education and Human Development Programs, the Chemeketa Storm Athletics Program, as well as a gymnasium, workout and weight rooms and other multi-use activity spaces.

The North Campus Zone is located north of Satter Drive and is anchored by the Applied Technology Complex, which was completed in 2015. The complex is home to the College's Engineering, Drafting, Machining, Welding and Apprenticeship programs. This zone is comprised of buildings in the 20 and 30 number series, and also includes facilities for Early Childhood Development, SOAR Program, faculty offices and classrooms.

The South Campus Zone is located on Winema Place near Lancaster, and is comprised of buildings in the 48-58 number series, which is home to the College's High School Partnership programs as well as offices and partner facilities.

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

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 9.

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

Política de Acción Afirmativa

Es la política de Chemeketa Community College que no existirá ninguna discriminación o acoso 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 Acoso

La política del colegio también prohíbe el acoso a base de todos los factores mencionados arriba. El acoso 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.

Hostigamiento Sexual y 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 la coordinadora de título IX, Vivi Caleffi Prichard, 503.365.4723 o Manuel Guerra, 503.365.4684

Please contact Advising and Counseling Services in Building 2 on the Salem Campus at 503.399.5120 or at your local Chemeketa community location. Before enrolling 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 28.

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 advised 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 online test preparation, 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, first-year, 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.

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

Registration and drop deadlines are dependent on the term session for which you are enrolled. Check the Schedule of Classes for general deadlines. Specific course deadlines can be found in My Chemeketa. It is recommended that changes be approved by an academic advisor or counselor. You may incur additional fees or charges when making registration changes.

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 accreditation requirements, limited staff, space, or equipment. Many career and technical education programs have special admission requirements before students can be admitted into the program.

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 62–139).

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.

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.

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.

International Students

1.503.428.0399; Fax 1.503.365.4768

internationaladmissions@chemeketa.edu

Each year about 150 international students attend Chemeketa. Representing a variety of cultures and ethnicities, they come from more than 40 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.

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 email 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 go.chemeketa.edu/paytuition 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: go.chemeketa.edu/paytuition

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 that is non-dischargeable under Section 523(a) (8) of the U.S. Bankruptcy Code. You further agree that,

Cost per credit academic year 2017–2018

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

# of credits	Oregon Resident Students			Out of State & International Students		
	Tuition	Universal Fee	Total Cost Per Credit	Tuition	Universal Fee	Total Cost Per Credit
1	\$85	\$15	\$100	\$247	\$15	\$262
2	\$170	\$30	\$200	\$494	\$30	\$524
3	\$255	\$45	\$300	\$741	\$45	\$786
4	\$340	\$60	\$400	\$988	\$60	\$1,048
5	\$425	\$75	\$500	\$1,235	\$75	\$1,310
6	\$510	\$90	\$600	\$1,482	\$90	\$1,572
7	\$595	\$105	\$700	\$1,729	\$105	\$1,834
8	\$680	\$120	\$800	\$1,976	\$120	\$2,096
9	\$765	\$135	\$900	\$2,223	\$135	\$2,358
10	\$850	\$150	\$1,000	\$2,470	\$150	\$2,620
11	\$935	\$165	\$1,100	\$2,717	\$165	\$2,882
12	\$1,020	\$180	\$1,200	\$2,964	\$180	\$3,144
13	\$1,105	\$195	\$1,300	\$3,211	\$195	\$3,406
14	\$1,190	\$210	\$1,400	\$3,458	\$210	\$3,668
15	\$1,275	\$225	\$1,500	\$3,705	\$225	\$3,930
16	\$1,360	\$240	\$1,600	\$3,952	\$240	\$4,192
17	\$1,445	\$255	\$1,700	\$4,199	\$255	\$4,454
18	\$1,530	\$270	\$1,800	\$4,446	\$270	\$4,716

Out of State and International Tuition total of \$247 per credit is comprised of the base tuition of \$85 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.

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 page 10 to estimate the cost of your course. 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), 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 \$15 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 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.

Veterans' Benefits Improvement Act of 2016

In accordance with Title 38, U.S.C., Section 3679(c), Chemeketa Community College will charge no active duty military member, Veteran, or eligible dependent who is receiving VA funding tuition and fees at a rate greater than that charged a resident student.

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

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 2017–2018 is \$5,920. 	<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 2017–2018 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 2017–2018 is \$2,250 (full-time students or \$1,125 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 emailed 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 2017–2018 is \$15.54 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 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.

- 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 62–139.

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 and assistance funds available. The Chemeketa Community College Foundation administers over 150 different scholarship and assistance funds for Chemeketa students. The foundation's universal online scholarship application simplifies the application process and is open each year February 1 through March 31 for the following academic year. Assistance funds are available upon request. More information can be found at the foundation website at foundation.chemeketa.edu.

Questions? Call for information.

503.399.5000

Salem Campus Information Center

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.

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. Students using any type of Federal Veterans Administration (VA) Education Benefit, including Vocational Rehabilitation and Employment, are required to have all prior college credit evaluated. This includes evaluation of the student's official military training transcript if applicable. Transcripts will be evaluated and credit given where possible to meet the requirements of the student's Chemeketa degree or program. It is the student's responsibility to request official transcripts from all previous colleges and universities attended and submit them to the Chemeketa Admission's office. This includes schools attended where VA benefits were not received. Students must also complete and submit a Request for Evaluation and Transfer of Previous Credit. Students receiving VA educational benefits may receive benefits for a maximum of two terms while waiting for their transcript evaluation to be completed. The student's prior credit evaluation must be complete before subsequent terms are certified for VA benefits.

How to Stay Eligible

To continue to receive VA educational benefits, you are required to complete and pass all classes you receive

Other Locations:

- **Brooks Area** • 503.485.2131
- **Center for Business and Industry (CCBI)**
503.399.5181
- **Chemeketa Online** • 503.399.7873
- **Polk 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



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. Questions on these policies can be directed to the Veterans' Services staff.

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
- 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 October of the previous year 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 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.

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.

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 (enrollment status, e.g. full-time, part-time, half-time, not enrolled)
- 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 honors and statistics
- Honors, awards and scholarships (released only to other academic institutions)

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

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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.** Assigned when some essential requirement of the course has not been completed and additional time is granted by the instructor for completion of coursework. An “I” does not entitle a student to satisfy a prerequisite for another course. For more information see page 21.
- 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

Incomplete grades are awarded at the request of the student and at the discretion of the instructor. A contract detailing the conditions for completion of work is required and must be completed prior to the end of the term. The default deadline for incomplete work to be submitted is automatically set to the end of the following term, but may be extended for up to one year at the instructor's discretion. When the requirements of the contract have been met, the instructor will assign the appropriate grade. If the contract is not fulfilled by

the deadline, the "I" grade will revert to the specified letter grade assigned at the time the incomplete contract was created.

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.

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.

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
- 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
MI Military 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 Examination Program (CLEP)

503.399.6556

testing@chemeketa.edu

If you have taken the College-Level 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.

student may file an appeal with the Academic Review Committee for reinstatement.

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 email 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

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/Internship **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.

It 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*.

eLearning and Academic Technology **Chemeketa Online** **online.chemeketa.edu** **503.399.7873**

Chemeketa is a leader in online education in Oregon. We offer more than 300 credit and noncredit courses each term. You have the option to complete the Oregon Transfer Module, 10 online degrees, 19 certificate programs or take individual classes.

Degrees

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

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

Certificates

You can earn a certificate in Accounting, Accounting Baccalaureate Preparation, Business Software, Business Technology, Event Management, Fire Service Supervision and Management,* Food and Beverage Management, Hospitality and Tourism Management, Juvenile Corrections, Lodging Management, Office Fundamentals, Payroll, Procurement Management, Retail Management, Speech-Language Pathology Assistant, Sustainability in Management, Tax Preparation, Tourism and Travel Management and Virtual Office Assistant.

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 email. A student email address will be assigned to you through your My Chemeketa account. This college-assigned email 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, Microsoft Edge, or Internet Explorer. Microsoft is no longer supporting Internet Explorer 8 or below. 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. Go to online.chemeketa.edu to view the Chemeketa Online eLearn Start Guide for detailed information.

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

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 email online@chemeketa.edu

Evening and Weekend Classes

Chemeketa offers 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.

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.

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.

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 employers/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 126 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.

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 chemeketa.edu/international

Current programs include: winter quarter in Nicaragua and spring quarter in Mexico or Japan.

For questions about Study or Service Learning Abroad, contact Teter Kapan at the phone number or email 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 email 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

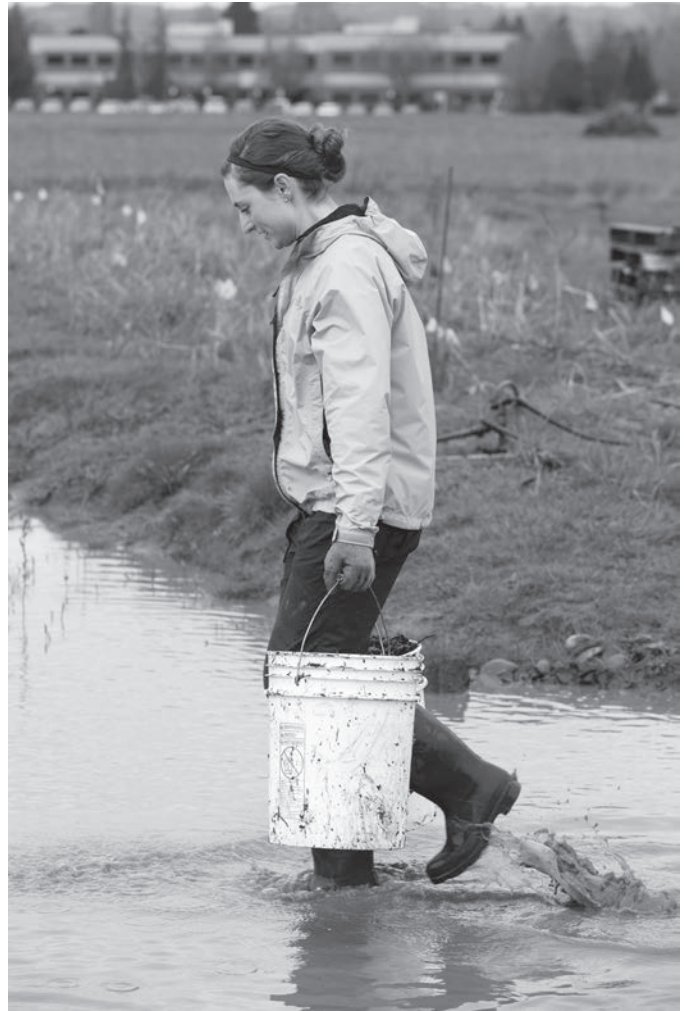
Student Email Accounts 503.399.7899

Salem Campus, Building 9, Room 128

Every Chemeketa student automatically gets a free student Gmail account and access to Google Apps. Your student email 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 email 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. 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, Room 204.

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 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

Polk 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 disabilities. If you have a documented disability, including learning, psychiatric, sensory, orthopedic, or other, please know that support services are available for you.

Disability Services is located in Building 2, Room 174. We provide information about academic accommodations for coursework and testing, access to facilities, digital media formats, sign language interpreters, and campus resources. Students are encouraged to contact the Disability Services early in the academic process to ensure materials and services are provided in a timely manner. We can discuss college processes, and help you advocate for your specific needs.

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 a path to college success for middle school and high school students at Chemeketa's Talent Search grant schools. The program provides access to tutoring and mentoring services to help students thrive at Chemeketa. Talent Search also prepares students to go on to universities with campus visits, assistance with university admission applications, entrance exams and paying for a bachelor's degree.

Upward Bound helps high school students at Chemeketa Upward Bound grant schools get ready for college through tutoring, field trips, and Saturday workshops that focus on a wide range of college preparation activities. Upward Bound also offers a six-week Summer 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 70 migrant and seasonal farmworkers and/or immediate family members in obtaining the equivalent of a high school diploma (GED) each year. Program elements include instruction in Spanish and English, academic advising, tutoring, technology and computer training, cultural enrichment activities, and academic excursions. Benefits to students include an extended evening 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 go.chemeketa.edu/highschool.

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 two class options.

PLAZA and Winema Options are offered through Chemeketa's Woodburn Center for high school students, aged 16–20, 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

Summit Community High School College 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 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.

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 Summit Community High School College Program

The Early College program is designed for Woodburn students who are working on their 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 GED/High School Options Program

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 18 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.

GED en español: Cada semana también se ofrecen clases de GED en español. Uno de los requisitos para los estudiantes que quieren tomar clases en Salem es hacer un examen de evaluación (el cual tiene un costo de \$15). La evolución toma aproximadamente 2 a 3 horas y se hace por medio de una cita en el edificio 22, oficina 100. Para más información acerca de las clases de GED en español, costos, y citas para exámenes en el campus de Salem, por favor llame al 503.399.5224.

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 503.399.6298

If English is not your native language and you wish to improve your ability to understand, speak, read or write in English, Chemeketa offers non-credit and credit day and evening ESOL classes. ESOL classes are 6–15 hours per week for beginning to advanced levels in reading, writing, listening, speaking, grammar, pronunciation, and technology. In addition to classes, ESOL students have access to workshops, advising, and language and computer labs. There is an ESOL application/assessment fee of \$15. You must pay the fee at the time of testing.

Additionally, there is a \$70 per term fee to take English classes. These fees are paid at registration. Students wanting ESOL classes should contact the ESOL program in Salem, 503.399.6298 or esol@chemeketa.edu, about the program requirements and language assessments.

English as a Non-Native Language (ENL)— credit program 503.399.6298

The Chemeketa ESOL program also offers intermediate to advanced level credit courses for non-native speakers of English at the Salem Campus to help students prepare for college or work. Courses include academic reading, writing, listening, 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.

Si inglés no es su lengua nativa y desea mejorar su habilidad de conversar sobre temas básicos, Chemeketa

le ofrece cursos sin crédito por las mañanas y por las noches de Inglés Ahora. Hay un pago trimestral para tomar clases de Inglés Ahora. Estudiantes que desean tomar cursos de Inglés Ahora deberán ponerse en contacto con la oficina de Inglés Ahora.

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 go.chemeketa.edu/studyskills

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. 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

503.399.6157 christina.steiger@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

Associated Students of Chemeketa (ASC)

**503.399.5185 or 503.365.4764
asc@chemeketa.edu**

The ASC Student Council 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 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 college-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. Find out more about ASC online here: go.chemeketa.edu/asc

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. 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 Student Retention and College Life department in Building 2, Room 176. Drop off your textbooks starting finals week of fall term and winter term. Buy your textbooks the first and second week of winter term and spring term.

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.

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 Student Retention & College Life department, the Marion/Polk Food Share and the community. 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. We also receive fresh vegetables from the Chemeketa Horticulture Program and the Marion/Polk Food Share during harvest season.

If you need food or would like to donate to the Chemeketa Food Pantry, you can stop by Building 2, Room 176 Monday, 8 am–5 pm; Tuesday–Friday, 8 am–8 pm; Saturday, 9 am–4 pm.

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.

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.

Design Op

503.399.8160

designop@chemeketa.edu

The Design Op 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.

Various duties may also include photography, video, web design and designing publications as needed.

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 5–8 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

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.

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.

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.

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.

Leadership through Mentoring Program

503.365.4764

adam.holden@chemeketa.edu

The Leadership through Mentoring Program aims to improve retention and academic advancement rates of high school and middle school students at local Boys & Girls clubs who may be at risk of dropping out of school. Students are provided with a college student mentor. Through participation in CG121B,C,D Leadership Through Mentoring 1,2,3, 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 class and on site at the Boys & Girls clubs.

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 and wireless printing
- 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 books and articles, and requesting and renewing items. Check us out.

Literary/Arts student publication

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 building45.com



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.

Mentor Program

503.315.4293

The TRiO Talent Search and Mentor Program gives Chemeketa students the opportunity to participate in important community service learning while earning college credits. By taking the CG121A TRiO Mentoring class, student mentors are trained to assist TRiO middle and high school students to successfully navigate their paths to college.

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

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 in Building 2, Room 173. Students and employees may purchase individual term permits or 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. 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 Chemeketa properties. The College suggests you lock your car at all times when on campus and not leave personal items 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: 503.399 .5023 or publicsafety@chemeketa.edu.

Chemeketa now has Electric Vehicle (EV) Charging Stations, currently located on the Salem and Yamhill Campuses. All stations are level 2, 208/240V chargers, and utilize the North American standard SAE J1772 connector. These stations are owned and operated by the College and require a unique access card which can be purchased through the Facilities Department. Charging access rights are granted on a yearly basis starting at the beginning of Fall Term. A new card must be purchased Fall Term of the following year and the old card returned if continued charging is desired. The purchase price of the card is fixed and will not be prorated based on time of purchase.

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.

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 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 go.chemeketa.edu/clubs, or contact the Office of Student Retention and College Life in Building 2 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.

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 Student Retention and College Life's department reception area with delivering exceptional customer

service, scheduling, answering phones, replying to emails, 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.

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. Stop by the Student Retention & College Life department located in Building 2, Room 176 to learn more about eligibility requirements.

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

Polk 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, first-year, 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 Non-Credit Program

503.399.5089 or 503.589.7759

go.chemeketa.edu/agriculture

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.

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.

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

For more information, call 503.399.5089 or 503.589.7759.

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.

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.

Chemeketa Small Business Development Center

fosters the start, growth, and sustainability of small businesses by providing education and coaching services to entrepreneurs. Areas of assistance include, but are not limited to: pre-venture feasibility, business plan development, strategic planning, financial analysis, personnel and organizational issues, financing, and marketing. Coaching is confidential and provided at no-charge by a team of skilled professionals (or business veterans).

Special programs are also included in the mix of SBDC's services:

- The **Small Business Management (SBM)** program is a 9-month program that assists established business owners to experience increased efficiency, profitability and support through monthly one-on-one business coaching and interactive learning sessions. SBM is a great way to start working on your business, not just in it. Take action; visit www.sbm.chemeketa.edu

- 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.

For more information, visit sbdc.chemeketa.edu or call the Small Business Development Center at 503.399.5088.

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 61 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, problem solving, presentation training, 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 and Microsoft Project.

Classes are customized to meet the needs of specific employee groups.

Threat Management Resources (TMR) is dedicated to the prevention of, reaction to, and recovery from targeted violence and disasters. TMR offers to organizations, employers, and individuals an array of resources such as workshops, consultation and training in three areas: Threat Assessment, Active Threats, and Disaster Behavioral Health.

- **Threat Assessment** professionals now have convenient access for continuing education through both online classes and in-person workshops. Multidisciplinary Threat Assessment Teams are recommended by the FBI, Secret Service, Department of Education, and others, as the process to mitigate targeted violence.
- **Active threat** workshops and training resources provide organizations and individuals strategies through scenario-based strategies for protection from an immediate threat. Included is emergency

planning and how to mitigate the damage and injury resulting from a potentially harmful incident.

- **Disaster Behavioral Health Center (DBHC)** is dedicated to advancing and enhancing the best practices in disaster behavioral health for our communities. DBHC provides training, consultation, research, and the application of behavioral health skills, and information in the preparation for, reaction to, and reintegration from any disaster situation.

For more information visit threatmanagement.chemeketa.edu/ or call Threat Management Resources at 503.399.2555.

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 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, dance, fitness, foreign language, health, music, continuing education, travel, writing, 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/communityed. To have a Community Education Class publication mailed to you, call 503.399.4949.

The Community Education Department 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 email 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

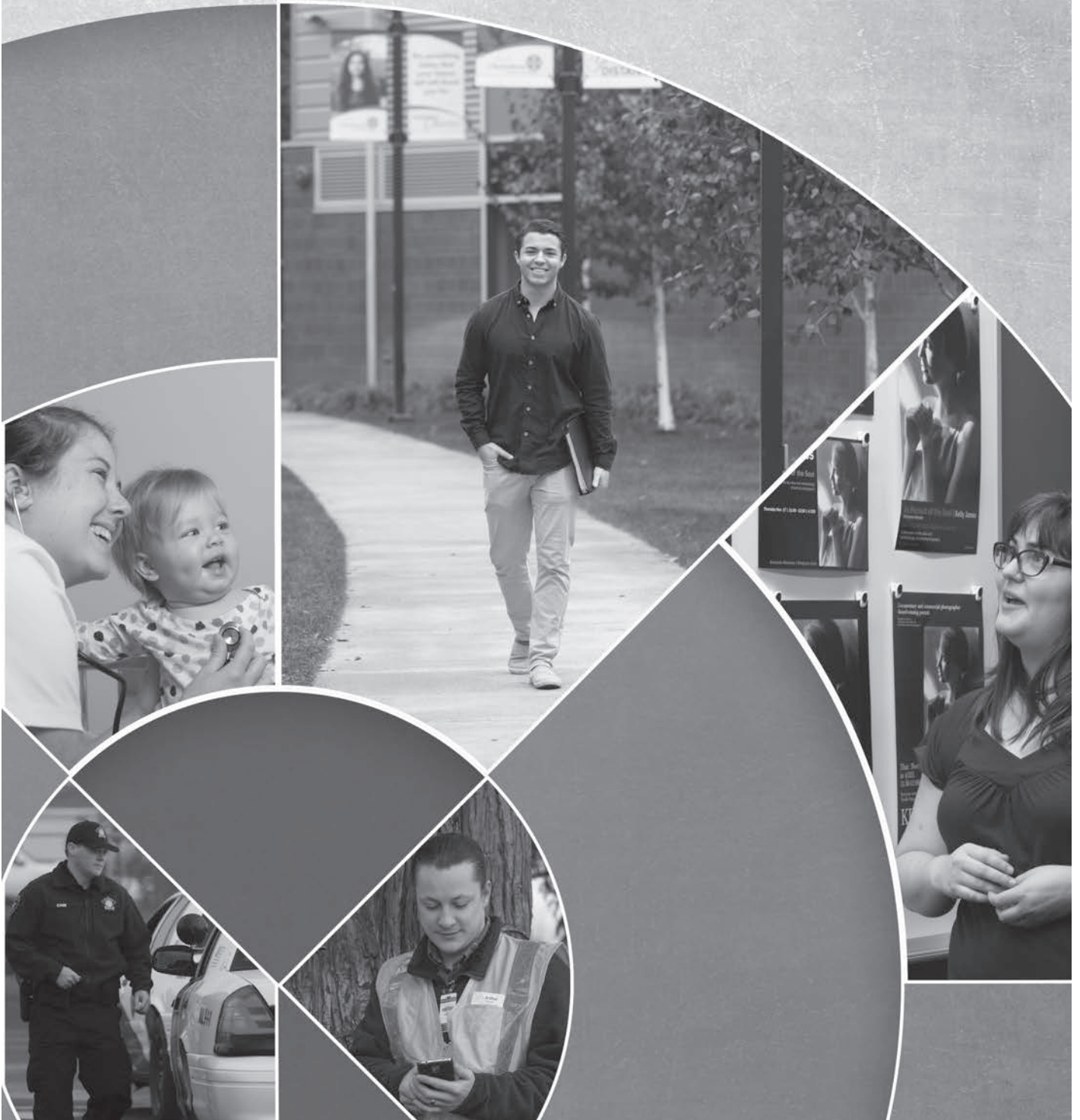
Chemeketa's Planetarium is in Building 2 on the Salem Campus. It features a Spitz model 512 sky instrument that projects 2,500 stars, five planets, the sun and moon, and sky coordinated on a 35-foot metal dome. This instrument can project the sky for any date—past, present or future—as seen from any location on earth.

In addition, the planetarium has a Discover Dome™ Fixed Dome Theater System that has the ability to project any fisheye configured content onto the dome. Specific astronomical shows using this system will be part of the museum-quality full dome presentations available.

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 (AAOT) degree, an Associate of Science-Business (AS/OT-BUS) transfer degree, an Associate of Science-Computer Science (AS/OT-CS) transfer degree, an Associate of Applied Science (AAS) degree, an Associate of Science (AS) degree, or an Associate of General Studies (AGS) 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 52. You must earn a grade of "C-" or better in all courses and have a minimum cumulative GPA of 2.00 to complete the module. Upon transfer, the receiving institution may specify additional general education coursework that will be required for your major or ask you to make up the difference between the transfer module and the institution's total general education requirements.

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

Associate of Arts Oregon Transfer degree

The Associate of Arts Oregon Transfer (AAOT) degree is the core curriculum of a liberal arts education. This 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. Note that in most areas, courses—not credits are required to meet the degree (90 credit hours total). You must earn a grade of "C-" or better in all courses and have a minimum cumulative GPA of 2.00 to complete the degree. Contact a college advisor for more information.

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.

Students must complete at least one course meeting the state criteria:

- **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 53 for Cultural Literacy courses).

See the program guide on pages 46 to 49 for a complete list of our transfer programs. Information and curriculum guidelines begin on page 62

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. To qualify for either of these degrees, you must meet the requirements listed on page 54 and 55.

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 57.

Associate of Applied Science degree

Chemeketa, with its emphasis on career and technical education, offers preparation in more than 40 occupational areas.

In most of these programs, you may earn an Associate of Applied Science (AAS) degree. If you enroll full-time, it usually takes about two years to meet the Associate of Applied Science degree requirements. In some programs of study, there are prerequisites to enter the program. See the program guide on pages 46 to 49 for a complete list of Associate of Applied Science degree programs. Information and curriculum outlines for these programs begin on page 62.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed on page 56.

Digital Literacy

Digital literacy is the combined technical and cognitive skills needed to enter a workforce in which technology is increasingly important.

The technical and cognitive skills needed for the Associate of Applied Science degree are:

- Demonstrate critical thinking skills to solve problems related to technology using a logical and systematic approach
- Understand the information processing cycle which includes business software, hardware and networking fundamentals
- Apply diverse applications and adapt to rapidly evolving technology
- Confidently transfer skills to a variety of applications and devices
- Employ correct terminology to describe, diagnose and explain the digital world
- Recognize and mitigate threats to the security of identity, assets and technology in the digital world

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 58.

Certificate of Completion

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

See the program guide on pages 46 to 49 for a complete list of Certificate of Completion programs. Information and curriculum outlines for these programs begin on page 62.

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.
- Apply courses numbered 050 or higher toward a certificate.

Many programs have other certificates that credential you to work 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 29.

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

Occupational Skills Training, Office of High School Partnerships, College-level Reading, College Transfer

General information

Chemeketa offers the Oregon Transfer (OT) Module and the Associate of Arts Oregon Transfer (AAOT) 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 and Computer Science for students who wish to transfer to one of those programs at any of Oregon's public universities.

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:

Portland State University, Linfield College

800.452.4176

Oregon State University, George Fox University

888.888.0178

Corban University

503.589.8195

Western Oregon University

877.877.1593

Curriculum Requirements

go.chemeketa.edu/counseling

Advising and Counseling Services has advising guides specific to Oregon's four-year public universities. These institutions 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 guides for programs offered at George Fox University, Linfield College, Oregon Health and Sciences University, Pacific University, Corban University, 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)			✓			52
Associate of Arts Oregon Transfer (AAOT)			✓			53
Associate of Science / Oregon Transfer in Business (ASOT-Bus)			✓			54
Associate of Science / Oregon Transfer in Computer Science (ASOT-CS)			✓			55
Associate of Applied Science (AAS)		✓				56
Associate of Science (AS)			✓			57
Associate of General Studies (AGS)		✓				58

Transfer Course Disciplines

For specific information about baccalaureate degrees at Oregon's public universities, see www.oregon.gov/HigherEd/Pages/campuslinks.aspx

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
American Sign Language			✓			150
Art			✓			68
Anthropology			✓			65
Biology			✓			71
Business Administration			✓			72
Chemistry			✓			81
Chicano/Latino Studies			✓			176
Communication			✓			81
Computer Science			✓			84
Counseling and Guidance			✓			162
Economics			✓			96
Education			✓			96
Engineering			✓			105
English			✓			105
Entrepreneurship			✓			191
Film Arts			✓			192
French			✓			193
General Engineering			✓			196
General Science			✓			197
Geography			✓			196
Geology			✓			197
Health, Health Education			✓			198
History			✓			206
Humanities			✓			208

Japanese	✓	209
Journalism	✓	208
Linguistics	✓	209
Mathematics	✓	211
Music	✓	214
Nutrition and Food Management	✓	126
Philosophy	✓	128
Physical Education and Human Performance	✓	128
Physics	✓	128
Political Science	✓	129
Psychology	✓	129
Religious Studies	✓	128
Russian	✓	224
Sociology	✓	226
Spanish	✓	226
Social Science	✓	227
Theater Arts	✓	228
Writing	✓	223
Women's Studies	✓	234

Agriculture, Food, and Natural Resources

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Horticulture Program		✓				113
Wine Studies Programs	✓	✓				137
• Vineyard Management		✓				138
• Vineyard Operations	✓					137
• Winemaking		✓				138

Arts, Information, and Communication

Visual Communications Programs						132
• Graphic Design		✓		✓		133
• Interactive Media		✓		✓		134

Business and Management

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Accounting Programs	✓	✓				62
• Accounting Baccalaureate Preparation	✓					63
• Payroll	✓					63
• Tax Preparation	✓					64
Business Management Programs	✓	✓				73
• Procurement and Supply Chain Management		✓				75
• Procurement Management	✓					75
• Retail Management	✓					74
• Sustainability in Management	✓					74
Business Technology Programs	✓	✓				76
• Accounting Administrative Assistant		✓				78
• Administrative Office Professional		✓				79
• Business Software	✓					77
• Medical Administrative Assistant		✓				80
• Office Fundamentals	✓					77
• Virtual Office Assistant	✓	✓				80
Hospitality and Tourism Management Programs	✓	✓				114
• Event Management	✓					114
• Food and Beverage Management	✓					115

• Hospitality and Tourism Management	✓	✓				116
• Lodging Management	✓					116
• Tourism and Travel Management	✓					116

Health Services

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Dental Assisting Program	✓			✓	✓	90
Dental Hygiene Program			✓	✓	✓	91
Emergency Medical Technology/Paramedic Program		✓				103
• Paramedicine Program		✓			✓	104
Health Information Management Programs	✓	✓		✓		110
• Basic Health Care	✓					110
• Health Information Management		✓				111
Hemodialysis Technician Program	✓			✓		112
Medical Assisting Program	✓			✓		123
Nursing Programs	✓	✓	✓	✓	✓	124
• Practical Nursing	✓					125
• Nursing		✓				125
Pharmacy Programs	✓	✓				127
• Pharmacy Technician	✓			✓	✓	127
• Pharmacy Management		✓		✓	✓	127

Human Resources

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Criminal Justice, Law Enforcement, and Corrections Programs			✓		✓	84
• Basic Corrections	✓				✓	88
• Basic Law Enforcement	✓				✓	89
• Corrections		✓		✓	✓	88
• Criminal Justice		✓			✓	86
• Juvenile Corrections	✓				✓	87
• Juvenile Justice		✓			✓	87
• Law Enforcement		✓		✓	✓	89
Early Childhood Education Programs	✓	✓			✓	93
• Infant/Toddler	✓					94
• Preschool	✓					95
Fire Protection Technology Programs	✓	✓				106
• Fire Prevention		✓				106
• Fire Service Supervision and Management	✓			✓	✓	107
• Fire Suppression		✓	✓	✓	✓	108
Human Services Programs						117
• Addiction Counselor Certification Preparation	✓			✓	✓	118
• Addiction Studies		✓		✓	✓	118
• Social Services		✓		✓	✓	119
Speech-Language Pathology Assistant Programs	✓	✓		✓		131

Industrial and Engineering Systems

	Certificate	AAS	Transfer	Limited	Addl Qual	Page
Apprenticeship Programs						65
• Construction Trades, General (Specializations in HVAC/R, Plumbing, and Sheet Metal)	✓	✓	✓		✓	65
• Electrician Apprenticeship Technologies: Inside Electrician	✓	✓	✓		✓	67

Automotive Technology Programs						68
• Automotive Body Repair	✓					70
• Automotive Entry Level Technician	✓					70
• Automotive Machining	✓					70
• Automotive Technology		✓		✓		71
Building Inspection		✓				71
Computer Information Systems Programs						81
• Computer Systems and Information Technology		✓				83
• Computer Programming	✓					82
• System Administration and Network Security	✓					83
• Web Developer	✓					83
Drafting Technology–CAD Programs	✓	✓				91
• Architectural Drafting	✓					92
• Computer-Assisted Drafting (CAD)	✓	✓				92
Electronics Technologies Programs						97
• Computer Electronics		✓				99
• Electronic Engineering Technician		✓	✓			100
• Electronics	✓					98
• Industrial Electronics		✓	✓			101
• Networking Technology Essentials	✓					99
• Process Control	✓					99
• Process Control Technology		✓				102
• Renewable Energy Management		✓				103
Machining Technology Programs	✓	✓				120
• Basic Manufacturing Technician	✓					121
• Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)		✓				122
• Computer-Aided Manufacturing (CAM) Fundamentals	✓					121
• Computer Numerically Controlled (CNC) Operator	✓					121
• Manual Machine Operator	✓					122
Robotics Program		✓				130
Welding Programs	✓	✓		✓		134
• Arc Welding	✓					135
• MIG Welding	✓					135

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	✓	✓				104
English as a Non-Native Language						30
English for Speakers of Other Languages						29
General Educational Development (GED)						29
GED Options	✓					28
High School Equivalency Program (HEP)				✓		27
Occupational Skills Training	✓					126
Winema						28

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 53 for identified cultural literacy requirements in the AAOT degree.

Information Literacy

Information literacy content is embedded in the college writing courses required for the AAOT degree. As a result of taking 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 245 for descriptions of the writing courses.

Oregon Transfer Module (OTM) 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, 121, 131, 201, 204, 205, 206, 207**, 221, 222, 223, 224, 225, 234, 237, 238, 240, 247, 261, 265, 270, 276, 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**, 250, 253**, 254**, 260, 261, 269**; FA255 , 256, 257; FR201 , 202, 203; HUM106 , 120**, 220**, 221**, 225**; JNL224 , 225, 227, 228, 240; JPN120 , 201, 202, 203; LING210 ; 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; TA110 , 141; WR240 , 241, 242, 243, 244, 250, 262
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 (AAOT)

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 PE 185 course (one credit each); or 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	MTH 105 or above
Oral Communication <i>One course</i>	1 course	COMM 100**, 105**, 111, 112, 115**, 130, 212, 218, 219**, 227**, 237**, 260**, 285
Writing <i>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 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	ART 101**, 115, 116, 117, 120, 121, 131, 201, 204, 205, 206, 207**, 221, 222, 223, 224, 225, 234, 237, 238, 240, 247, 261, 265, 276, 270, 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**, 250, 253**, 254**, 260, 261, 269**, FA 255, 256, 257; FR 201, 202, 203; HUM 106, 120**, 220**, 221**, 225**, JNL 224, 225, 227, 228, 240; JPN 120, 201, 202, 203; LING 210; 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; TA 110, 141; WR 240, 241, 242, 243, 244, 250, 262
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: 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 a fourth course from the list above or below: CIS 233J, 234J; CS 160, 161, 162, 260, 271; MTH 105 or above
Social Sciences <i>Four courses chosen from two or more 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, 201**, 202**, 203**, 228, 237, 257**, 258**, 262**, 269**, 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**
• 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: BT 104, 105; MTH 052-095; RD 080, 085, 090; SSP 050A, B, C, 051; WR 080, 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 50.		
* 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 (ASOT-Bus)

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, 274, 275, 276, 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**, 216, 220**, 221, 232**, 250, 253**, 254**, 256**, 257**, 258**, 260, 261, 269**, 275; FA255 , 256, 257; FR201 , 202, 203; HUM106 , 120**, 220**, 225**, JNL224 , 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, 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 A minimum of three credits.	4	BA101
BA211 Financial Accounting 1 and BA213 Managerial Accounting (or BA211 , BA212 Financial Accounting 2, and BA213) A minimum of eight credits.	8–12	BA211 , BA212 , and BA213
BA226 Business Law 1 (or other advisor-approved Business elective) A minimum of three credits	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 two years of the same high school-level second language with an average grade of "C-" or above, OR satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.
 - 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 (ASOT-CS)

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, 276, 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 two years of the same high school-level second language with an average grade of "C-" or above, OR satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.
 - 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 70 to 151 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	PSY 101, 104, 201, 202, 206, 237, 239, 282; SOC 204, 205, 206, 210, 213; or approved program substitute
Digital Literacy	3/4	Complete the program-designated digital literacy course(s) or competency testing. Check with your program advisor If you have any questions related to this requirement.***
<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 50.
 - 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
 *** See page 44 for more Information regarding the Digital Literacy requirement for the AAS degree.

Associate of Science Degree Requirements (AS)

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:		
• 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, 276, 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, 133U, 133VB, 135AE, 140B, 140U, 145, 178I, 178W, 179, 186, 195, 233J, 234J, 244, 275, 276C, 277A, 277B, 278, 279, 288, 289, 295; CS 160, 161, 162, 260, 271
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
• 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:

1. Complete a minimum of 24 credits at Chemeketa.
2. 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.
3. 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 (AGS)

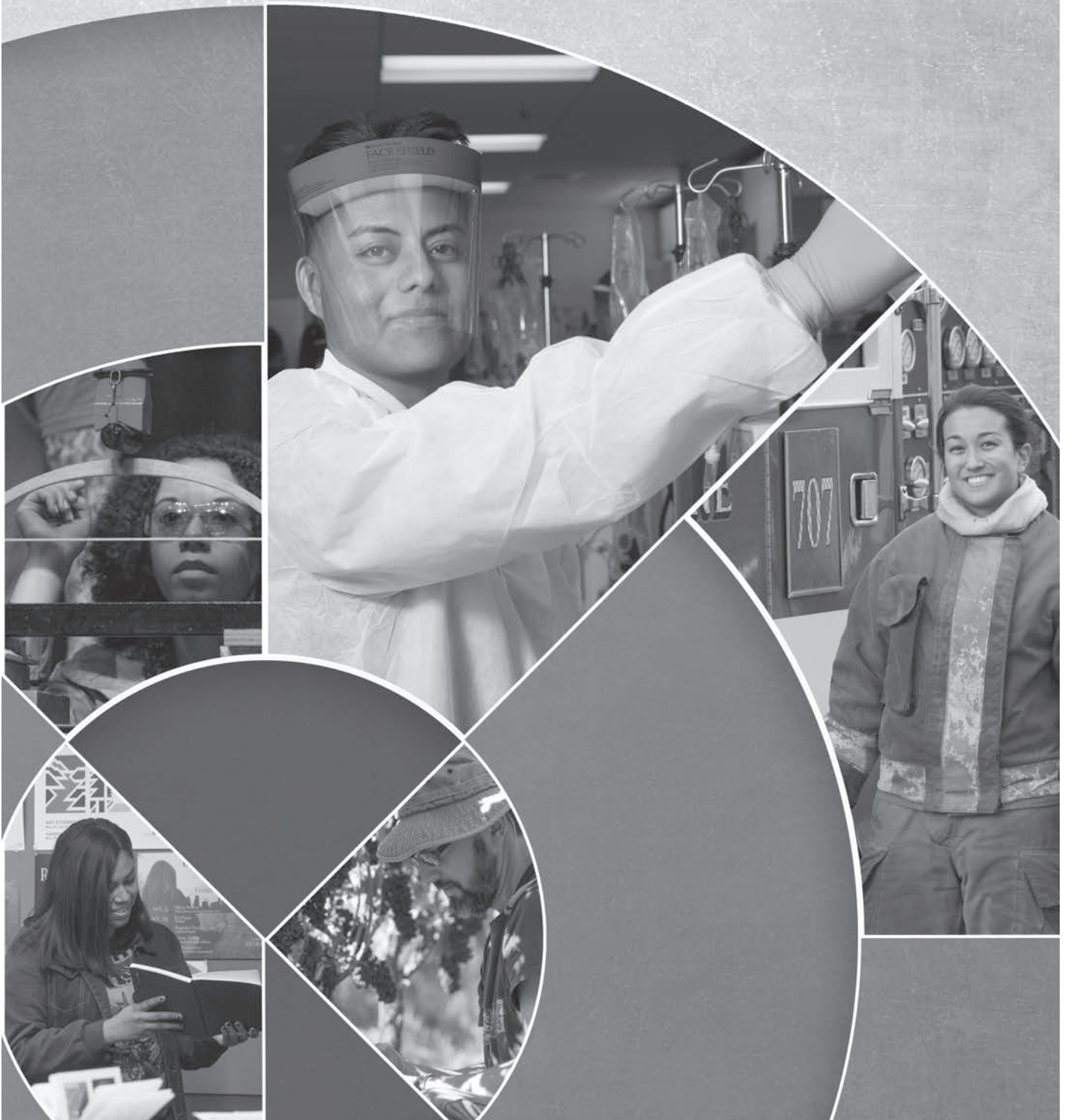
Requirements	Credits	Courses which satisfy requirements
Complete a minimum of 90 credits. These must include the following:		
<ul style="list-style-type: none"> General Education Requirements 		
Digital Literacy <i>As demonstrated by course completion or competency testing</i>	3/4	Any CS or CIS course 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 (PE 185) 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	MTH053 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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 142 for how courses are numbered. All collegiate-level courses must be numbered 100 or above.

Note:

- Earn a cumulative grade point average (GPA) of 2.00 or above in all courses to be applied toward the degree.
- Complete a minimum of 24 credits at Chemeketa.
- 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

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.

Note: In pages 62 through 139, only those areas of study terminating in a certificate or degree are referred to as "programs."

Fastest Growing Occupations in the United States

Occupation	Program or Information	Page or Telephone
Wind Turbine Service Technicians	See Renewable Energy Management Associate of Applied Science Degree Option	page 103
Occupational Therapist	See Associate of Arts Oregon Transfer	page 53
Physical Therapist Assistant	Contact Mt. Hood Community College	503.491.7464
Personal Care Aide/Home Health Aide	See Practical Nursing	page 125
Nurse Practitioners	Nursing Major + Post-Baccalaureate Education	page 126
Physical Therapist	See Associate of Arts Oregon Transfer/Physical Therapy + Post- Baccalaureate Education	page 53
Statisticians	See Associate of Arts Oregon Transfer/Mathematics Major	page 53
Ambulance Drivers and Attendants	See Paramedicine Associate of Applied Science Degree	page 104
Physician Assistant	See Associate of Arts Oregon Transfer/Biology Major	page 53
Operations Research Analysts	See Associate of Arts Oregon Transfer/Management Science Major	page 53
Personal Financial Advisors	See Associate of Arts Oregon Transfer/Finance Major	page 53
Cartographers and Photogrammetrists	See Surveying Technology/Surveying	page 178
Interpreters and Translators	See Associate of Arts Transfer/Foreign Languages and Literatures Major	page 53
Audiologists	See Associate of Arts Transfer/Audiology Major + Post-Baccalaureate Education	page 53
Optometrists	See Associates of Arts Transfer/Biology Major + Post-Baccalaureate Education	page 53

Source: U.S. Department of Labor Statistics Publish Date: December 17, 2015

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
Computer-Controlled Machine Tool Operators, Metal and Plastic	Duane Hibbeler	503.399.5087	See Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM), page 122
Nurse Practitioner	Carolyn Millburn	503.399.2673	See Nursing, page 126
Web Developers	Mandy Reininger	503.365.4822	See Computer Systems and Information Technology, page 83
Industrial Machine Mechanics	Duane Hibbeler	503.399.5087	See Machining Technology, page 120
Health Technologists and Technicians	Jane Ellis	503.589.7848	See Health Information Management, page 111
Machinists	Sheldon Schnider	503.589.7875	See Machining Technology, page 120

Source: Oregon Employment Department Retrieved Date: April 6, 2017

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	Jack Wu, 503.399.5055	43	62
Arc Welding	Mike Myers, 503.399.6066	19	135
Automotive Entry-Level Technician	Steve Agee, 503.399.6521	28	70
Basic Corrections	Marshall Roache, 503.399.2339	38	88
Basic Health Care	Jane Ellis, 503.589.7848	16	110
Basic Law Enforcement	Marshall Roache, 503.399.2339	38	89
Basic Manufacturing Technician	Duane Hibbeler, 503.399.5087	17	121
Business Software	Barbara Johansen, 503.399.2894	18	77
Computer Programming	Mandy Reininger, 503.365.4822	31	82
Computer-Aided Manufacturing (CAM) Fundamentals	Duane Hibbeler, 503.399.5087	25	121
Computer Numerically Controlled (CNC) Operator	Duane Hibbeler, 503.399.5087	40	121
Electronics	Chuck Sekafetz, 503.399.6254	43	97
Event Management	Paul Davis, 503.584.7553	36	115
Early Childhood Education: Infant/Toddler	Pam Ditterick, 503.399.6076	15	94
Early Childhood Education: Preschool	Pam Ditterick, 503.399.6076	14	95
Food and Beverage Management	Paul Davis, 503.584.7553	36	115
Lodging Management	Paul Davis, 503.584.7553	36	116
Manual Machine Operator	Duane Hibbeler, 503.399.5087	40	122
MIG Welding	Mike Myers, 503.399.6066	12	135
Networking Technology Essentials	Chuck Sekafetz, 503.399.6254	16	99
Office Fundamentals	Barbara Johansen, 503.399.2894	36	77
Payroll	Jack Wu, 503.399.5055	20	63
Process Control	Chuck Sekafetz, 503.399.6254	37	99
Retail Management	Karen Edwards, 503.399.3996	38	74
Sustainability in Management	Karen Edwards, 503.399.3996	12	74
Systems Administrator and Network Security	Mandy Reininger, 503.365.4822	40	83
Tax Preparation	Jack Wu, 503.399.5055	16	64
Tourism and Travel Management	Paul Davis, 503.584.7553	36	116
Vineyard Operations	Jessica Sandrock, 503.584.7255	42	137
Virtual Office Assistant	Barbara Johansen, 503.399.2894	39	80
Web Developer	Mandy Reininger, 503.365.4822	31	83
Short-Term Training Awards (Non-credit) Training	Contact	Duration	
Basic Nurse Assistant	Pam Fifer, 503.399.3907	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	
Non-Credit Training Certificates	Contact	Hours	
Threat Management	Rebecca Bolante, 503.399.2555	198	
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	

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

Accounting Program

go.chemeketa.edu/accounting

See also **Business Administration and Business 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 program includes 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 the 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 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:

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:

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 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 certificate 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 required courses listed below are books, \$1,341; 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	Computing Concepts.....	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 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 required courses listed below are books, \$1,658; class fees, \$25; and universal fee, \$756. 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	Computing Concepts.....	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 44. For subject areas, see page 56.

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

Payroll Certificate of Completion

The Payroll certificate emphasizes skill development for those interested in pursuing a position as payroll/benefits specialist. Graduates of the certificate 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 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 certificate 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 required courses listed below are books, \$651; class fees, \$25; and universal fee, \$280. 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

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 certificate 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 required courses listed below are books, \$551; 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 required courses listed below are books, \$2,854; 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	Computing Concepts.....	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
MTH111	College Algebra (or higher).....	5
	or	
	Business elective****	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*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.

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

Agriculture

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 51.

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 staff or a Chemeketa Agriculture faculty 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 50.

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 53, 54, and 55 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 staff or a Chemeketa Anthropology faculty 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 Program

go.chemeketa.edu/apprenticeship

Apprenticeship training is a method of vocational education recognized by the Apprenticeship and Training Division (ATD) of the Oregon Bureau of Labor and Industries (BOLI). It combines full-time, on-the-job training (OJT) with committee-approved contractors and trade-related instruction. Apprentices work full time and take courses two evenings a week for four years.

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. The program requires four years of OJT and related instruction. HVAC/R technicians, plumbers, and electricians require state licensure at the conclusion of their training.

Chemeketa's Apprenticeship program 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. The program provides 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 with limited courses 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 503.399.5255 or go to go.chemeketa.edu/apprenticeship or www.oregonapprenticeship.org.

All students in the HVAC/R and Inside Wire Electrician apprenticeship programs must complete 8,000 hours of State of Oregon approved OJT; the Sheet Metal program requires 7,200 hours of OJT; and the Plumbing program requires 7,700 hours of OJT. In addition, students must successfully complete specific skill sets in their field of specialization.

Students Transferring into the Apprenticeship Program

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.

Contact the apprenticeship office at 503.399.5255 or email apprenticeship@chemeketa.edu if you have questions about the program.

Construction Trades, General Apprenticeship, Certificate of Completion

Students may earn a Certificate of Completion by successfully completing the Construction Trades, General Apprenticeship general education requirement of 12 credit hours, plus additional credits in one area of specialization.

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 44. For subject areas, see page 56.

Plus: Choose one area of specialization (HVAC/R, Sheet Metal or Plumbing)

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 and 22 hours for proof of journey-level status.

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

Course	Title	Credit Hours
CIS101	Computing Concepts.....	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 44. For subject areas, see page 56.

Plus: Choose one area of specialization (HVAC/R, Sheet Metal or Plumbing)

HVAC/R Specialization

In addition to tuition, estimated costs for students who complete the entire four-year HVAC/R Apprenticeship degree are \$480 in program fees, and \$840 in universal fees. Contact the Financial Aid Office at 503.399.5018 for information on assistance with costs.

Program Outcomes

Students completing the Construction Trades General Apprenticeship Certificate and/or AAS Degree, HVAC/R Specialization should be able to:

- 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 60 hours of HVAC/R trade-related coursework.
- Complete three general education courses for the certificate or six courses for the AAS, with a grade of C or better.

Getting Started

HVAC/R Apprenticeship entry requirements:

- 18 years of age or older.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or better; or completion of MTH060 (or higher) at Chemeketa; or placing into MTH070 (or higher) on a college placement test.

Degree and Certificate Options

Construction Trades General Apprenticeship AAS Degree, 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.
- Complete a minimum of 90 approved credits; 22 credits are awarded for proof of journey-level status.

Construction Trades General Apprenticeship Certificate, HVAC/R Specialization Requirements

- Journey-level status in the HVAC/R industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the required 12 HVAC/R courses and three (3) general education courses.

HVAC/R Specialization Required Courses

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 Apprenticeship Plumbing degree are \$448 in program fees, and \$896 in universal fees. Contact the Financial Aid Office at 503.399.5018 for information on assistance with costs.

Program Outcomes

Students completing the Construction Trades General Apprenticeship Certificate and/or AAS Degree, Plumbers Specialization should be able to:

- 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 for the certificate or six courses for the AAS degree with a grade of C or better.

Getting Started

Plumber Apprenticeship entry requirements:

- 18 years of age or older.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or better; or completion of MTH060 (or higher) at Chemeketa; or placing into Math 60 (or higher) on a college placement test.

Degree and Certificate Options

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.
- Complete a minimum of 90 approved credits; 22 credits are awarded for proof of journey-level status.

Construction Trades General Apprenticeship Certificate, Plumber Specialization requirements:

- Journey-level status in the plumbing industry.

- Complete a minimum of 30 credits at Chemeketa.
- Complete the required 64 credit hours (12 hours of general education credits listed above plus 52 hours of plumbing trade-related coursework).

Plumbing Specialization Required Courses

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 Sheet Metal Apprenticeship degree are \$455 in program fees, and \$798 in universal fees. Contact the Financial Aid Office at 503.399.5018 for information on assistance with costs.

Program Outcomes

Students completing the Construction Trades General Apprenticeship certificate and/or AAS degree, Sheet Metal Specialization should be able to:

- 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 for the certificate or six courses for the AAS degree with a grade of C or better.

Getting Started

Sheet Metal Apprenticeship entry requirements:

- Minimum of 17 years of age.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or better; or completion of MTH060 (or higher) at Chemeketa; or placing into Math 70 (or higher) on a college placement test.

Degree and Certificate Requirements

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.

Construction Trades General Apprenticeship Certificate, Sheet Metal Specialization requirements:

- Journey-level status in the sheet metal industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the required 71 credit hours (12 hours of general education credits listed above plus 59 hours of sheet metal trade-related coursework).

Sheet Metal Specialization Required Courses

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 Degree and Certificate

In addition to tuition, estimated costs for students who complete the entire four-year degree are \$412 in program fees and \$728 in universal fees. Contact the Financial Aid Office at 503.399.5018 for information on assistance with these costs.

Program Outcomes

Students completing the Electrician Apprenticeship Technologies Certificate and/or AAS Degree, Inside Wire Electrician specialization should be able to:

- 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 for the certificate or six courses for the AAS degree with a grade of C or better.

Getting Started

Contact IEC Oregon at 503.598.7789 or visit www.iecoregon.org for more information and program entry requirements.

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 are awarded for proof of journey-level status.

Electrician Apprenticeship Technologies Certificate, Inside Wire Electrician Specialization requirements:

- Journey-level status in the electrical industry.
- Complete a minimum of 30 credits at Chemeketa.
- Complete the required 52 program credit hours.
- Complete 12 general education requirements: MTH095 (or higher), PSY101 (or higher), and WR 115 (or higher).

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

Inside Electrician Specialization Required Courses for the AAS Degree

Course	Title	Credit Hours
CIS101	Computing Concepts	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 44. For subject areas, see page 56.

Art

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 50.

See also Visual Communications Program

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 52 and 53 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 (EOU), Oregon State University (OSU), Portland State University (PSU), Southern Oregon University (SOU), University of Oregon (U of O), and Western Oregon University (WOU). WOU 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 degree is offered at OSU, SOU, and U of O.

We strongly recommend developing a term-by-term plan of study. We are in the process of developing transfer guides for students who plan to major in art at WOU, OSU, and PSU. Contact the Visual and Performing Arts Program Chair or consult with Chemeketa’s Advising and Counseling Services staff if you plan to transfer as an art major. Questions regarding Chemeketa’s art offerings may be directed to the Liberal Arts and Social Science office at 503.399.5184.

Automotive Technology Program

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 has been designed to be completed in one year or less and the degree in two years. The program offers 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 certificates have special admission requirements and enrollment limits. The first step to entering the program is to take the college's free placement test and meet with Chemeketa's 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 the Automotive program 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 Chemeketa's 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 certificates. 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 Body Repair Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses 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
CIS101	Computing Concepts (or higher)	3
MTH052	Intro to Algebra/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 Body Repair core requirements (21 credit hours):

Course	Title	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):

Course	Title	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 44. For subject areas, see page 56.

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 certificate 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 certificate.)

In addition to tuition, estimated costs for students who complete the required courses 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	Intro to Algebra/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):

Course	Title	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 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 required courses 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	Computing Concepts (or higher)	3
MTH052	Intro to Algebra/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 (45 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 44. For subject areas, see page 56.

Automotive Technology Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses 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	Computing Concepts (or higher).....	3
MTH052	Intro to Algebra/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 44. For subject areas, see page 56.

Biology

For discipline outcomes, see **General Education Outcomes—Science or Computer Science on page 51**.

Chemeketa offers a number of biology 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 53, 54, and 55 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 staff or a Chemeketa Biology faculty advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Building Inspection Technology Program

go.chemeketa.edu/buildinginspection

The Building Inspection Technology Associate of Applied Science (AAS) degree is a two-year (seven-term) program for those interested in employment as a building inspector or plans examiner in residential and/or commercial construction. Opportunities for employment depend upon your experience and certifications. There is a need for certified building inspectors and plans examiners working for public and private agencies.

The curriculum covers technical and general education courses as you work toward an Associate of Applied Science degree. Classes on building codes, plan review, inspection techniques, and construction materials are complemented by courses in mathematics, communication skills, and public relations. Throughout the year, students are encouraged to attend professional educational conferences for code professionals at an additional cost. Students who complete the program may be eligible to receive vouchers to cover the cost of some certification tests; others will be at an additional cost.

Cooperative Work Experience (CWE) is a required component of the program. The CWE allows you to gain valuable work experience in the field while you earn college credit. With the approval of the Program Chair, you may enroll in BLD280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

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

these areas. To assess the time you will need to complete the program, please meet with an advisor.

This program has special admission requirements and enrollment limits. For additional information, contact the Admissions Office at 503.399.5006 or the Dallas Center at 503.623.5567.

Program Outcomes

Students completing the degree should be able to:

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

Building Inspection Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$2,980; class fees, \$1,866; universal fee, \$1,358; equipment and supplies, \$375. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 97 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1.....	3
BLD158	Construction Materials and Blueprints	2
BLD292	International Residential Code (Structural).....	3
CIS101	Computing Concepts.....	3
MTH052	Intro to Algebra/Geometry + (or higher).....	3
Term 2		
BLD152	Building Codes 2.....	3
BLD161	Structural Inspection 1.....	3
BLD181	Mechanical Codes 1	4
FE205B	Resumes and Job Search Correspondence	1
MTH053	Intro to Trigonometry/Geometry (or higher)	3
Term 3		
BLD153	Building Codes 3.....	3
BLD163	Structural Inspection 2.....	3
BLD170	ADA Accessibility Code	3
BLD182	Mechanical Codes 2.....	4
BLD193A	Building Inspection Lab.....	2
Term 4		
BLD280L	Cooperative Work Experience (summer term)	12

Term 5

BLD268	Foundations, Excavation, and Grading.....	3
BLD269	Engineering for Code Professionals 1	4
PSY104	Workplace Psychology	4
WR088	Introduction to Technical Writing 1+	3
	or	
WR121	The College Essay+ (or higher).....	4

Term 6

BLD155	Building Department Administration 1+	4
BLD266	Structural Plan Review	3
BLD270	Engineering for Code Professionals 2.....	4
FRP172	International Fire Codes.....	3

Term 7

BLD255	Building Department Administration 2	4
BLD260	Fire Protection for Buildings.....	4
BLD267	Non-Structural Plan Review	3
WR089	Introduction to Technical Writing 2	3
	or	
WR227	Technical Writing.....	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Business Administration

For discipline outcomes, see General Education Outcomes beginning on page 50.

See also Accounting, and Business Management. (Includes Accounting, Finance, International Business, Marketing, Management, Procurement Management, Retail Management, and Sustainability in 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 54 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 staff or a Chemeketa Business Administration faculty 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 Management Program

go.chemeketa.edu/management

See also Accounting, and Business Administration

The program includes 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. The Procurement Management certificate and the Procurement and Supply Chain AAS 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 and quality assurance, distribution, and transportation. As a graduate of Chemeketa's Management AAS degree, you may begin as a management trainee or other entry-level employee of a small business, mid-size organization, or large firm.

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

For more information about this program, contact program faculty Karen Edwards at 503.399.3996 or karen.edwards@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 should be able to:

- 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 AAS degree should be able to:

- 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 Retail Management certificate should be able to:

- 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.

Students completing the Procurement Management certificate should be able to:

- 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 AAS degree should be able to:

- 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.

Getting Started

The first step to entering the 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:

For the Management degree, and Sustainability in Management and Retail Management certificates:

CIS101	Computing Concepts.....	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading.....	3
WR121	The College Essay	4

For the Procurement Management certificate and Procurement and Supply Chain Management degree:

CIS101	Computing Concepts.....	3
MTH095	Intermediate Algebra	4
RD090	College Textbook Reading.....	3
WR121	The College Essay	4

Sustainability in Management Certificate of Completion

Providing an interdisciplinary approach, this certificate 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 required courses 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 (AAS)

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 required courses 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 91 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	Access - Database	3
MTH070	Elementary Algebra+ (or higher).....	4

Term 3		
BA204	Diversity in the Workplace	3
BA206	Business Management Principles.....	4
BA213	Managerial Accounting	4
PSY101	Psychology of Human Relations+	4
	or	
PSY201	Psychology: Mind and Body+ (or higher).....	4
	or	
SOC204	The Sociological Perspective+ (or higher).....	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
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 44. For subject areas, see page 56.

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

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

***Choose CIS102A, CIS121, CIS125G, or CIS133A or above, or CA200 or above.

Retail Management Certificate of Completion retail.chemeketa.edu

The Retail Management certificate 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 certificate 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 required courses listed below are books and 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

Procurement Management Certificate of Completion

The Procurement Management certificate emphasizes skill development in public and private procurement, contract administration, and project management. Graduates of this certificate 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 required courses 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 (or higher).....	4
MTH105	Math in Society+	4
PSY101	Psychology of Human Relations+.....	4
	or	
PSY201	Psychology: Mind and Body+ (or higher).....	4
	or	
SOC204	The Sociological Perspective+ (or higher).....	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*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 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 required courses listed below are books and 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	Access - Database	3
PSY101	Psychology of Human Relations+.....	4
	or	
PSY201	Psychology: Mind and Body+ (or higher).....	4
	or	
SOC204	The Sociological Perspective+ (or higher).....	4
Term 4		
BA226	Business Law I	4
BA231	Fundamentals of Transportation and Logistics Management.....	4
COMM111	Fundamentals of Public Speaking (or higher).....	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 44. For subject areas, see page 56.

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

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

Business Technology Program

bt.chemeketa.edu

Chemeketa offers certificates and degrees 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 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 individuals to become entry-level office support specialists. Students may earn any of the certificates by successfully completing the credit hours required.

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

Program Outcomes

Students completing the Business Software certificate should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 the 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. 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, Office Fundamentals and Virtual Office Assistant certificates:

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

For the degrees:

MTH060	Introductory Algebra.....	4
RD090	College Textbook Reading.....	3

If you have questions about the requirements, contact the Business Technology Program Chair at barbara.johansen@chemeketa.edu or call the department office at 503.399.5048. Failure to be assessed may delay your entry into program classes.

Business Software Certificate of Completion

This certificate offers students the opportunity to earn a certificate in Business Software through online courses and/or traditional courses.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$1,100; class fees, \$86; universal fee, \$280; 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 18 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
CA117	Microsoft Publisher.....	3
CA118B	Excel Basics.....	3
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 2.....	1
CA118F1	PowerPoint Basics 1.....	1
CA201D	Microsoft Word Processing 1.....	3
CA202D	Microsoft Word Processing 2.....	3
	Business Software electives*	3

*Business Software electives (Select 3 credit hours minimum)

BA131	Business Computing.....	4
CA100	Beginning Computing.....	3
CA119	Exploring Office Desktop Publishing.....	4
CA121	Keyboarding.....	3
CA208	Workplace Presentations Using PowerPoint.....	3
CA220	QuickBooks-Computerized Bookkeeping.....	3

*Some of these courses have prerequisites. Check the course descriptions in the back of this catalog for details.

Business Technology Certificate of Completion

This certificate prepares you to work as a word processing specialist, general office clerk, receptionist, file clerk, secretary, records retention specialist, office specialist, bookkeeping assistant, and/or accounting clerk. You may enroll part time or full time. Your classes will be offered in traditional and computer classrooms. Each of the courses in this certificate is offered online at least once per year.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$2,150; class fees, \$207; universal fee, \$770; equipment and supplies, \$300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a certificate of completion by successfully completing the required 57 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA104	Business Applications Using Mathematics+.....	4
	or	
MTH060	Introductory Algebra+ (or higher)	
BA115	Introduction to Accounting.....	4
BT104	Business English 1.....	3
BT105	Business English 2.....	3
BT116	Office Procedures.....	3
BT123	Minute-Taking, Level 1.....	2
BT128	Introduction to Records Management.....	3
BT186	Personal and Professional Development.....	3
BT210	Professional Communications Skills+.....	4
BT230	Organization Performance and Customer Service+.....	3
CA100	Beginning Computing.....	3
	or	
BA131	Business Computing.....	4
CA117	Microsoft Publisher.....	3
CA118B	Excel Basics.....	3
CA118C1	Access Basics 1.....	1
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding.....	3
CA201D	Microsoft Word Processing 1.....	3
CA202D	Microsoft Word Processing 2.....	3
CA213	Integrating Office Procedures.....	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Office Fundamentals Certificate of Completion

The Office Fundamentals certificate allows you to concentrate on developing the basic skills required of a receptionist, file clerk, 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. Each of the courses in this certificate is offered online at least once per year.

You may work toward the Office Fundamentals certificate 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, \$1,422; class fees, \$168; universal fee, \$518; equipment and supplies, \$240. 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.

Office Fundamentals core requirements and electives (36 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	3
BT186	Personal and Professional Development.....	3
BT230	Organization Performance and Customer Service.....	3
CA100	Beginning Computing.....	3
	or	
BA131	Business Computing	4
CA117	Microsoft Publisher.....	3
CA118B	Excel Basics	3
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3

Virtual Office Assistant Certificate of Completion

This certificate is designed for individuals with prior administrative assistant experience who are seeking the necessary coursework and practical experience to work as an independent contractor. Certificate admittance is granted only through program faculty approval. For more information, contact Business Technology Program Chair barbara.johansen@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, \$1,308; class fees, \$219; universal fee, \$560; equipment and supplies, \$240. 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 39 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 1	4
BA251	Office Management	3
	or	
BA250	Small Business and Entrepreneurship	4
	or	
BA206	Business Management Principles.....	4
BT272	Virtual Office 1	4
CA117	Microsoft Publisher.....	3
CA119	Office Desktop Publishing 1.....	4
CA208	Workplace Presentations Using PowerPoint	3
CA220	QuickBooks-Computerized Bookkeeping	3
	Virtual Office Assistant elective*	3

***Virtual Office Assistant electives**

BA101	Introduction to Business.....	4
BA104	Business Applications using Mathematics.....	4
BA214	Business Communications.....	3
BT210	Professional Communication Skills.....	4
BT230	Organization Performance and Customer Service.....	3
CA122	Keyboard Skillbuilding	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures.....	3

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 degree provides you with basic education in bookkeeping—both manual and computerized—in addition to training in office skills such as customer service, software applications, office procedures, records management, and office management.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$3,900; class fees, \$268; universal fee, \$1,400; equipment and supplies, \$550. 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.

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

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT104	Business English 1	3
BT105	Business English 2	3
BT116	Office Procedures.....	3
BT123	Minute-Taking, Level 1	2
	or	
CA118C1	Access Basics 1.....	1
	and	
CA118C2	Access Basics 2.....	1
BT128	Introduction to Records Management	3
BT186	Personal and Professional Development.....	3
BT210	Professional Communication Skills+	4
CA100	Beginning Computing.....	
	or	
BA131	Business Computing	4
CA118B	Excel Basics	3
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures.....	3

Accounting Administrative Assistant 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
BA177	Payroll.....	4
BA211	Financial Accounting 1	4
BA214	Business Communications.....	3
BA226	Business Law 1	4
BA251	Office Management	3
BT230	Organization Performance and Customer Service+	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA117	Microsoft Publisher.....	3
	or	
CA119	Office Desktop Publishing.....	4
CA208	Workplace Presentations Using PowerPoint	3
CA220	QuickBooks-Computerized Bookkeeping	3
	General Education Elective	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Administrative Office Professional Associate of Applied Science Degree

The Administrative Office Professional degree 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 degree 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 degree is transferable to the
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following participating schools: Blue Mountain Community College, Clackamas Community College, Clatsop Community College, Columbia Gorge 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 a Business Technology faculty advisor on course transferability.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$3,500; class fees, \$262; universal fee, \$1,344; equipment and supplies, \$525. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 92 credit hours with a grade of "C" or better in all courses.

Administrative Office Professional first-year core requirements (47 credit hours):

Course	Title	Credit Hours
BT104	Business English 1	3
BT105	Business English 2	3
BT116	Office Procedures.....	3
BT123	Minute-Taking, Level 1	2
BT128	Introduction to Records Management	3
BT186	Personal and Professional Development.....	3
BT210	Professional Communication Skills.....	4
CA100	Beginning Computing.....	3
	or	
BA131	Business Computing	4
CA117	Microsoft Publisher.....	3
CA118B	Excel Basics	3
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 2.....	1
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures.....	3

Administrative Office Professional second-year core requirements (45 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 1	4
BA251	Office Management	3
BT230	Organization Performance and Customer Service+	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA119	Office Desktop Publishing 1.....	4
CA208	Workplace Presentations using PowerPoint.....	3
CA220	QuickBooks-Computerized Bookkeeping	3
	General Education Elective	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Medical Administrative Assistant Associate of Applied Science Degree

The Medical Administrative Assistant degree prepares you to work in medical 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 for this degree.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, \$4,167; class fees, \$370; universal fee, \$1,358; equipment and supplies, \$550. 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 95 credit hours with a grade of "C" or better in all courses.

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

Course	Title	Credit Hours
BI171	Introduction to Human Anatomy and Physiology 1	3
BI172	Introduction to Human Anatomy and Physiology 2	3
BT104	Business English 1	3
BT105	Business English 2	3
BT186	Personal and Professional Development.....	3
BT210	Professional Communication Skills.....	4
CA100	Beginning Computing.....	3
	or	
BA131	Business Computing	4
CA118B	Excel Basics	3
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 2.....	1
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures.....	3
HM120	Medical Terminology 1.....	3
HM121	Medical Terminology 2.....	4

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

Course	Title	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	3
BT230	Organization Performance and Customer Service+	3
BT271	Administrative Capstone Projects	4
BT280C	Cooperative Work Experience	3
CA117	Microsoft Publisher.....	3
CA119	Exploring Office Desktop Publishing	4
CA208	Workplace Presentations Using PowerPoint	3
HM101	Medical Law and Ethics.....	3
HM114	CPT Coding and Reimbursement	3
HM115	ICD-10-CM Coding/Diagnosis	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Virtual Office Assistant Associate of Applied Science Degree Option

The Virtual Office Assistant degree 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, \$3,500; class fees, \$387; universal fee, \$1,386; equipment and supplies, \$550. 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.

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

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT104	Business English 1	3
BT105	Business English 2	3
BT116	Office Procedures.....	3
BT128	Introduction to Records Management	3
BT186	Personal and Professional Development.....	3
BT210	Professional Communication Skills.....	4
CA100	Beginning Computing.....	3
	or	
BA131	Business Computing and Applications	4
CA118B	Excel Basics	3
CA118C1	Access Basics 1.....	1
CA118C2	Access Basics 2.....	1
CA121	Keyboarding.....	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures.....	3

Virtual Office Assistant second-year core requirements (46 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 1	4
BA251	Office Management	3
	or	
BA250	Small Business and Entrepreneurship	4
	or	
BA206	Business Management Principles.....	4
BT230	Organization Performance and Customer Service+	3
BT272	Virtual Office 1	4
CA117	Microsoft Publisher.....	3
CA119	Office Desktop Publishing 1.....	4
CA220	QuickBooks-Computerized Bookkeeping	3
PSY104	Workplace Psychology	4
	General Education elective	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Chemistry

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 51.

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 53, 54, and 55 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, University of Oregon, and Western Oregon University. Southern Oregon University 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 staff or a Chemeketa Chemistry faculty 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 51.

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 (AAOT) degree and the Associate of Science/Oregon Transfer (ASOT)degrees in Business and Computer Science. See pages 53, 54, and 55 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 Communication. Oregon State University offers an option in Theatre Arts. Southern Oregon University offers a baccalaureate degree in Communication with options in Human Communication, 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 staff or a Chemeketa Communication faculty 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 Program

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 Systems Administrator and Network Security certificate prepares students for careers in enterprise and workgroup systems administration, software and systems troubleshooting, IT technical support, corporate information systems and private computer security consulting. This certificate provides a pathway to the CompTIA A+, CompTIA Network+, LINUX+, Microsoft Certified Systems Engineer, Microsoft Certified Solutions Associate certifications. 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 should be able to:

- 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 should be able to:

- 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 Systems Administrator and Network Security certificate should be able to:

- Install, configure and support industry required operating systems and applications to the enterprise environment.
- Install, configure, and administer servers and their various roles as part of a secure enterprise network.

- Utilize logical analysis and enterprise tools to support remote access, resolve internal and external security breaches and develop a defendable network security plan.

In addition to the degree outcomes, students completing the Web Developer certificate should be able to:

- 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 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:

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 email mandy.reininger@chemeketa.edu.

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 courses 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
CIS133J	Java Programming 1	4
CIS133VB	Visual Basic Programming	4
CIS133JS	Java Script Web Programming 1.....	4
CIS133SC	Scripting Languages.....	4
CIS233J	Java Programming 2	4
CIS234J	Java Programming 3	4
CIS133U	C++ Language	4

Systems Administrator and Network Security Certificate of Completion

The Systems Administrator and Network Security certificate prepares students with the knowledge and skills to design, install, implement, monitor, maintain, and manage enterprise and workgroup-level computer systems. Students can obtain an entry-level position as an IT Admin Support Specialist, or as a local, federal or private computer security consultant. 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 and Network Security pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Systems and Network Security certificate courses listed below are books, \$1078; class fees, \$219; universal fee, \$560; equipment and supplies, \$150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify with these costs.

You may earn a certificate of completion by successfully completing the required 40 hours with a grade of "C" or better in all courses.

course	Title	Credit Hours
CIS102A	Cyber Security and Safety	4
CIS133U	C++ Language	4
	Or	
CIS133J	Java Programming 1	4
CIS140B	Computer Operating Systems	4
CIS140U	Unix/Linux.....	4
CIS179	Client-Server Networks	4
CIS186	Computer Forensics	4
CIS278	Data Communications.....	4
CIS279	Server Management 1	4
CIS288	Server Management 2.....	4
CIS289	Network Systems Management	4

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 courses 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	Scripting Languages.....	4
CIS133VB	Visual Basic Programming	4
CIS178I	Internet and 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 required courses 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	CIS Pathway.....	1
CIS121	Programming Concepts	4
CIS125A	Access - Database	3
CIS133SC	Scripting Languages.....	4
CIS140B	Computer Operating Systems	3
CIS140U	UNIX/Linux	3
CIS145	Computer Hardware.....	4
CIS179	Client-Server Networks	4
CIS244	Systems Analysis	4
CIS278	Data Communications.....	4
CIS279	Server Management 1	4
CIS288	Server Management 2.....	4
CIS275	Database Management.....	4

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

Course	Title	Credit Hours
CIS125E	Excel Workbooks.....	4
CIS125G	Introduction to Computer Game Development....	4
CIS133A	Android Application Design.....	4
CIS133I	iOS Application Design.....	4
CIS133J	Java Programming 1	4
CIS133JS	JavaScript Web Programming 1.....	4
CIS133VB	Visual Basic Programming	4
CIS135AE	Advanced Microsoft Excel.....	4
CIS178I	Internet and World-Wide Web.....	3
CIS178W	Fundamentals of Web Design.....	4
CIS186	Computer Forensics	4
CIS195	Web Site Development.....	4
CIS233J	Java Programming 2	4
CIS234J	Java Programming 3	4
CIS280B-L	Cooperative Work Experience	2-12
CIS289	Network Systems Management	4
CIS295	Web Applications Development	4
CJ101	Criminology.....	3
CIS133U	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 44. For subject areas, see page 56.

Computer Science

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 51.

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 Chemeketa’s 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 50.

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 staff or a Chemeketa Criminal Justice faculty 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, Corrections, and Law Enforcement

cj.chemeketa.edu

Graduates of Chemeketa’s Criminal Justice, Law Enforcement, and Corrections 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 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 Megan Gonzalez at 503.584.7350 or megan.gonzalez@chemeketa.edu.

The Law Enforcement associate of applied science degree prepares 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 Chemeketa’s Advising and Counseling Services staff 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 program should contact Megan Gonzalez at 503.584.7350 or megan.gonzalez@chemeketa.edu. Students interested in the Law Enforcement program should contact Michael Withington at 503.589.7768 or michael.withington@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 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 Chemeketa's 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 courses 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 104 credit hours with a grade of "C" or better in all courses. These include the 68 credit hours listed under general education requirements, 21 credit hours of Criminal Justice core requirements, and an additional 15 credit hours of Criminal Justice electives.

General Education requirements (71 credit hours):

Course	Title	Credit Hours
CIS101	Computing Concepts (or higher)	3
COMM218	Interpersonal Communication.....	4
	or	
	Communications elective	4
MTH060	Introductory Algebra+ (or higher)	4
PE185ES	Tactical Athlete (plus 2 additional PE courses)	3
	or	
CJ104A	CJ Personal Defense–Beginning	1
	and	
CJ104B	CJ Personal Defense–Intermediate.....	1
	and	
CJ104C	CJ Personal Defense–Advanced	1
	or	
	Physical Education elective (3 different activities) .	3
WR121	The College Essay+.....	4
WR122	Argument and Research.....	4
CJ212	Police Report Writing	3
	and	
	Criminal Justice elective***	1
	or	
WR227	Technical Writing	4
	General Education electives.....	18
	Arts and Letters electives*	12
	Psychology or Sociology electives+**	12

Criminal Justice core requirements (36 credit hours):

Course	Title	Credit Hours
CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
CJ130	Corrections Process.....	3
CJ206	Crime and Delinquency.....	3
CJ210	Criminal Investigations 1: Crimes vs. Persons	3
CJ226	Constitutional Law.....	3
CJ280C	Cooperative Work Experience	3
	Criminal Justice electives***	15

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

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

**Recommended: PSY201 and PSY202 for Law Enforcement and Adult Corrections.

***Choose any CJ course not required.

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 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 certificate 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 Chemeketa’s Advising and Counseling Services staff or a Chemeketa Criminal Justice faculty advisor on course transferability.

In addition to tuition, estimated costs for students who complete the courses listed below 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.

General Education requirements (31 credit hours):

Course	Title	Credit Hours
CIS101	Computing Concepts (or higher)	3
MTH060	Introductory Algebra+ (or higher)	4
PSY201	Psychology: Mind and Body+	4
PSY202	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):

Course	Title	Credit Hours
CJ101	Criminology.....	3
CJ203	Crisis Intervention Seminar.....	3
CJ206	Crime and Delinquency	3
	or	
SOC221	Juvenile Delinquency	4
CJ230	Juvenile Corrections.....	3
CJ132	Parole and Probation.....	3
	or	
CJ232	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 44. For subject areas, see page 56.

Juvenile Justice Associate of Applied Science Degree

The Juvenile Justice associate of applied science degree 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 courses 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 99 credit hours with a grade of “C” or better in all courses.

Course	Title	Credit Hours
Term 1		
CIS101	Computing Concepts (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
MTH060	Introductory Algebra+ (or higher)	4

Term 2

CJ230	Juvenile Corrections.....	3
CJ235	Youth, Drugs, and Corrections	3
	Criminal Justice elective*	3
PSY201	Psychology: Mind and Body+	4
WR121	The College Essay+.....	4

Term 3

CJ203	Crisis Intervention Seminar.....	3
CJ132	Parole and Probation.....	3
	or	
CJ232	Corrections Casework	3
PSY202	Psychology: Mind and Society	4
PSY237	Life Span Development.....	4
SOC206	Social Problems.....	4

Term 4

CJ240	Intake, Assessment, and Interviewing	3
COMM111	Fundamentals of Public Speaking (or higher).....	4
WR122	Argument and Research.....	4
	Arts and Letters elective.....	4
	Criminal Justice elective*	3

Term 5

CJ212	Police Report Writing	3
	and	
	Criminal Justice elective*	1
	or	
WR227	Technical Writing	4
CJ241	Group Skills for Correctional Clients	3
PE185ES	Tactical Athlete (plus 2 additional PE courses)	3
	or	
CJ104A	CJ Personal Defense-Beginning.....	1
	and	
CJ104B	CJ Personal Defense-Intermediate	1
	and	
CJ104C	CJ Personal Defense-Advanced.....	1
	or	
HE250	Personal Health	3
PSY239	Abnormal Psychology	4

Term 6

CJ170	Juvenile Justice Ethics and Boundaries.....	3
	or	
PHL203	Ethics.....	4
CJ280C	Cooperative Work Experience	3
	Arts and Letters elective.....	4
	Criminal Justice electives*.....	6

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*Choose any CJ courses not already required in the program.

Basic Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses 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 37 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	Psychology: Mind and Body.....	4
WR121	The College Essay	4

Basic Corrections core requirements (25 credit hours):

Course	Title	Credit Hours
CJ101	Criminology.....	3
CJ130	Corrections Process.....	3
CJ132	Parole and Probation.....	3
CJ134	Search/Contraband/Restraints	2
CJ147	Criminal Personality and Errors in Thinking.....	2
CJ203	Crisis Intervention Seminar.....	3
CJ232	Corrections Casework	3
CJ253	Introduction to Penology	3
	Corrections elective*	3

* Corrections elective: Choose any CJ course not required within the program

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

In addition to tuition, estimated costs for students who complete the courses 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 104 credit hours with a grade of "C" or better in all courses:

General Education requirements (24 credit hours):

Course	Title	Credit Hours
CIS101	Computing Concepts (or higher)	3
COMM115	Intercultural Communication (or higher)	4
HPE295	Health and Fitness for Life.....	3
MTH060	Introductory Algebra+ (or higher)	4
PSY201	Psychology: Mind and Body+	4
WR121	The College Essay+.....	4
	Physical Education electives*	2

Corrections core requirements (80 credit hours):

Course	Title	Credit Hours
CJ100	Survey of the Criminal Justice System	3
	or	
CJ101	Criminology.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ134	Search/Contraband/Restraints	2
CJ146	Officer Survival Mindset	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Criminal Investigations 1: Crimes vs. Persons	3
CJ211	Property Crimes: Behavior and Evidence.....	3
CJ212	Police Report Writing	3
CJ217	Interviewing and Interrogation in Criminal Justice	3
CJ224	Missing and Abducted Children.....	2
CJ226	Constitutional Law.....	3
CJ255	Oral Boards and Multi-Assessment	2
CJ261	Law Enforcement Related Experience 1.....	3
CJ261	Law Enforcement Related Experience 2.....	3
CJ261	Law Enforcement Related Experience 3.....	3
CJ261	Law Enforcement Related Experience 4.....	3
CJ261	Law Enforcement Related Experience 5.....	3
CJ261	Law Enforcement Related Experience 6.....	3
CJ269	Police Ethics and Professional Contact	3
CJ270	Crime Victim Advocacy	2
CJ272	Recognizing Child Molesters.....	3
	Corrections electives**	18

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*Physical Education electives: Choose any PE185 courses.

**Corrections electives: Choose any CJ courses not required within the program.

Basic Law Enforcement Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses 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
	or	
PE185ES	Tactical Athlete.....	1
	or	
CJ104A	CJ Personal Defense-Beginning.....	1
	and	
CJ104B	CJ Personal Defense-Intermediate	1
	and	
CJ104C	CJ Personal Defense-Advanced.....	1
PSY201	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	Law Enforcement.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Criminal Investigations 1: Crimes vs. Persons	3
CJ226	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 courses 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 104 credit hours with a grade of "C" or better in all courses:

General Education requirements (24 credit hours):

Course	Title	Credit Hours
CIS101	Computing Concepts	3
COMM115	Intercultural Communication (or higher)	4
HPE295	Health and Fitness for Life.....	3
MTH060	Introductory Algebra+ (or higher)	4
PSY201	Psychology: Mind and Body+	4
WR121	The College Essay+.....	4
	Physical Education electives*	2

Law Enforcement core requirements (80 credit hours):

Course	Title	Credit Hours
CJ100	Survey of the Criminal Justice System	3
CJ101	Criminology.....	3
CJ112	Field Operations and Patrol Procedures	3
CJ134	Search/Contraband/Restraints	2
CJ146	Officer Survival Mindset	3
CJ203	Crisis Intervention Seminar.....	3
CJ210	Criminal Investigations 1: Crimes vs. Persons	3
CJ211	Property Crimes: Behavior and Evidence.....	3
CJ212	Police Report Writing	3
CJ217	Interviewing and Interrogation in Criminal Justice	3
CJ224	Missing and Abducted Children.....	2
CJ226	Constitutional Law.....	3
CJ255	Oral Boards and Multi-Assessment	2
CJ261	Law Enforcement Officer Related Experience 1....	3
CJ262	Law Enforcement Officer Related Experience 2....	3
CJ263	Law Enforcement Officer Related Experience 3....	3
CJ264	Law Enforcement Officer Related Experience 4....	3
CJ265	Law Enforcement Officer Related Experience 5....	3
CJ266	Law Enforcement Officer Related Experience 6....	3
CJ269	Police Ethics and Professional Conduct	3
CJ270	Crime Victim Advocacy	2
CJ272	Recognizing Child Molesters.....	3
	Law Enforcement electives.....	18

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*Physical Education electives: Choose any PE185 courses within the program.

- 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	Computing Concepts.....	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 Health Sciences Department at 503.399.5058 or email 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 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 courses listed below are books, \$800; lab fees, \$820; universal fee, \$784; dental kit, \$434; uniform and shoes, \$350; exam fees, \$725; 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 57 credit hours with a grade of "C" or better in all courses:

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 should be able to:

- 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.

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.....	3
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 44. For subject areas, see page 56.

Dental Hygiene

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 51.

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 www.oit.edu/online/courses.

**CH104, 105, and 106; or CH110—OIT requires one term of general chemistry with a lab, but students must meet the Chemeketa requirements for BI231, 232, and 233

Design

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 50.

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 staff. Also, you should make early contact with an advisor at OSU to learn of any possible changes in an academic area.

Drafting Technology—CAD Program

go.chemeketa.edu/drafting

Drafting Technology offers training for entry into careers in Computer-Assisted Drafting (CAD). CAD 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 should be able to:

- 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 should be able to:

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

Students completing the Computer-Assisted Drafting (CAD) degree should be able to:

- 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 Drafting program faculty. You may need to complete entry-level courses. Then the Drafting program faculty 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	Computing Concepts.....	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 email mike.kelly@chemeketa.edu.

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 courses 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 44. For subject areas, see page 56.

Computer-Assisted Drafting (CAD) Certificate of Completion

The CAD certificate is for students seeking a basic working knowledge of CAD systems. Full-time students can complete the certificate 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 courses 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 courses 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 44. For subject areas, see page 56.

Early Childhood Education Program

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.

There are options for students who are interested in transferring to other universities, including Western Oregon University, who want to earn a bachelor's degree in Early Childhood Education. Program faculty will provide advising to help students better understand their options.

Program Outcomes

Students completing the ECE certificate should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 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:

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 email pam.ditterick@chemeketa.edu.

Early Childhood Education Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses 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 54 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE150	Introduction and Observation	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		
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		
ECE153	Music and Movement for Young Children.....	3
ECE154	Children's Literature and Literacy	3
ECE163	Preschool Practicum	4
HDF229	Middle Childhood Development	3
	or	
MTH211	Elementary Mathematics 1	4
HDF248	Learning Experiences for Young Children	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

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 courses 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 certificate.

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

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 courses 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 certificate.

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

The following institutions offer Bachelor of Arts and/or Bachelor of Science degrees in Early Childhood Education: Oregon State University, Portland State University, and Western Oregon University. As a student, you are responsible for learning the departmental requirements of the institution to which you plan to transfer. Consult with Chemeketa's

Advising and Counseling Services or an Early Childhood Education faculty 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.

In addition to tuition, estimated costs for students who complete the courses 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 98 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE150	Introduction and Observation	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		
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		
ECE153	Music and Movement for Young Children.....	3
ECE154	Children's Literature and Literacy	3
ECE163	Preschool Practicum****	4
HDF229	Middle Childhood Development	3
	or	
MTH211	Elementary Mathematics 1	4
HDF248	Learning Experiences for Young Children	4
Term 4		
ECE251	Young Children Environments.....	3
ECE261	Student Teaching 1***	6
HDF285	Professional Issues in Early Childhood Education	3
MTH060	Introductory Algebra+ (or higher)	4
Term 5		
BI101	General Biology 1	4
GEG106	Cultural Geography.....	4
HDF257	Home, School, and Community	3
	Arts and Letters elective*	4
	or	
	Science/Applied Science elective*	4
	or	
	Communications elective* **	4
	Computer Science elective**	3

Term 6

COMM111	Fundamentals of Public Speaking	4
ECE262	Student Teaching 2***	6
	Arts and Letters elective*	4
	or	
	Science/Applied Science elective*	4
	or	
	Communications elective*	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

*Selection may not be repeated.

**See Associate of Applied Science degree guidelines on page 56.

***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 51.

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 53, 54, and 55 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 Economics faculty 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

go.chemeketa.edu/education

Are you interested in becoming a teacher? You can start your education degree at Chemeketa. A two-year Associate of Arts Oregon Transfer (AAOT) degree with emphasis on education prepares students for university transfer or for employment as an instructional assistant in local school districts.

Chemeketa has developed two-year transfer tracks designed specifically for students who want to become teachers, both for elementary/middle school and middle/high school (requirements for these two levels is different). The curriculum consists of a small foundation of transferable 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. For details, contact Education program staff at 503.399.5140.

Elementary/Middle School Education

For discipline outcomes, see General Education Outcomes beginning on page 50.

Chemeketa has developed transfer guides with some of Oregon’s public and private universities offering Elementary/Middle School Education licensure programs. The following offer Bachelor of Arts and/or Bachelor of Science degrees in Elementary/Middle School Education: Oregon State University, University of Oregon, Eastern Oregon University, Pacific University, Corban University, Concordia University, and Western Oregon University.

Recommended 90 credit path for Elementary/Middle School Teaching Licensure:

Course	Title	Credit Hours
Arts and Letters - Maximum of 12 Credits		
ART115	Basic Design: Black and White, or.....	4
ART130	Digital Media Time Design	4
ENG104	Introduction to Fiction, and.....	4
ENG105	Introduction to Dramatic Literature, or	4
ENG106	Introduction to Poetry, or	4
HUM120	International Community Development in Action	4
LING210	Introduction to Linguistics	4
Communication:		
COMM111	Fundamentals of Public Speaking	4
Computer Literacy:		
CIS101	Computing Concepts.....	3
Education:		
ED200	Foundations of Education	3
ED229	Learning and Development	3
ED230	Children’s Literature in the Diverse Classroom.....	3
ED240	Education Practicum and Seminar	3
ED258*	Multicultural Education and English Language Learners	3
ED265	Inclusion: Special Needs Students	3
Health:		
HE250	Personal Health, or.....	3
	Three 1-credit Physical Education Courses	3
Math:		
MTH211	Elementary Mathematics 1	4
MTH212	Elementary Mathematics 2.....	4
MTH213	Elementary Mathematics 3.....	4

Science:

BI101	General Biology 1	4
GS104	General Science: Physics, or.....	4
GS105	General Science: Chemistry, or	4
GS106	General Science: Earth Science.....	4

Social Science - Maximum of 16 Credits:

EC202	Introduction to Macroeconomics	4
GEG106	Cultural Geography.....	4
HST201	United States: to 1840, or	4
HST202	United States: 1840 to 1900, or	4
HST203	United States: 1900 to Present.....	4
PS201	American Government.....	4
PSY201	Psychology: Mind and Body, or.....	4
PSY218	Educational Psychology	4

Writing:

WR121	The College Essay	4
WR122	Argument and Research.....	4

*Recommended for students who are looking for a dual language endorsement.

Transfer admission education programs usually require a minimum grade point average (GPA) of 2.75 to 3.00.

Program Outcomes

Students completing a 2-year Associate of Arts Oregon Transfer (AAOT) degree with emphasis in education will be able to:

- Embody the characteristics and ethical standards of professionals in the education field.
- Describe the relevant state and federal education laws, standards of behavior and professional ethics.
- Articulate a teaching philosophy that integrates educational theory, and demonstrate a strong knowledge of social justice and social context related to education.
- Explain and instruct basic mathematical functions to elementary/middle students.
- Explain and instruct literacy development, using strong skills in reading, writing and oral communication.
- Explain and instruct on foundational science concepts at the elementary/middle level.

Secondary Education

For discipline outcomes, see General Education Outcomes beginning on page 50.

Chemeketa has developed transfer guides with some of Oregon's public and private universities offering Middle/High School Education licensure programs. The following institutions offer Bachelor of Arts and/or Bachelor of Science degrees in Middle/High School Education: Western Oregon State University, Oregon State University, University of Oregon, Eastern Oregon University, Pacific University, and Western Oregon University.

Admission to these programs requires maintaining a specific GPA, usually 2.75 to 3.00; and successfully passing the ORELA Civil Rights test as well as the ORELA subject area test in your specific discipline area. For example, students who wish to become a high school math instructor would take one to two math courses every term at Chemeketa.

As a student, you are responsible for learning the departmental requirements of the institution to which you plan to transfer. Consult with Chemeketa's Advising and Counseling Services or an Education faculty 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 Program

go.chemeketa.edu/electronics

See also Robotics Program

Career opportunities in the electronics field are diverse, exciting, and rewarding. Chemeketa's electronics department offers three certificates and five associate of applied science degrees to meet the present and future challenges of the electronics industry: certificates in the areas of Electronics, Network Technology Essentials, and Process Control; and associate of applied science degrees in Computer Electronics, Electronic Engineering Technician, 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 should be able to:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, coworkers, 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.

Students completing the Networking Technology Essentials certificate should be able to:

- Read and interpret written materials, including manuals, technical bulletins, diagrams, schematics, and procedures to design, maintain, install, and repair network Infrastructure.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and coworkers.
- Identify and solve technology problems related to network hardware infrastructures.
- Perform test procedures and use equipment and software to diagnose, install, maintain, and/or repair network systems.

In addition to the Electronic Engineering outcomes, students completing the Computer Electronics degree should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 Electronics 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:

CA121	Keyboarding (if less than 25 wpm)	3
CIS101	Computing Concepts.....	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.

Electronics Certificate of Completion

The three-term Electronics certificate 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 courses 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

Networking Technology Essentials Certificate of Completion

The Networking Technology Essentials provides the entry-level skills that will enable graduates to work in the field of computer network support. Those who work in networking support assist information technology employees within their organization by testing and evaluating existing network systems, performing regular maintenance to ensure that networks operate correctly, and troubleshooting local area networks (LANs), wide area networks (WANs), and Internet systems. The certificate's coursework sequence provides integrated and comprehensive coverage of networking topics, from fundamentals to advanced applications and services, along with hands-on practical experience and career skills development. The certificate is wholly contained within the Computer Electronics AAS degree option and may be used as a stepping stone in the path to a network technician or computer support specialist position, and then to the Computer Electronics degree.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$600; class fees, \$120; universal fee \$224; equipment and supplies, \$25; and Intel-compatible laptop computer, \$500. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a certificate of completion by successfully completing the required 16 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
NET141	Network for Small Business	4
NET142	Medium Business Networks	4
NET143	Routing and Switching Systems	4
NET144	Network Design and Support	4

Process Control Certificate of Completion

The three-term Process Control certificate focuses attention 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 courses 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 degree 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 courses listed below are books, \$2,700; class fees, \$490; universal fee, \$1,428; equipment and supplies, \$470; 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	Computer Hardware.....	4
PSY104	Workplace Psychology+.....	4

Term 6		
ELT222	Programming Concepts 2	4
	or	
CIS140U	UNIX/Linux	3
	or	
CIS179	Client-Server Networks	4
ELT255	Advanced Data Communications.....	4
	or	
CIS279	Server Management 1	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 44. For subject areas, see page 56.

Electronic Engineering Technician Associate of Applied Science Degree

Upon graduation from the Electronic Engineering Technician degree, 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 courses 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
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
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 44. For subject areas, see page 56.

***Electronics electives (select 6 credits):**

(For second-year students only; must have prior approval of the Program Chair.)

CH121	College Chemistry.....	5
CH201	Chemistry for Engineers.....	4
CIS145	Computer 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

Industrial Electronics Associate of Applied Science Degree Option

Students selecting the Industrial Electronics degree 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 degree 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 courses listed below are books, \$2,625; class fees, \$450; universal fee, \$1,442; Intel-compatible computer, \$800; equipment and supplies, \$600. 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	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 44. For subject areas, see page 56.

***Technical electives:**

CH121	College Chemistry.....	5
CH201	Chemistry for Engineers.....	4
CIS145	Computer 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

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 courses 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
MTH081	Technical Mathematics+.....	4
	or	
MTH111	College Algebra+ (or higher)	5
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
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
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 44. For subject areas, see page 56.

Renewable Energy Management Associate of Applied Science Degree Option

The Renewable Energy Management degree 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 degree.

During the second year, students of the Renewable Energy Management degree 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 addition to tuition, estimated costs for students who complete the courses listed below are books, \$2,300; 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
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra+ (or higher)	5
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
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5

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 44. For subject areas, see page 56.

Emergency Medical Technology/Paramedic Program

go.chemeketa.edu/emt

The Paramedicine program offers career training for entry-level personnel, as well as certification/licensure 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 Health Authority/ Emergency Medical Services (OHA-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 should be able to:

- 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 courses 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	EMT, 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	EMT, 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 (or higher).....	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 44. For subject areas, see page 56.

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. For additional information, contact Chemeketa's Advising and Counseling Services staff.

Engineering

For discipline outcomes, see **General Education Outcomes—Math and Science on page 51.**

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 50.**

Chemeketa offers a number of English courses. Many 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 53, 54, and 55 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 staff or a Chemeketa English faculty 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

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 English for Speakers of Other Languages (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 Program

go.chemeketa.edu/fire

The Fire Protection program 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 should be able to:

- 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 should be able to:

- Demonstrate skills and knowledge to function as a NFPA Fire Officer 1 and 2.
- 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 should be able to:

- 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 courses 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	Computing Concepts (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 44. For subject areas, see page 56.		
*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 courses 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 44. For subject areas, see page 56.		

***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
	and	
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 (4) 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 courses 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	EMT, 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	EMT, 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
	or	
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	Computing Concepts (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 44. For subject areas, see page 56.

*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 50.

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 53, 54, and 55 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 staff or a Chemeketa Foreign Languages faculty 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

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 51.

Chemeketa offers a few general science 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 53, 54, and 55 for a complete listing.

Oregon's state universities offering bachelor of arts and/or bachelor of science degrees in General Science are Oregon State 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 Physical science faculty 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 Studies

For discipline outcomes, see General Education Outcomes beginning on page 50.

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. 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 51.

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 53, 54, and 55 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 staff or a Chemeketa Geography faculty 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 51.

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 53, 54, and 55 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 staff or a Chemeketa Geology faculty 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 Program

Health, Health Education

For discipline outcomes, see General Education Outcomes beginning on page 50.

Chemeketa offers a number of health courses. Some of these courses can be used to fulfill the requirements of the Associate of Arts Oregon Transfer (AAOT) degree, and the Associate of Science Oregon Transfer (ASOT) degrees in Business and in Computer Science. See pages 53, 54, and 55 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 staff 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 Program

go.chemeketa.edu/healthservices

Basic Health Care Certificate of Completion

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.

Program Outcomes

Students completing the certificate should be able to:

- 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.
- 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.

Getting Started

The first step to entering the following program options 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:

AH115	Healthcare Career	1
MTH060	Introductory Algebra (or higher).....	4
RD090	College Textbook Reading (or higher)	3
WR115	Introduction to Composition (or higher)	4

In addition to tuition, estimated costs for students who complete the courses 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	Computing Concepts.....	3
HM120	Medical Terminology 1	3
HM121	Medical Terminology 2.....	4

Health Information Management Associate of Applied Science Degree

As a graduate of the Health Information Management two-year degree, 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 combination of career and technical education courses and transfer courses will give you a wide variety of options, including bachelor and master's degrees in health information management.

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

Additionally, you must be able to pass a criminal background check. Health care institutions may also require another criminal background check, urine drug screen, proof of immunizations, and current CPR certification before a student can be placed at the facility for externship, practicum, or cooperative work experience.

Program Outcomes

Students completing the degree should be able to:

- 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 program options 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:

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 Health Sciences Department at 503.399.5058 or email healthsciences@chemeketa.edu.

Health Information Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$2,309; class fees, \$160; universal fee, \$1,260; equipment and supplies, \$172; 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 91 credit hours with a grade of "C" or better in all courses. If you have completed or 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 or
BI231	Human Anatomy and Physiology	4
CIS101	Computing Concepts.....	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 or
BI232	Human Anatomy and Physiology	4
CA118B	Excel Basics	3
CA208	Workplace Presentations Using PowerPoint	3
HM121	Medical Terminology 2.....	4
MTH070	Elementary Algebra+ (or higher).....	4
Term 3		
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 44. For subject areas, see page 56.

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 should be able to:

- 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 Healthcare Provider CPR certification.
- Be prepared to sit for national certification as a Certified Clinical Hemodialysis Technician (CCHT).

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 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:

MTH020	Basic Mathematics.....	4
WR080	Basic Writing	4

Prior to applying to this program, it is recommended that Term 1 courses be completed with a grade of C or higher. Before beginning the program, you must pass both a criminal background check and drug test (pursuant to OAR 855-010-0045).

If you have questions about the requirements, call the Yamhill Valley Campus in McMinnville, 503.472.9482. 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 courses 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 41 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
HM120	Medical Terminology 1.....	3
MTH060	Introductory Algebra+ (or higher)	4
PSY101	Psychology of Human Relations (or higher)	4
WR090	Fundamentals of Writing+ (or higher)	4
Term 2		
HEM101	Hemodialysis Technology 1.....	13
Term 3		
HEM102	Hemodialysis Technology 2.....	13

History

For discipline outcomes, see **General Education Outcomes—Social Science on page 51**.

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 53, 54, and 55 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 staff or a Chemeketa History faculty 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 should be able to:

- 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 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:

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 email sherrie.magarrell@chemeketa.edu.

In addition to tuition, estimated costs for students who complete the courses 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 96 credit hours with a grade of “C” or better in all courses:

Course	Title	Credit Hours
Term 1		
CIS101	Computing Concepts (or higher)	3
HOR111	Introduction to Horticulture.....	3
WR121	The College Essay+ (or higher).....	4
SOIL205	Soil Science	4

Hospitality and Tourism Management Program

go.chemeketa.edu/programs/htm

Program courses are delivered entirely online.

The Hospitality and Tourism Management curriculum focuses on the management aspects of Oregon's fastest-growing industry: hospitality and tourism. The Hospitality and Tourism Management associate of applied science degree, in combination with one or more specialized areas of study, prepares students for a wide variety of career opportunities in key industry sectors. The Event Management certificate offers career opportunities in meeting and event planning. The Food and Beverage Management certificate prepares students to work in food and beverage supervision in a variety of venues. The Lodging Management certificate preps students to work in the area of lodging supervision in facilities ranging from small B & Bs to large resorts, while the Travel and Tourism certificate focuses on travel-related careers. The one-year Hospitality and Tourism Management certificate opens the door to careers in hospitality and tourism management.

Courses focus on the knowledge, skills, and abilities needed to formulate and implement effective business and marketing strategies in a hospitality and tourism context. Students develop the skills required to lead stakeholder groups in hospitality and tourism business entities, including leadership and communication, finance and accounting, sales and marketing, human resource management, and operational delivery of competitive guest experiences for diverse guest types. 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.

As a student in the program, you are expected to work with a department advisor in planning your class schedule leading toward fulfillment of all program requirements. If you plan to earn a bachelor's degree, you will also be advised on opportunities to continue your education through other universities.

Program Outcomes

Students completing the Event Management certificate should be able to:

- Organize and promote a special event or meeting utilizing appropriate Industry techniques.
- Establish a service-profit link to deliver competitive guest experiences in diverse cultural groups.
- Develop marketing strategies specific to hospitality and tourism.

Students completing the Food and Beverage certificate should be able to:

- Establish a service-profit link to deliver competitive guest experiences in diverse cultural groups.
- Develop marketing strategies specific to hospitality and tourism.
- Use industry-specific cost control terms and techniques to improve profitability.

Term 2

HOR211	Plant Propagation.....	4
MTH070	Elementary Algebra+ (or higher).....	4
PSY104	Workplace Psychology+ (or higher)	4
SOIL206	Plant Nutrition	2
	Horticulture elective(s).....	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	4

Term 4

HOR203	Fall Practicum	2
HOR237	Integrated Pest Management: Insects and Diseases	4
	Horticulture elective*	4
	Plant Identification course**.....	4

Term 5

HOR204	Winter Practicum.....	2
HOR112	Pesticides and Safety	2
HOR225	Greenhouse Production and Management.....	4
	Horticulture elective*	4
	Plant Identification course**.....	4

Term 6

HOR105	Spanish for Horticulture.....	3
HOR205	Spring Practicum	2
HOR236	Integrated Pest Management: Weeds	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 44. For subject areas, see page 56.

*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
HOR201	Growing Vegetables in the Willamette Valley	4
HOR212	Advanced Plant Propagation.....	2
HOR238	Plant Problem Diagnosis	2
HOR240	Sustainable Landscape Design.....	4
HOR251	Growing Fruit in the Willamette Valley.....	3
HOR256	Identification of Herbaceous Plants 2	2
HOR257	Horticultural Marketing	3
HOR273	Urban and Community Forestry	2
HOR276	Organic Gardening.....	3
HOR277	Composting.....	2

**Plant Identification courses (select 9 credit hours):

HOR226	Fall Plant Identification	4
HOR227	Winter Plant Identification.....	4
HOR228	Spring Plant Identification	4
HOR255	Identification of Herbaceous Plants 1	3

Students completing the Lodging certificate should be able to:

- Demonstrate the ability to anticipate market trends within industry-specific distribution processes and technology platforms.
- Develop marketing strategies specific to hospitality and tourism.
- Manage lodging operations throughout the guest cycle to maximize revenue.

Students completing the Travel and Tourism Management certificate should be able to:

- Organize and promote a special event or meeting utilizing appropriate Industry techniques.
- Demonstrate the ability to anticipate market trends within industry-specific distribution processes and technology platforms.
- Develop marketing strategies specific to hospitality and tourism.

Students completing the Hospitality and Tourism certificate should be able to:

- Organize and promote a special event or meeting utilizing appropriate Industry techniques.
- Establish a service-profit link to deliver competitive guest experiences in diverse cultural groups.
- Demonstrate the ability to anticipate market trends within industry-specific distribution processes and technology platforms.

Students completing the Hospitality and Tourism AAS degree should be able to:

- Organize and promote a special event or meeting utilizing appropriate industry techniques.
- Discuss technology platforms within industry-specific distribution and promotion processes in order to anticipate market trends.
- Develop marketing strategies specific to Hospitality and Tourism.
- Manage lodging operations throughout the guest cycle to maximize revenues.
- Use industry-specific cost control terms and techniques to improve profitability.
- Implement operational strategies that optimize Balanced Scorecard results.

Getting Started

The first step to entering the Hospitality and Tourism Management 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:

For the certificates:

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

For the degree:

CA121A	Keyboarding A (if less than 25 wpm).....	1
CIS101	Computing Concepts.....	3
RD115	Academic Thinking and Reading.....	3
SSP112	Effective Learning.....	3
WR115	Introduction to Composition.....	4

If you have questions about the requirements, contact Advising and Counseling Services at 503.399.5120 or Hospitality and Tourism Management program staff at 503.472.9482, or email kathryn.ellis@chemeketa.edu. Failure to be assessed may delay your entry into program classes.

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 courses listed below are books, \$578; universal fee, \$504. 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 36 credit hours with a grade of “C” or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM125	Special Event Planning.....	4
HTM127	Selling in Hospitality and Tourism Management...	4
HTM131	Customer Service Management.....	4
HTM138	Foods and Beverages: Gastronomy.....	4
HTM203	Service Marketing.....	4
HTM224	Catering and Banquets.....	4
HTM226	Meetings and Conventions.....	4

Food and Beverage Management Certificate of Completion

The Food and Beverage Management certificate prepares students for direct employment in food and beverage supervision in the following fields: food and beverage certificate in hotels, resorts, and convention/exposition centers; catering and event companies; free-standing bars, restaurants, and food trucks; attraction-based concessions such as museums, gardens, and zoos; tasting rooms in wineries, micro-breweries, and craft distilleries; and local

attractions or institutions with food service such as theme parks, museums, hospitals, schools, and correctional facilities.

Courses focus on the operational aspects of food and beverage management: food and beverage pairing, inventory management, cost control, menu design, customer service management, and layout and set-up of dining service areas. Students develop the skills necessary for supervisory 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 concept design and marketing strategies.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$525; universal fee, \$504. 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 36 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM105	Restaurant Operations	4
HTM107	Hospitality Cost Control.....	4
HTM125	Special Event Planning.....	4
HTM131	Customer Service Management.....	4
HTM138	Foods and Beverages: Gastronomy.....	4
HTM203	Service Marketing.....	4
HTM224	Catering and Banquets	4

Lodging Management Certificate of Completion

The Lodging Management certificate prepares students for direct employment in lodging supervision in the following businesses: hotels, motels, resorts, inns, and B & Bs.

Courses focus on the history and current landscape of the hospitality and tourism industry, market segmentation of lodging guests, supervising guest service employees, lodging guest accounting and record-keeping practices, industry-specific web technologies used to attract and engage potential customers, and meeting and event services provided in lodging establishments.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$525; universal fee, \$504. 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 36 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM125	Special Event Planning.....	4
HTM127	Selling in Hospitality and Tourism Management... 4	4
HTM131	Customer Service Management.....	4
HTM143	Computer Reservation Systems	4
HTM203	Service Marketing.....	4
HTM209	Lodging Operations.....	4
HTM226	Meetings and Conventions	4

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 Hospitality and Tourism degree program.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$525; universal fee, \$504. 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 36 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM114	Travel Destination Geography.....	4
HTM125	Special Event Planning.....	4
HTM127	Selling in Hospitality and Tourism Management... 4	4
HTM131	Customer Service Management.....	4
HTM143	Computer Reservation Systems	4
HTM203	Service Marketing.....	4
HTM226	Meetings and Conventions	4

Hospitality and Tourism 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 courses listed below are books, \$1,072; class fees, \$70; universal fee, \$672. 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 48 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

General Education requirements (16 credit hours)

Course	Title	Credit Hours
COMM218	Interpersonal Communication (or higher)	4
MTH060	Introductory Algebra+ (or higher)	4
PSY104	Workplace Psychology+ (or higher)	4
WR121	The College Essay+ (or higher)	4

Hospitality and Tourism Management certificate core requirements (32 credit hours)

Course	Title	Credit Hours
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM105	Restaurant Operations	4
HTM125	Special Event Planning	4
HTM127	Selling in Hospitality and Tourism Management... 4	
HTM131	Customer Service Management	4
HTM138	Foods and Beverages: Gastronomy.....	4
HTM143	Computer Reservation Systems	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Hospitality and Tourism Management Associate of Applied Science Degree

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

General Education requirements (20 credit hours)

Course	Title	Credit Hours
COMM218	Interpersonal Communication (or higher)	4
MTH060	Introductory Algebra+ (or higher)	4
PSY104	Workplace Psychology+ (or higher)	4
WR121	The College Essay+ (or higher)	4
WR227	Technical Writing	4

Hospitality and Tourism Management degree core requirements (72 credit hours)

Course	Title	Credit Hours
BA101	Introduction to Business.....	4
BA206	Business Management Principles.....	4
BA226	Business Law 1	4
HTM100	Hospitality Industry.....	4
HTM104	Tourism and Travel Industry.....	4
HTM105	Restaurant Operations	4
HTM107	Hospitality Cost Control.....	4
HTM114	Travel Destination Geography.....	4
HTM125	Special Event Planning	4
HTM127	Selling in Hospitality and Tourism Management... 4	
HTM131	Customer Service Management.....	4
HTM138	Foods and Beverages: Gastronomy.....	4
HTM143	Computer Reservation Systems	4
HTM203	Service Marketing.....	4
HTM209	Lodging Operations.....	4
HTM224	Catering and Banquets	4
HTM226	Meetings and Conventions	4
HTM290	Hospitality and Tourism Management Strategic Management.....	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Human Services Program

go.chemeketa.edu/humanservices

The Human Services program offers training for entry-level positions in human service agencies. The Human Services degrees and certificates combine academic coursework. Practicum must equal 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 eligible to complete the Addiction Counselor Certification Preparation (ACCP) program and earn a one-year certificate. It is recommended that you contact Christina Steiger (christina.steiger@chemeketa.edu) for advising.

The program has special admission requirements and enrollment limits, and there is a deadline for applications. Students in the Addiction Studies program that are recovering from chemical dependency are encouraged to enter the program but must have a minimum of two years of continuous sobriety in an unrestricted environment in order to commence practicum. Social Services practicum does not have this limitation. Criminal history limitations apply to student in this program as well.

By enrolling in PLP121, Introduction to Prior Learning Portfolio, students may be able to earn credits for prior learning acquired through jobs, non-credit classes, community or volunteer service, or individual study. For more information, call 503.399.5114.

Program Outcomes

Students completing the AAS degrees and the ACCP certificate should be able to:

- 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 in the major human systems.
- Identify and select interventions that promote client 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.
- Adapt assessment skills and interventions to a variety of settings.
- Comprehend and recognize the worth and uniqueness of the individual, including race, culture, ethnicity, gender, religion, learning style, abilities, sexual orientation, age, social class, and other expressions of diversity.

In addition to the outcomes above, students completing the Addiction Studies degree and the Addiction Counselor Certification Preparation certificate should be able to:

- Describe, identify, assess, and treat substance use disorders.

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 substance use disorder 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 courses listed below are books, \$1,937; class fees, \$63; universal fee, \$826; CADC candidate registry, \$50; equipment and supplies, \$231; measles vaccine: cost varies per provider. 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 59 credit hours with a grade of "C" or better in all Human Services courses and a minimum of 15 credits of practicum. Students interested in this program must attend the an orientation or meet personally with Christina Steiger (christina.steiger@chemeketa.edu) 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
HS155	Fundamentals of Interviewing	3
HS211	Wellness Counseling	4
HS213	Multicultural Issues	3

Term 2

HS103	Ethics for Human Services	3
HS214	Advanced Interviewing and Counseling Skills.....	3
HS219	Client Records, Case Management, and Care Coordination	3

Term 3

HS156	Counseling Theories	3
HS216	Assessment and TX Planning	3
HS218A	Group Processes A.....	1
HS284A- HS288A	Practicum: Human/Addiction Studies	4-8

Term 4

HS158	Trauma Informed Theory, Practice, and Crisis Management.....	3
HS217	Group Counseling Skills	3
HS218B	Group Processes B	1
HS284A- HS288A	Practicum: Human/Addiction Studies	4-8

Term 5

HS201	Addiction and the Family System.....	3
HS209	Co-occurring Disorders	3
HS218C	Group Processes C	1
HS284A- HS288A	Practicum: Human/Addiction Studies	4-8

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 degree is 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 courses listed below are books, \$3,510; class fees, \$109; universal fee, \$1,495; CADC candidate registry, \$50; equipment and supplies, \$278; measles vaccine: cost varies per provider. 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 99 credit hours with a grade of "C" or better in WR121 and all Human Services courses. Twenty-five credits of practicum are required, at least 15 of which must be in a substance use disorder studies placement; 10 credits can be satisfied at a social services placement.

Course	Title	Credit Hours
Term 1		
HS150	Personal Effectiveness in Human Services	3
HS152	Stress Management.....	1
HS170	Introduction to Practicum.....	3
WR121	The College Essay	4

Term 2	
HS101	Addiction Pharmacology and Physiology 4
HS103	Ethics for Human Services 3
HS155	Fundamentals of Interviewing 3
HS211	Wellness Counseling 4
PSY201	Psychology: Mind and Body+ 4
Term 3	
HS214	Advanced Interviewing and Counseling Skills..... 3
HS219	Client Records, Case Management, and Care Coordination 3
HS260	Group Dynamics..... 3
HS284A- HS288A	Practicum: Human/Addiction Studies 4-8
Term 4	
HS156	Counseling Theories 3
HS216	Assessment and TX Planning 3
HS218A	Group Processes A 1
HS284A- HS288A	Practicum: Human/Addiction Studies 4-8
PSY239	Abnormal Psychology 4
Term 5	
HS158	Trauma Informed Theory, Practice, and Crisis Management..... 3
HS213	Multicultural Issues..... 3
HS217	Group Counseling Skills 3
HS218B	Group Processes B 1
HS284A- HS288A	Practicum: Human/Addiction Studies 4-8
Term 6	
CIS101	Computing Concepts..... 3
HS201	Addiction and the Family System..... 3
HS209	Co-occurring Disorders 3
HS218C	Group Processes C 1
HS284A- HS288A	Practicum: Human/Addiction Studies 4-8
MTH060	Introductory Algebra (or higher)..... 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 courses listed below are books, \$3,910; class fees, \$109; universal fee, \$1,316; equipment and supplies, \$286; measles vaccine: cost varies per provider. 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 94 credit hours with a grade of "C" or better in WR121 and all Human Service courses. Twenty-five credits of practicum are required.

Course	Title	Credit Hours
Term 1		
HS150	Personal Effectiveness in Human Services 3	
HS152	Stress Management..... 1	
HS170	Introduction to Practicum..... 4	
WR121	The College Essay 4	
Term 2		
HS101	Addiction Pharmacology and Physiology 4	
HS103	Ethics for Human Services 3	
HS155	Fundamentals of Interviewing 3	
HS211	Wellness Counseling 4	
PSY201	Psychology: Mind and Body+ 4	
Term 3		
HS260	Group Dynamics..... 3	
HS265	Casework Interviewing 3	
HS284S- HS288S	Practicum: Human/Social Services 4-8	
PSY237	Life Span Development..... 4	
Term 4		
HS156	Counseling Theories 3	
HS218A	Group Processes A 1	
HS266	Comprehensive Case Management..... 3	
HS284S- HS288S	Practicum: Human/Social Services 4-8	
PSY239	Abnormal Psychology 4	
Term 5		
HS158	Trauma Informed Theory, Practice, and Crisis Management..... 3	
HS213	Multicultural Issues..... 3	
HS28B	Group Processes B 1	
HS284S- HS288S	Practicum: Human/Social Services 4-8	
Term 6		
CIS101	Computing Concepts (or higher) 3	
HS218C	Group Processes C 1	
HS223	Aging: Theory and Practice..... 3	
HS284S- HS288S	Practicum: Human/Social Services 4-8	
MTH60	Introductory Algebra (or higher)..... 4	

Interactive Media

See Visual Communications Program

Journalism

For discipline outcomes, see General Education Outcomes—Speech/Oral Communication or Writing on page 51.

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 53, 54, and 55 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 staff or a Chemeketa Journalism faculty 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 Program

This program offers 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 certificate 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 appliedtech@chemeketa.edu.

Program Outcomes

Students completing the Basic Manufacturing Technician certificate should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- 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 should be able to:

- Produce accurate 2D and 3D drawings using CAD software.
- Use effective communication skills as a team member.
- Program CNC machine tools at the machine control level.
- Perform advanced set-ups and operations using manual and/or Computer Numerical Controlled (CNC) equipment to produce accurately sized parts.
- Create parametric solid models and generate CNC code through CAM software to manufacture parts on CNC machine tools.
- Design and build fixtures and tooling for manufacture production purposes to meet customer specifications.
- Determine optimal production process planning to meet customer requirements.
- Select and optimize available machines and equipment to meet product process requirements.
- Calculate power requirements, select drive and system components, and design criteria for mechanical systems.

Getting Started

The first step to entering the Machining Technology 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 program advisor will help you develop an individualized

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

CIS101	Computing Concepts.....	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 Duane Hibbeler at 503.399.5087 (email duane.hibbeler@chemeketa.edu), or the office of the Dean of Applied Technologies at 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 courses 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 9 credit hours, plus the additional credits in one area of specialization listed below.

Basic Manufacturing Technician core requirements (9 credit hours):

Course	Title	Credit Hours
CAM050	Orientation to Manufacturing Processes.....	2
CAM100	Blueprint Reading and Sketching.....	2
CAM105	Precision Measurement.....	2
MTH052	Intro to Algebra/Geometry	3

Plus: Choose one area of specialization

Welding Specialization

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

Mill Specialization

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

Lathe Specialization

CAM110	Benchwork and Manual Fundamentals	4
CAM121	Manual Lathe Processes.....	2

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 courses 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 25 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
CAM130	CNC Machine Setup Operation.....	4
MTH052	Intro to Algebra/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	Intro to Trigonometry/Geometry	3
WR088	Introduction to Technical Writing 1	3

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 courses 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 40 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
CAM130	CNC Machine Setup/Operation.....	4
MTH052	Intro to Algebra/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	Intro to Trigonometry/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

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 courses 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 40 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
CAM130	CNC Machine Setup Operation.....	4
MTH052	Intro to Algebra/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	Intro to Trigonometry/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 courses listed below are books, \$1,388; class fees, \$321; universal fee, \$1,302; precision tools and supplies, \$4,000. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 97 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
CAM130	CNC Machine Setup/Operation.....	4
DRF130	CAD 1.....	3
MTH052	Intro to Algebra/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	Intro to Trigonometry/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.....	2
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.....	2
CAM265	Advanced CNC Lathe Operation and Programming.....	3
DRF262	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 44. For subject areas, see page 56.

Mathematics

For discipline outcomes, see General Education Outcomes—Mathematics on page 51.

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 53, 54, and 55 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 staff or a Chemeketa Mathematics faculty 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

go.chemeketa.edu/medassistant

This program prepares graduates for a wide range of duties in medical offices and other healthcare settings. Administrative responsibilities will include scheduling and receiving patients,

keeping medical records, handling telephone calls and correspondence, and maintaining supplies and equipment.

Medical assistant clinical duties will include assisting with examinations and treatments, obtaining medical histories, sterilizing instruments and equipment, and performing certain diagnostic tests and laboratory procedures to include venipuncture and injections 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 should be able to:

- 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 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 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 courses listed below are books, \$500; 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 41 credit hours:

Course	Title	Credit Hours
Term 1 (Must be completed prior to applying to program)		
HM120	Medical Terminology 1	3
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
Term 3		
MED131	Medical Assisting Seminar	1
MED132	Medical Assisting Clinical Practice	11

Music

For discipline outcomes, see **General Education Outcomes—Arts and Letters on page 50.**

go.chemeketa.edu/music

Chemeketa’s growing music curriculum offers a comprehensive range of foundational courses in both performance and general music. Our music performance classes include three levels each of choir, band, and orchestra, as well as individual applied lessons in piano, voice, and most of the traditional string, wind, and percussion instruments. Music Fundamentals, Music Appreciation, Music History, and Music Theory classes provide a basis for understanding and appreciation of music.

Many music 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 52 and 53 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 Music are: Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

We strongly recommend developing a term-by-term plan of study. Contact the Visual and Performing Arts Program Chair or consult with Chemeketa’s Advising and Counseling Services staff if you plan to transfer as a music major. Questions regarding Chemeketa’s music offerings may be directed to the Liberal Arts and Social Science office at 503.399.5184.

Nursing Program

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 Chemeketa’s Advising and Counseling Services staff 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 should be able to:

- Demonstrate organized and prioritized care in a patient centered manner that advocates for patients and families based on personal preferences, beliefs and values.
- Demonstrate nursing care that minimizes risk of harm to patients, self and others.
- Apply the nursing process based on current evidence and patient preferences, needs and values.
- Demonstrate nursing care that reflects integrity, accountability and legal/ethical practice.
- Demonstrate nursing care using current technology and patient information to maximize safety and optimize health.
- Communicate effectively with patients, families, and members of the health-care team.

Students completing the degree should be able to:

- **Incorporate novice level management skills while providing patient centered care.**
- **Develop nursing care that minimizes risk or harm to patients, self, and others; and uses data to monitor outcomes of patient centered care.**
- **Formulate clinical judgements in providing nursing care based on current evidence, clinical expertise, and patient preferences, needs, and values.**
- **Design nursing care that reflects integrity, accountability, and legal and ethical practice while modeling the professional roles of coordinator of care, educator, advocate, and leader.**
- **Formulate nursing care using current technology and patient information to maximize safety, and optimize health.**
- **Communicate effectively and collaboratively In a self-directed manner with patients, families, and members of the healthcare team.**

In addition, the program has specific entry requirements 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 Health Sciences Department at 503.399.5058 or email 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:

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 Level I program courses 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 65 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).

General Education Corequisites:

Course	Title	Credit Hours
BI231	Human Anatomy and Physiology*	4
BI232	Human Anatomy and Physiology*	4
BI233	Human Anatomy and Physiology*	4
CH110	Biochemistry.....	5
CIS101	Computing Concepts**.....	3
MTH095	Intermediate Algebra+ (or higher)	4
PSY201	Psychology: Mind and Body+†	4
PSY237	Life Span Development.....	4
WR121	The College Essay+‡	4
	General Education elective (may use PSY237).....	4
	Additional elective*** (may use CHM pre-req)	3

*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.

**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, SSP, WR, WS

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

†The following options may be used to fulfill the Psychology course requirement.

Completed	Course No.	Cr Hrs
Pre-Summer Term 2010	PSY201 and PSY202	3
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 and WR122, or WR123, or WR227	3
Pre-Summer Term 2010	WR122, or WR123, or WR227	3

Core Nursing Courses

Course	Title	Credit Hours
Term 1		
NUR106	Fundamentals of Nursing.....	9
Term 2		
NUR108	Acute and Chronic Condition 1.....	10
Term 3		
NUR109	Acute and Chronic Condition 2.....	10

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 94 credit hours (29 credits during the second year in addition to the 64-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 courses 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		
NUR206	Complex Health Conditions.....	11
Term 5		
NUR208	Care in Urgent and Community Settings	10
Term 6		
NUR209	Entry into Practice	8

For clock hour information, see note following Practical Nursing Certificate course plan.

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 Chemeketa's Advising and Counseling Services staff, 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 the Nursing program 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 Advising and Counseling staff to ensure that you choose the appropriate courses.

Please contact Chemeketa's Advising and Counseling Services at 503.399.5120 for additional information. 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.

Occupational Skills Training

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 should be able to:

- 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 representative or to receive a schedule of OST orientations, contact a staff member on the Salem Campus at 503.399.7398.

Pharmacy Program

go.chemeketa.edu/pharmacology

Pharmacy Technician certificate and Pharmacy Management AAS degree prepares 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.

Program Outcomes

Students completing the certificate should be able to:

- 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 should be able to:

- 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 Chemeketa's Advising and Counseling Services staff.

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. Should you have any questions, contact the Health Sciences Department at 503.399.5058.

Students are required to submit a copy of their current American Heart Association Healthcare Provider CPR cards and completed immunization forms prior to registration in the first term of the program. 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 Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$656; class fees, \$210; universal fee, \$728; equipment and supplies, \$22; One-year non-renewable license (includes criminal background check and fingerprinting), \$102; 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 52 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
MTH070	Elementary Algebra+ (or higher).....	4
PHM101	Intro 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
PHM210	Over-the-Counter (OTC) Products.....	2
PHM215	Sterile Compounding/Cytotoxic Medications.....	3
PHM220	Multicultural Patient Healthcare.....	2
PHM232	Pharmacology 2.....	5
WR115	Introduction to Composition+.....	4
Term 3		
PHM130	Pharmacy Info: Law and Ethics.....	3
PHM150	Pharmacy Practicum.....	4
PHM151	Pharmacy Tech Seminar.....	1
PHM160	Hospital/Ambulatory Pharmacy Practicum.....	2
PSY104	Workplace Psychology+.....	4

+Meets related instruction requirement.

Pharmacy Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete second year courses listed below are books, \$1,570; class fees, \$222; universal fee, \$686. 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 101 credit hours of the two-year Pharmacy Management program (49 credits during the second year in addition to the 52-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
MTH095	Intermediate Algebra (or higher).....	4
WR121	The College Essay	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
CIS125E	Excel-Workbooks.....	4
HPE295	Health and Fitness for Life.....	3
PSY201	Psychology: Mind and Body (or higher)	4
	Arts and Letters elective*	3

+Meets related instruction requirement.
*Choose courses numbered 200 or above.

Philosophy and Religious Studies

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 50.

Chemeketa offers a number of philosophy and religion 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 53, 54, and 55 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 staff or a Chemeketa Philosophy and Religious Studies faculty advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

Refer to the Associate of Arts Oregon Transfer degree information in the Degrees, Diplomas, certificates and Transfer Information section of this catalog beginning on page 53.

Physical Education and Human Performance

For discipline outcomes, see General Education Outcomes beginning on page 50.

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 53, 54, and 55 for a complete listing.

Students wishing to explore careers in Health or Physical Education are encouraged to complete a two-year Associate of Arts Oregon Transfer (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 staff or a Chemeketa Physical Education and Human Performance faculty 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 51.

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 53, 54, and 55 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 staff or a Chemeketa Physics faculty 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 51.

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 53, 54, and 55 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 staff or a Chemeketa Political Science faculty 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 50.

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 51.

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 53, 54, and 55 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 staff. 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 51.

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 53, 54, and 55 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 staff or a Chemeketa Psychology faculty 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.

Robotics Program

go.chemeketa.edu/

See also **Electronic Technologies Program**

Chemeketa's Robotics program is designed to prepare students for industrial automation in applications and service type positions. The program provides training in topics such as assembling, installation, troubleshooting, and maintaining and operating industrial robotic systems. Students develop skills in industrial controls, programming, vision systems, fluid power, multi axis motion control, and automation integration, and use robotics with programmable controllers, as well as conventional control systems, to solve problems in an industrial flexible manufacturing environment. The Robotics program offers hands-on learning with modern equipment in classes taught by faculty who have spent their careers working in the field of electronics. Graduates of the Robotics program will be prepared to work as an automated equipment technician in almost any industry. Today, robots can be used in manufacturing, transportation, safety research, mass production, and even surgery. This field offers a wide range of employment opportunities to those who are properly qualified to work in robotics.

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 ELT280B-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 Robotics degree should be able to:

- Use appropriate technology to design, construct, and troubleshoot robotic systems for both consumer and industrial use.
- Apply scientific processes and critical thinking skills to issues in the high technology field of robotics.
- Explain the ethical aspects of utilizing robotics in society.

Getting Started

The Robotics degree has a special admission requirements and enrollment limits. The first step to entering this program is to take the college's free placement test and meet with Advising and Counseling Services staff, 503.399.5120. There are entry-level expectations for skill levels in reading, writing, and mathematics. If you have questions about the requirements, 503.399.5210.

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, on the Chemeketa public Website, and the Electronics program staff office in Building 4, Room

121. Enrollment in this program is limited, and there is an early deadline for applications. All applicants must attend the Robotics 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 Robotics Technology program chair at 503.399.6254 for details if you are considering the Robotics Technology degree. To enroll, you must have a high school diploma or GED certificate

The first step 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. Failure to be assessed may delay your entry into program classes. 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	Computing Concepts.....	3
MTH070	Elementary Algebra.....	4
RD090	College Textbook Reading.....	3
WR115	Introduction to Composition.....	4

If you have questions about the program requirements, please contact program chair Charles Sekafetz at 503.399.6254 (charles.sekefetz@chemeketa.edu) or the office of the Dean of Applied Technologies, 503.399.5210.

Robotics Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$3,125; class fees, \$648; universal fee, \$1,428. 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		
CAM105	Precision Measurement	2
CAM115	Geometric Dimensioning and Tolerances	2
ELT100	Electronics Fundamentals for Non-Majors	4
ELT111	Electronics Orientation.....	1
MT105	Introduction to Robotics.....	3
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+.....	5
Term 2		
CAM110	Benchwork and Manual Fundamentals	4
DRF130	CAD1.....	3
ELT151	Digital Fundamentals	4
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry.....	5
WR121	The College Essay+.....	4

Term 3

CAM120	Manual Milling Processes.....	4
DRF210	Parametric Design with SolidWorks	3
FE205B	Resumes and Job Search Correspondence	1
MT211	Sensors and Control Elements 1	2
MT231	Programmable Logic Controllers 1	3
WR227	Technical Writing	4

Term 4

ELT121	Programming Concepts 1	4
MT212	Sensors and Control Elements 2	3
MT232	Programmable Logic Controllers 2	2
PH121	Applied Physics	4
WLD105	Introduction to Welding	3

Term 5

COMM111	Fundamentals of Public Speaking	4
MT130	Motors, Pumps, and Generators	2
MT227A	Pneumatics and Hydraulics Fundamentals.....	3
MT260	Factory Floor Networks.....	3
MT291	Robotic Capstone Preparation	1
PH122	Applied Physics	4

Term 6

ELT293	Flexible Manufacturing Systems and Processes....	3
MT216	Statistical Process Control	2
MT235	Human Machine Interfaces.....	2
MT292	Robotic Capstone.....	6
PSY104	Workplace Psychology+	4

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

Sociology

For discipline outcomes, see General Education Outcomes—Social Science on page 51.

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 53, 54, and 55 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 staff or a Chemeketa Sociology faculty 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 Program

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 should be able to:

- 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 deadline is June 1 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: 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 Chemeketa's Advising and Counseling Services to formulate an individualized program of study, which may include the following program entry requirements:

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 Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses 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 44. For subject areas, see page 56.

Speech-Language Pathology Assistant Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses 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	Computing Concepts (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

Visual Communications Program

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 the first year, students meet with a faculty advisor to help determine a 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.

Visual Communications is a limited enrollment program, and students must apply in spring for entry the following fall term.

Either degree 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 should be able to:

- 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 required 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 program application 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 the last week of April through the last week of June. 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 email 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 \$651 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 \$1,182 for required courses, and universal access fees are an additional \$1,484. 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 106 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	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics.....	4
Term 2		
ART207	Graphic Design Literacy	4
ART224	Type Design 1	4
VC115	Introduction to Digital Layout	4
WR121	The College Essay+.....	4
	Graphic Design elective*	2
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 44. For subject areas, see page 56.

***Graphic Design electives (select one course):**

ART120	Digital Media Time Design	4
ART237	Photo Illustration	4
ART238	Introduction to Illustration.....	3
ART243	Advanced Illustration.....	3
ART265	Photography 1	4
ART266	Photography 2.....	4
ART267	Portrait Photography	4
ART268	Documentary Photography	4
ART289	The Medium and the Message	4
VC130	Photoshop 1	2
VC133A	InDesign 1	2
VC134	Dreamweaver 1	2
VC139	Illustrator 1	2
VC147	Cascading Style Sheets.....	2
VC237	Web Design 1.....	4

*Graphic Design AAS***Interactive Media Associate of Applied Science Degree Option**

In addition to tuition, estimated costs for the students who complete the entire Interactive Media program average \$527 per term. Costs include books, printing, presentation supplies, tracing paper, sketchbooks, and digital media. Class fees for the Interactive Media option total \$1,101 for required courses, and universal access fees are an additional \$1,470. 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 105 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	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics.....	4

Term 2

ART207	Graphic Design Literacy	4
ART224	Type Design 1	4
VC115	Introduction to Digital Layout	4
WR121	The College Essay+.....	4
	Interactive Media elective*.....	2

Term 3

ART118	Digital Design and Color.....	4
ART225	Type Design 2	4
VC224	Layout 1: 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

ART222	Graphic Design 2: Logo Design	4
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 44. For subject areas, see page 56.

***Interactive Media electives (select one course):**

ART120	Digital Media Time Design	4
ART223	Graphic Design 3: Package Design.....	4
ART237	Photo Illustration	4
ART238	Introduction to Illustration.....	3
ART265	Photography 1	4
VC130	Photoshop 1	2
VC133A	InDesign 1	2
VC134	Dreamweaver 1	2
VC139	Illustrator 1	2
VC147	Cascading Style Sheets.....	2
FLM265	Documentary Filmmaking	3

Welding Technology Program

go.chemeketa.edu/welding

The Welding Technology program offers several options: two career pathway certificates, a three-term Welding certificate, and the six-term Welding Fabrication AAS degree. The Arc Welding certificate and the MIG Welding certificate focus on two specialized types of welding; the Welding certificate 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 certificates have been designed to be completed in one year or less 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 Arc Welding certificate or the MIG Welding certificate should be able to:

- Set up and operate shielded metal arc welding (SMAW) equipment or the gas metal arc welding (GMAW) equipment used in the welding/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.

In addition to the Arc or MIG Welding certificate outcomes, students completing the Welding certificate should be able to:

- Set up and operate manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.
- 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 should be able to:

- 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 the Welding Technology 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:

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

If you have questions about the requirements, contact Mike Myers at 503.399.6066 or email mike.myers@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 www.chemeketa.edu/programs/welding/documents/WeldingTechApp2015.pdf.

Enrollment in this program 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 Chemeketa's Advising and Counseling Services at 503.399.5120, or the Welding Technology program chair at 503.399.6066 for details if you are considering the Welding certificate or the Welding Fabrication degree.

Arc Welding Certificate of Completion

This program combines hands-on training in the use of SMAW welding equipment with the associated coursework needed for success in the field. The program assists students in meeting the entry-level qualifications of the welding industry and prepares them to take the American Society of Welding's D1.1 Structural Welding Code Performance Qualification examination. This certificate is wholly-contained within the Welding Fabrication AAS degree program and may serve as the first step in a career pathway toward the degree.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$200; class fees, \$869; universal fee, \$266; equipment and supplies, \$500; 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 19 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
WLD151	Basic Arc Welding	5
WLD156	Blueprint Reading and Sketching.....	4
Term 2		
WLD152	Intermediate Arc Welding	5
WLD157	Introduction to Layout and Fabrication.....	2
Term 3		
WLD153	Advanced Arc Welding	3

MIG Welding Certificate of Completion

This program combines hands-on training in the use of GMAW welding equipment with the associated coursework to develop the skill sets needed for success in the field. The program assists students in meeting the entry-level qualifications of the welding industry and prepares them to take the American Society of Welding's D1.1 Structural Welding Code Performance Qualification examination. This certificate is wholly-contained within the Welding Fabrication AAS degree program and may serve as the first step in a career pathway toward the degree.

In addition to tuition, estimated costs for students who complete the courses listed below are books, \$150; class fees, \$564; universal fee, \$168; equipment and supplies, \$550; 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 12 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
WLD156	Blueprint Reading and Sketching.....	4
Term 2		
WLD157	Introduction to Layout and Fabrication.....	2
WLD161	Basic Gas Metal Arc Welding (MIG)	3
Term 3		
WLD163	Advanced Gas Metal Arc Welding (MIG)	3

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 courses listed below are books, \$402; class fees, \$1,316; universal fee, \$700; 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 50 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
MTH052	Intro to Algebra/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
WLD153	Advanced Arc Welding	3
WLD155	Fabrication Procedures.....	3
WLD163	Advanced Gas Metal Arc Welding (MIG)	3
WLD180	Metallurgy for Welders.....	2

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

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 courses listed below are books, \$909; class fees, \$2,093; universal fee, \$1,358; 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 97 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
MTH052	Intro to Algebra/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
WLD153	Advanced Arc Welding	3
WLD155	Fabrication Procedures.....	3
WLD163	Advanced Gas Metal Arc Welding (MIG)	3
WLD180	Metallurgy for Welders.....	2
Term 4		
CAM110	Benchwork and Manual Fundamentals	4
DRF130	CAD 1.....	3
MTH053	Intro to Trigonometry/Geometry (or higher)	3
WLD256	Fabrication Practices 1	3
Term 5		
CAM120	Manual Milling Processes	4
DRF210	Parametric Design with SolidWorks	3
GS104	General Science: Physics (or higher)	4
WLD257	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 44. For subject areas, see page 56.

Wine Studies Program

go.chemeketa.edu/ag

Career opportunities in the wine industry are diverse, exciting, and rewarding. Chemeketa's Wine Studies department offers one certificate and two AAS degrees to meet the present and future needs of the wine industry: Vineyard Management 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 winery. LIVE, a non-profit organization dedicated to sustainable wine growing and production practices is housed there as well.

For additional information about the Wine Studies program, contact the Agricultural Sciences Department at 503.399.5139.

Within the Wine Studies program, students may achieve a certificate in Vineyard Operations or an Associates of Applied Science degree in Vineyard Management and/or Winemaking.

Program Outcomes

Students completing the Vineyard Operations certificate should be able to:

- 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 should be able to:

- 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 Winemaking degree should be able to:

- 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 the Wine Studies program is to take part in an assessment process, which includes taking the college's free placement test and meeting with wine studies faculty. They will help you develop an individualized program of study, which may include:

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 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 completing prerequisites. For more information, contact the Agricultural Sciences department at 503.399.5139

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 courses 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
Spring Term		
VMW115	Spring Vineyard Practices.....	4
VMW261	Vine Physiology.....	4
VMW262	Vineyard Pest Management.....	4
Summer Term		
VMW116	Summer Vineyard Practices.....	4
VMW260	Vineyard Nutrition and Irrigation Management....	3
WR115	Introduction to Composition+ (or higher).....	4

Fall Term

PSY101	Psychology of Human Relations+ (or higher)	4
VMW117	Fall Vineyard Practices.....	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 Wine 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 courses 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 91 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CIS101	Computing Concepts (or higher)	3
MTH095	Intermediate Algebra+ (or higher)	4
VMW101	General Viticulture.....	3
VMW122	Introduction to Winemaking	3
Term 2		
SOIL205	Soil Science	4
VMW114	Winter Vineyard Practices	4
VMW222	Science of Winemaking.....	4
Term 3		
VMW115	Spring Vineyard Practices.....	4
VMW233	Sensory Analysis of Wine Components.....	3
VMW261	Vine Physiology	4
VMW262	Vineyard Pest Management	4
Term 4		
COMM111	Fundamentals of Oral Communication (or higher) 4	
VMW116	Summer Vineyard Practices.....	4
VMW260	Vineyard Nutrition and Irrigation Management	3
VMW280C	Cooperative Work Experience	3
Term 5		
PSY101	Psychology of Human Relations+ (or higher)	4
VMW117	Fall Vineyard Practices.....	4
VMW280C	Cooperative Work Experience	3
WR121	The College Essay+ (or higher)	4
Term 6		
VMW105	Spanish in the Vineyard.....	3
VMW223	Fundamentals of Chemistry for Wine.....	5
	Vineyard Management electives*	3

Term 7

VMW290	Wine Studies Capstone.....	4
WR227	Technical Writing	4
	Vineyard Management electives*	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

***Vineyard Management electives (select 6 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	Access - Database	3
CIS125E	Excel-Workbooks.....	4
CIS178I	Internet and World-Wide Web	3
HOR211	Plant Propagation.....	4
SPN101	First Year Spanish, Term 1 (or higher).....	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
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
VMW257	Direct to Consumer Wine Sales Management	3
VMW271	Wine Marketing: Brand Development	4
VMW272	Wine Sales and Distribution	4
VMW273	Wine Consumer Behavior	4
VMW280B-F	Cooperative Work Experience	2-6
WLD151	Basic Arc Welding	5

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.

Students also participate in the Cooperative Work Experience program and complete a wine related internship where they have the opportunity to work at a work-site to gain specific skills and strengthen their professional network.

For more information about this program, contact Scott Dwyer at 503.589.7663.

In addition to tuition, estimated costs for students who complete the courses 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 90 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CIS101	Computing Concepts (or higher)	3
MTH095	Intermediate Algebra+ (or higher)	4
	or	
MTH111	College Algebra+ (or higher)	5
VMW122	Introduction to Winemaking	3
VWM131	Wine Appreciation	3
Term 2		
VMW101	General Viticulture.....	3
VMW222	Science of Winemaking.....	4
VMW223	Fundamentals of Chemistry for Winemaking.....	5
Term 3		
PSY101	Psychology of Human Relations+ (or higher)	4
VMW170	Introduction to Wine Marketing (or higher)	3
VMW224	Chemical Analysis of Must and Wine	4
VMW233	Sensory Evaluation of Wine Components.....	3
Term 4		
BI230	Introductory Microbiology (or higher)	4
COMM111	Fundamentals of Public Speaking (or higher).....	4
WR121	The College Essay+ (or higher)	4
Term 5		
VMW134	Wines of the Pacific Northwest	3
VMW244	Wine Production.....	6
VMW280F	Cooperative Work Experience	6
Term 6		
VMW132	Wines of the World	3
	or	
VMW232	Sensory Evaluation of Wine Varietals	3
VMW245	Wine Clarification and Stabilization	4
VMW254	Winery Process Planning and Design.....	3
	Winemaking elective*	3
Term 7		
VMW246	Wine Aging, Filtration, and Bottling	4
VMW290	Wine Studies Capstone.....	4
	Winemaking elective*	3

+Meets related instruction requirement, see page 44. For subject areas, see page 56.

***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	Access - Database	3
CIS125E	Excel-Workbooks.....	4
CIS178I	Internet and 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	Vineyard Nutrition and Irrigation Management	3
VMW261	Vine Physiology	4
VMW271	Wine Marketing: Brand Development	4
VMW272	Wine Sales and Distribution	4
VMW273	Wine Consumer Behavior	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. You must meet these conditions 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.

Consult with Chemeketa's Advising and Counseling Services or a faculty program advisor for transfer information.

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. For information on when and where classes meet, consult the Schedule of Classes available each term at chemeketa.edu/classes, or access through your MyChemeketa account if you are a registered student.

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.

Course textbook information

Please check with the Bookstore to determine required textbooks and cost (information required for financial aid).

The online searchable schedule of classes designates classes with course materials that are low cost, \$40 or less, or no cost. Low-cost or no-cost course material designations will be displayed in class search with a symbol in the next to last column. Low cost and no cost. Currently these designations will not appear in the printed schedule.

How courses are listed

The following course prefixes describe the primary intent of the courses offered:

Developmental Courses

Developmental courses numbered less than 50 do not meet the requirements of the AA/OT, AAS, AS/OT-BUS, AS/OT-CS, or AGS degrees.

MTH: Mathematics

SSP: Study Skills Program

RD: Reading

WR: Writing

Career and Technical Courses (CTE)

Many career and technical courses are applicable to the baccalaureate degree. Please contact your school of choice for additional information.

AH: Allied Health

HEM: Hemodialysis Technician

APR: Apprenticeship

HM: Health Information Management

AUM: Automotive Technology

HOR: Horticulture

BA: Business Administration

HS: Human Services

BLD: Building Inspection Technology

HTM: Hospitality and Tourism Management

BT: Business Technology

MED: Medical Assisting

CA: Computer Applications

MT: Industrial

CAM: Computer-Aided Manufacturing

NET: Network Technology

CIS: Computer Information Science

NUR: Nursing

CJ: Criminal Justice

PHM: Pharmacy Technician/Pharmacy Management

CVL: Civil Technology

PLP: Portfolio for Prior Learning

DEN: Dental Assisting

RNW: Renewable Energy Management

DRF: Drafting Technology

SLP: Speech-Language Pathology Assistant

ECE: Early Childhood Education

SOIL: Soil

ELT: Electronics Technologies

ST: Occupational Skills Training

EMT: Emergency Medical Technology

VC: Visual Communications

ES: Emergency Services

VMW: Vineyard Management/Wine Business/
Winemaking

FE: Field Experiences

WFB: Welding Fabrication

FRP: Fire Protection Technology

WLD: Welding

HDF: Human Development and Family Studies

Lower Division Collegiate Courses

A number below 100 indicates a support course, which is usually not transferable to a BA-granting institution.

ART:	Art	HST:	History
ASL:	American Sign Language	HUM:	Humanities
ATH:	Anthropology	JNL:	Journalism
BI:	Biology	JPN:	Japanese
CG:	Counseling and Guidance	LING:	Linguistics
CH:	Chemistry	MTH:	Mathematics
CHN:	Chinese	MUP:	Musical Performance
CIS:	Computer Information Science	MUS:	Music
CLA:	Chicano/Latino Studies	NFM:	Nutrition and Food Management
COMM:	Oral Communication/Speech	PE:	Physical Education
CS:	Computer Science	PH:	Physics
EC:	Economics	PHL:	Philosophy
ED:	Education	PS:	Political Science
EGR:	Engineering	PSY:	Psychology
ENG:	English	RD:	Reading
ENL:	English as a Non-Native Language	REL:	Religious Studies
ENT:	Entrepreneurship	RUS:	Russian
FA:	Film Arts	SOC:	Sociology
FLM:	Filmmaking	SPN:	Spanish
FR:	French	SSC:	Social Science
FYE:	First Year Experience	TA:	Theatre Appreciation
GE:	General Engineering	WR:	Writing
GEG:	Geography	WS:	Women's Studies
GEO:	Geology		
GS:	General Science		
HE:	Health Education		
HPE:	Health and Physical Education		



Course Description Terms

Recommended:

Students are encouraged to complete the stated recommendation in order to be better prepared for the course.

Prerequisite:

A requirement or course that must be successfully completed before taking the course.

Co-Requisite:

A requirement or course that must be taken in combination with another course.

AH

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 Strategies

1 class hr/wk, 1 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, health promotion, and wellness. 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 sub metals, 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**

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 completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **F, W, Sp, Su; CL**

ART102 The Creativity Class
2 class and 2 lab hr/wk, 3 cr.

Introduces methods to improve creativity for college and career through concrete idea generation strategies that push previous experience, assumption, and current abilities. Stresses the importance of experimentation and risk taking, process, ways of thinking, environment, flirting with failure, collaboration, and the psychological components of creativity. Provides creative blocks and methods to maintain lifelong innovation. **F, W, Sp; 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 3D Design: Construct + Recycle
2 class and 4 lab hr/wk, 4 cr.

Introduces basic materials, design terminology, and techniques used in creating three-dimensional forms. Explores sculptural issues using a textbook and hands-on projects to produce student-generated solutions to design problems. Develops designs, improves upon design ideas, and delivers final designs in projects made largely with recycled and recyclable materials. Encourages exploration, supports innovative problem solving, and introduces a variety of processes, including additive, subtractive, assembly, and casting methods. Develops critical thinking skills, apply new vocabulary in written proposals and assessment (critique) of course projects, and reflects upon social responsibility and sustainability issues. Independent and collaborative teamwork required. **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**

ART121 Introduction to Digital Arts
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. **Prerequisite:** ART115 with a grade of C or better; or consent of instructor. **F**

**ART131 Introduction to Drawing
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**

**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**

**ART201 Intro to Arts of East Asia
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 completion of WR115 (or higher) with a grade of C or better; or consent of instructor. **W**

**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 completion of 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 completion of 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 completion of 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 completion of WR115 (or higher) with a grade of C or better, or consent of instructor. **W, Sp**

**ART207 Graphic Design Literacy
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. **Recommended:** WR121 with a grade of C or better. **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
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: Adv.
Topics
2 class and 4 lab hr/wk, 4 cr.**

Continues figure drawing skill development increasing focus on intention, media, anatomy, expression, and accuracy. Offers lectures, demonstrations, and continued individualized training in representational figure drawing skills begun in ART131 and ART234. Emphasize 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: ART142, ART265, VC114, or VC130; or demonstrated experience in Adobe Photoshop; 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.**

Explores the elements of successful illustration as visual communication through the use of digital tools. Introduces the importance of concept, color, and composition, which students will apply to create thoughtful and visually strong digital imagery. **Prerequisite:** VC114 or VC139, either with a grade of C or better; or demonstrated experience in vector and raster graphics software; 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 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.

Prerequisite: ART115 or ART116, either with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART247B Fusing, Slumping: Adv Topics**1 class and 4 lab hr/wk, 3 cr.**

Presents advanced skills and technical information on using an electric kiln and high-temperature molds to flat-fuse and form glass. Explores using glass as the primary material of expression using techniques such as Basque relief, mold making, inclusions, pattern bars, glass raking and color layering. **Prerequisite:** ART247; and completion of at least one of the following studio art classes: ART115, or ART116, or ART117; ART258; or ART291; 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**

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**

ART258 Introduction to Ceramics
2 class and 4 lab hr/wk, 4 cr.

Introduction to clay; using handbuilding and wheel throwing skills to create ceramic forms. Includes basic form and 3-D design considerations as well as pinch, coil, slab, basic throwing and trimming, decoration, and glazing techniques. Emphasizes craftsmanship through slide lectures, demonstrations, and studio projects. **F, W, Sp, Su**

ART259 Pottery 2: Wheel Throwing**2 class and 4 lab hr/wk, 4 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**

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, Su**

ART265 Photography 1**2 class and 4 lab hr/wk, 4 cr.**

Investigates digital photography stressing competent SLR and mirrorless 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 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:** ART142 or ART265, either 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.) **W, Sp, Su**

ART274 Screen Printing: Adv Topics

1 class and 4 lab hr/wk, 3 cr.

Continues skill building in techniques of silkscreen printing introduced in ART270 including photographic processes. Emphasizes skill development, and use of composition, color, and various stencil processes to achieve greater technical proficiency and an expressive visual form. **Prerequisite:** ART270 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

ART276 Introduction to Printmaking

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

Introduces the tools, materials, and techniques of printmaking to produce monotype, silkscreen, intaglio, and relief art prints. Covers historical and contemporary approaches to the medium. Includes hands-on studio experience, demonstrations, slide lectures, critiques, and individualized instruction. Stresses innovative image development with strong underlying design and craftsmanship, as well as stresses safe studio practices.

Prerequisite: ART131 or ART115, either 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. **Sp**

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. **Sp**

ART291 Beginning Sculpture

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

Introduces the basic materials, processes and concepts fundamental to sculpture. Develops skills through hands-on, concept-driven projects that explore three-dimensional form and its potential for personal expression. Examines both historic and contemporary sculpture through lectures and readings. Learn mold making, casting, carving, construction, and assemblage. Materials include sculpture clay, plaster, wood, found objects, everyday materials and mixed media. Apply principles of design and practice critical analysis of work through written and oral critiques. Encourages creative risk taking and mindfulness of sustainability issues.

Recommended: ART115, or ART117, or ART131 with a grade of C or better; or consent of instructor. **W**

ART292 Sculpture: The Figure

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

Introduces the human figure as a springboard for creative study. Materials include sculpture modeling clay and mixed media, discovering inherent potential and limitations of these materials. Covers basic anatomy, human proportions, and the power of gesture in communicating an idea. Explores realism and abstraction. Apply principles of design and practice critical analysis of work through written and oral critiques. Includes skill-building exercises with materials, research of the figure and its role in art history and contemporary art, and final projects that demonstrate the synthesis of course content. **Recommended:** ART115, or ART117, or ART131 with a grade of C or better; or consent of Instructor. **Sp, Offered as needed**

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**

DEN

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 culture change and the application of cultural anthropology to practical society problems. **F, W, Sp, Su; CL**

ATH180 The Nature of Language
3 class hr/wk, 3 cr.

Introduces anthropological linguistics. Includes the history of linguistics and written language, descriptive linguistics, sociolinguistics, language and thought, language acquisition and the biology and physiology of language development. Also includes bilingualism and multiculturalism and written language development in both the old and new world. **Offered as needed**

ATH212 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**

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 vehicles 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**

BA131 Business Computing

4 class hr/wk, 4 cr.

Covers computer concepts and the use of information technology in business organizations, including the use of word processing, spreadsheet, and presentation software. Includes introduction to hardware, software, databases, system development, and tools that businesses use for communication and collaboration. Includes appreciating the value of ethical conduct in a business/computer environment and the impact of technology on industry and society. **F, W, Sp, Su**

BA177 Payroll

4 class hr/wk, 4 cr.

Provides a comprehensive overview to federal and State 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 problemsolving 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. **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 completion of 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 completion of BA101 with a grade of C or better; and computer literacy. **F**

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, shortterm 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. **W, 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 completion of BA212, CIS125E, and MTH070 or higher. (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 completion of BA101, BA211, and CIS125E (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 completion of 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 completion of 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 completion of BA101 and BA226, each 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 reports.

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. **Sp, Offered as needed**

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 completion of BA101 with a grade of C or better. **Offered as needed**

BA235 Principles of Public Procurement

4 class hr/wk, 4 cr.

Covers principles of public procurement for the State of Oregon including, but not limited to, methods, laws, rules, policies, procedures, executive orders, and best practices as they relate to basic purchasing and cross-cutting procurement themes (definitions, ethics, regulations, risk, sustainability). **Recommended:** Placement into RD090 and WR121; and completion of BA101 with a grade of C or better. **F, Sp**

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 completion of BA101 with a grade of C or better. **W, Offered as needed**

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**

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**

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 completion of 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 completion of BA101 with a grade of C or better. **F, Sp**

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. Identifies and explains how issues of difference and power occur in the workplace and management process. **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.

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. **F, Sp, Su, 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 completion of MTH070 (or higher), and BA213; and BA225 or CIS125E; and SSP125; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F, Sp, Offered as needed**

BA267 Intermediate Financial Accounting 2

4 class hr/wk, 4 cr.

Studies short-term and long-term operating assets, operating and financing liabilities, stockholders' equity and revenue recognition. **Prerequisite:** BA266 with a grade of C or better; or consent of instructor. **F, W, Offered as needed**

BA268 Intermediate Financial Accounting 3

4 class hr/wk, 4 cr.

Offers a comprehensive study of Investment assets, 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, Offered as needed**

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 advanced payroll accounting, internal controls, and ethics. **Prerequisite:** BA177 with a grade of C or better; or consent of instructor. **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 completion of BA101 with a grade of C or better. **F, 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, coworker relations considering individual and cultural differences, customer relationships, conflict management, and power and politics.

Recommended: Placement into RD090 and WR121; and completion of 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 completion of BA101 and COMM115, both with a grade of C or better. **W, Offered as needed**

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; and completion of BA101, and MTH095 (or higher). (With a grade of C or better.) **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 completion of BA101 with a grade of C or better. **W, Offered as needed**

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 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**

BI235 Human Dissection

1 class and 3 lab hr/wk, 2 cr.

Examines the structure of the human body through cadaver dissection. Provides a review of human anatomy and physiology and trains students in dissection technique and care of preserved tissues. **Prerequisite:** BI232 with a grade of C or better; and submission of the human dissection class application: and consent of instructor. **Su**

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**

BLD153 Building Codes 3

3 class hr/wk, 3 cr.

Provides a comprehensive review of the Uniform Building Code including pedestrian protection, permanent occupancy, prefabricated construction, fire systems, energy conservation, and architectural barriers. **Prerequisite:** BLD152 with a grade of C or better; or consent of instructor. **Sp**

BLD155 Building Department Administration 1

4 class hr/wk, 4 cr.

Discusses purpose and procedures of building department administration. Explores building department organization and relationships with other departments, leadership of the building official, personnel management of staff, and public and customer relations. **W**

BLD158 Construction Materials and Blueprints

1 class and 3 lab hr/wk, 2 cr.

Provides instruction in reading civil, architectural, structural, mechanical, plumbing, and electrical construction drawings used in residential and commercial construction. Introduces terminology, abbreviations, symbols, scales and dimensioning, construction notes, and component schedules. Gives an explanation of plan views, elevations, cross-sections, and sectional details. Covers material characteristics common to the different construction trades and regulated by the International Building Code. **F**

BLD161 Structural Inspection 1

3 class hr/wk, 3 cr.

Introduces basic methods of wood and steel framing. Covers allowable stresses, loads, and fundamental design of construction systems. **W**

BLD163 Structural Inspection 2
3 class hr/wk, 3 cr.

Introduces concrete and masonry as construction materials and covers the specific code requirements for related types of construction, both structural and nonstructural. Covers physical properties, including mix design, handling, storage, delivery, placement, and their fire-resistive qualities. **Sp**

BLD170 ADA Accessibility Code
3 class hr/wk, 3 cr.

Provides a comprehensive review of the International Building Code related to ADA accessibility standards in new and remodeled facilities. **Sp**

BLD181 Mechanical Codes 1
4 class hr/wk, 4 cr.

Introduces the thermodynamics of heat and how it relates to the mechanical appliance. Examines the International Mechanical Codes general code requirements for heating, ventilation, and air conditioning equipment. Studies the fuel gas piping system from the gas meter to the appliance, and the combustion air requirements for appliances that burn gas fuel. Stresses evaluation of appliances and equipment for its listing and installation instruction for residential applications and commercial applications. **W**

BLD182 Mechanical Codes 2
4 class hr/wk, 4 cr.

Examines the mechanical code requirements for chimneys and vents serving fuel burning appliances and equipment; special solid fuel and fuel gas burning appliances and equipment; kitchen hoods, grease ducts, hazardous exhaust ducts, and product conveying ducts; refrigerants, refrigeration systems, and refrigeration mechanical rooms; boilers, hot water heaters, and pressure vessels; hydronic piping and solar heating systems; and fuel oil piping and storage tanks. **Prerequisite:** BLD181 with a grade of C or better; or consent of instructor. **Sp**

BLD193A Building Inspection Lab
A**6 lab hr/wk, 2 cr. each**

Provides code standards and conditions typical of building inspection work for inspectors in the following areas: mechanical inspection, structural inspection, and one- and two-family dwelling codes. Stresses writing correction notices based upon field observations. **Sp**

BLD255 Building Department Administration 2**4 class hr/wk, 4 cr.**

Discusses building department administration roles and responsibilities. Examines laws and principles that affect building department records management, budgeting, information technology, and legal aspects. **Prerequisite:** BLD155 with a grade of C or better; or consent of instructor. **Sp**

BLD260 Fire Protection for Buildings**4 class hr/wk, 4 cr.**

Covers the installation, function, location, and purpose of sprinkler systems. **Sp**

BLD266 Structural Plan Review
2 class and 3 lab hr/wk, 3 cr.

Covers the fundamentals of structural plan review. Includes analysis and design of beams, columns, and connections.

Prerequisite: BLD269 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: BLD152 with a grade of C or better; or consent of instructor. **Sp**

BLD268 Foundations, Excavation, and Grading
3 class hr/wk, 3 cr.

Covers the fundamentals of and the code requirements for regulating excavations and fills for any building or structure, construction of foundation, retaining structures, and general grading. Presents code requirements and emphasizes application to plan review and inspection functions. Uses grading and building plans and soil reports to complement the codes.

Prerequisite: MTH052 with a grade of C or better; or consent of instructor. **F**

BLD269 Engineering for Code Professionals 1**4 class hr/wk, 4 cr.**

Studies static forces and their effect upon rigid bodies at rest, including a study of stresses and strains that occur in these bodies when subjected to tensile, compressive, and shearing forces.

Prerequisite: MTH052 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F**

BLD270 Engineering for Code Professionals 2**4 class hr/wk, 4 cr.**

Studies dynamic wind and seismic loads on structures and their reduction to simplified equivalent static forces used in the design of structures. Covers how to determine the required lateral load path elements: diaphragms, shear walls, and foundations used to resist lateral forces. Emphasizes code requirements of Chapter 16 Section 1609 for wind and Sections 1613 through 1623 of the Oregon Structural Specialty Code (2003 IBC). Uses the Western Woods Use Book related to lateral design. Also studies the design, fabrication, and erection of structural steel for buildings and structures. Emphasizes code requirements of Oregon Structural Specialty code Chapter 22 and the American Institute of Steel Construction Steel Manual. **Prerequisite:** BLD269 with a grade of C or better; or consent of instructor. **W**

BLD280A-L Cooperative Work Experience**See CWE-Cooperative Work Experience****BLD292 International Residential Code (Structural)****3 class hr/wk, 3 cr.**

Covers the structural portion of the International Residential Specialty Code as it relates to residential construction and other applicable codes. **F**

BT**Business Technology****BT104 Business English 1****3 class hr/wk, 3 cr.**

Emphasizes basic English skills, including 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 and 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. **Offered as needed**

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 Records Management**3 class hr/wk, 3 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 and numeric filing systems of correspondence and other papers. Introduces MS Windows operating systems software currently used in business and industry. Includes exploring, organizing, and managing electronic records and files. **F, Sp**

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**

BT230 Organization Performance and Customer Service**3 class hr/wk, 3 cr.**

Covers various aspects of customer service including using verbal communication and non-verbal communication, listening, using technology (telephone, voice mail, email, etc.), composing written messages, handling difficult encounters, understanding diversity, managing stress and time, and encouraging customer loyalty. **F, W**

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:** CA202D, CA213, 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**

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, Su**

CA102 Practical Computing**2 class hr/wk, 2 cr.**

Covers basic file management, word processing, spreadsheets, and presentations. Focuses on the skills necessary to be productive in both work and personal environments via a variety of computer devices. **Offered as needed**

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 Border Art, Word Art, and text wrap. Covers features for improving publications design and creating multiple-page publications. **Prerequisite:** BA131 or CA100, either with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

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. **Offered as needed**

CA118B Excel Basics**3 class hr/wk, 3 cr.**

Introduces building and editing worksheets, formatting and printing worksheets, working with formulas and functions, and charting in MS Excel. Introduces sorting, filtering, and analyzing list data; enhancing worksheets and charts; and sharing MS Excel files. Includes what-if analysis, macros, PivotTables and PivotCharts, linking, embedding, and exploring MS Excel options. **Prerequisite:** MTH020 (or higher); and BA131 or CA100; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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. **Offered as needed**

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. **Offered as needed**

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. **Offered as needed**

CA118C1 Access Basics 1

1 class hr/wk, 1 cr.

Introduces database basics for forms design, data entry, queries, tables, and reports.

Prerequisite: BA131 or CA100, either with a grade of C or better; or consent of instructor. **F, W, Sp**

CA118C2 Access Basics 2

1 class hr/wk, 1 cr.

Reinforces basic database skills. Introduces multiple table and action queries; 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; and BA131 or CA100, or consent of instructor. (All prerequisites must be completed with a grade of C or better.) **Offered as needed**

CA118E Email and Personal Information Manager Basics

1 class hr/wk, 1 cr.

Introduces personal information management software currently used in business and industry. Covers electronic messaging (email management), use of the address book, and calendar and task management. **Prerequisite:** Computer literacy (prior experience with computer and mouse device) and touch keyboarding ability; or consent of instructor. **Offered as needed**

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:** BA131 or CA100, either with a grade of C or better; 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. Includes the features of text threading, layers, frames, kerning, and tracking using Adobe InDesign. **Prerequisite:** BA131 or CA100; and CA121; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 Keyboard Skillbuilding A

1 class hr/wk, 1 cr. each

Improves keyboarding skill, including keyboard (alphabetic and numeric) proficiency, speed, and accuracy. Focuses on alphabet, Individual finger, concentration, word level, and pacing drills. Serves as preparation for production keyboarding as well as general skill development. Course may be repeated for a maximum of two (2) credits. **Prerequisite:** CA121 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CA122B Keyboard Skillbuilding B

1 class hr/wk, 1 cr. each

Improves keyboarding skill, including keyboard (alphabetic and numeric) proficiency, speed, and accuracy. Focuses on reaches, concentration, frequently used words, punctuation, and pacing drills. 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 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CA122C Keyboard Skillbuilding C

1 class hr/wk, 1 cr. each

Improves keyboarding skill, including keyboard proficiency (alphabetic and numeric), speed, and accuracy. Focuses on numeric, frequently misspelled words, alternate hand, double letter, right/left hand, and pacing drills. 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:** 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 1, Parts 1-3

1 class hr/wk, 1 cr. each

Offers basic to intermediate word processing training in the operation of Microsoft Word for Windows. **Prerequisite:** CA201D1: Touch keyboarding ability of 30 words per minute; or consent of Instructor. CA201D2: CA201D1; and touch keyboard ability of 30 words per minute; or consent of instructor. CA201D3: CA201D2; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 2, Parts 1-3

1 class 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); and touch keyboarding ability of 35 wpm. CA202D2: CA202D1 (or equivalent as determined by instructor); and touch keyboarding ability of 35 words per minute. CA202D3: CA202D2 (or equivalent as determined by instructor); and touch keyboarding ability of 35 words per minute. (All prerequisite courses must be completed with a grade of C or better.) **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:** BA131 or CA100, either with a grade of C or better; or consent of instructor. **F, 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, CA118B, CA201D; and BA131 or CA100; and BT210 and CA118C1 (or concurrent enrollment in both); 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:** CA119 with a grade of C or better; 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. **Offered as needed**

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

1 class and 3 lab hr/wk, 2 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

1 class and 3 lab hr/wk, 2 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**

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:** DRF262 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

See also **FYE—First Year Experience**

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**

CG121C Leadership through Mentoring 2

1 class and 3 lab hr/wk, 2 cr.

Builds on and expands mentoring and community leadership skills. Complements and enhances CG121B and CG121D. Prepares student to take on more responsibility in coordinating college access-focused programming to complete with their mentees. Represents a course in the three-part Leadership Through Mentoring series. **Prerequisite:** Must pass a criminal background check to work with middle or high school students. **W**

CG121D Leadership through Mentoring 3

1 class and 3 lab hr/wk, 2 cr.

Expands on and wraps up mentoring, community leadership, and college access skills developed in CG121B and CG121C. Teaches student to facilitate their mentee transition to high school or college, and transfer skills learned to other classes, to their career, and to other community engagement opportunities. Guide mentee through a mini-lesson and a project related to an academic or community engagement topic of their choosing. **Prerequisite:** Must pass a criminal background check to work with middle or high school students. **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**

CG127D Intercultural Leadership: Latino Culture Thru Film

2 class hr/wk, 2 cr.

Examines critical issues pertaining to Latino culture throughout North America. Explores and defines key social issues, traditions, perspectives, and themes through documentaries and 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 completion of MTH095 (or higher, except MTH098 and MTH105) 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 completion of MTH095 (or higher, except MTH098 and MTH105) 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 completion of MTH095 (or higher, except MTH098 and MTH105) 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 completion of MTH095 (or higher-except MTH098 and MTH105) 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

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 completion of MTH095 (or higher-except MTH098 and MTH105) with a grade of C or better; or consent of instructor. **F**

CH212 Chemistry for Engineers

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 completion of 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**

CHN

Chinese

CHN101 First Year Chinese, Term 1

First course of a three-course sequence in introductory Mandarin Chinese language and culture class. Emphasizes effective communicative skills in both the written and spoken language. Includes an understanding of the practices and products of native Chinese culture. Helps the early beginning learner to acquire language proficiency as well as cultural awareness and understanding. **F, Offered as needed**

CHN102 First Year Chinese, Term 2

Second course of a three-course sequence in introductory Mandarin Chinese language and culture class. Continues to emphasize effective communicative skills in both the written and spoken language, as well as an understanding of the practices and products of native Chinese culture. Expands the beginning learner's language proficiency as well as cultural awareness and understanding. **Recommended** CHN101 with a grade of C or better. **W, Offered as needed**

CHN103 First Year Chinese, Term 3

Third course of three-course sequence in introductory Mandarin Chinese language and culture class. Includes additional expansion on effective communicative skills in both the written and spoken language, as well as the understanding of the practices and products of native Chinese culture. Continues to expand beginning learner's proficiency, as well as cultural awareness and understanding. **Recommended** CHN102 with a grade of C or better. **Sp, 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 Computing Concepts 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 and digital security. **Recommended:** Placement into RD090 (or higher). **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, Su**

CIS120 Digital Literacy 4 class hr/wk, 4 cr.

Introduces the basic elements of Digital Literacy as they develop the technology proficiency, Information literacy, and media literacy necessary for safe use of digital technologies vital for success in today's digital world. Introduces terminology and issues dealing with personal computers and communication devices in a wide variety of settings. Addresses basic computer concepts and history, computer hardware, operating systems, the Internet, online safety and security, email, computer application software including word processors, spreadsheets, presentation graphics, databases, and the Impact of computers on society. **F, W, Sp, Su**

CIS120A Computer Info Sciences Pathway

2 class hr/wk, 2 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 Programming Concepts 4 class hr/wk, 4 cr.

Introduces fundamental logic in designing specific algorithms for processing information typified by management information systems and the logical thought process used when programming. Covers structured programming and object oriented programming concepts that include problem definition, generating a description of its step-by-step solution (the algorithm), writing the program, and finally documenting the program. **Prerequisite:** CIS120 with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CIS125A Access - Database

3 class hr/wk, 3 cr.

Provides the tools necessary to create and maintain a basic database 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.

Provides the tools necessary to create and use basic spreadsheets presenting them in a multi-worksheet environment using Microsoft Excel. Includes concepts associated with data types; how to build effective workbooks for use in projection; and analysis of typical business situations. Includes workbook applications such as the use of arithmetic formulas, functions, proper formatting, macros, graphics, pivot tables, charts, and other analysis tools available in Microsoft Excel. Extends to Business Intelligence (Power BI) with Microsoft Excel as a database. Includes concepts such as defining data models, queries, and forecast projections using charts and trend analysis. **Prerequisite:** CIS101 or CIS120, either with a grade of C or better; or consent of instructor. **F, W, Sp, Su**

CIS125G Introduction to Computer Game Development

4 class hr/wk, 4 cr.

Surveys the field of computer game development, including a study of the history and business of computer gaming, computer game categories and platforms, and computer game technologies. Covers an overview of the game development process and introduces game graphics. Provides complete game development lifecycle using a high-level game development framework to design and develop a computer game. **Recommended:** CIS120 or CIS101, either with a grade of C or better. **F, Sp**

CIS133A Android Application Design

4 class hr/wk, 4 cr.

Prepares students to design and build mobile applications for the Android platform. Covers mobile application design process, mobile app best practices for interactive media, the Android Studio IDE, Java programming language, major Android APIs and frameworks, and Android App deployment. **Prerequisite:** CIS121 with a grade of C or better; or consent of instructor. **W**

CIS133I iOS Application Design

4 class hr/wk, 4 cr.

Provides an introduction to developing native iOS applications (apps). Covers RIA (Rich Internet Applications), UI (User Interface) design, and using Swift programming language for iOS mobile apps. Includes resource management for iOS mobile apps and deployment of iOS mobile apps. Presents major Swift topics including views, controllers, animations, localization, and camera, as well as location-based services and sensors. **Prerequisite:** CIS121 with a grade of C or better; or consent of instructor. **Sp**

CIS133J 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; and 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, CIS133U, or CS161; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

CIS133SC 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**

CIS133U 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**

CIS133VB Visual Basic- 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 Excel

4 class hr/wk, 4 cr.

Introduces Microsoft Excel 2016 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 2016. **Prerequisite:** CIS125E with a grade of C or better; or consent of instructor. **Offered as needed**

CIS140B Computer Operating Systems

3 class hr/wk, 3 cr.

Studies operating systems currently used on microcomputers. Includes experience in using these operating systems to access files and communicate with other microcomputers. Discusses computer security basics relating to microcomputer operating systems and its users. **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 Computer Hardware

4 class hr/wk, 4 cr.

Studies the hardware concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and varied device hardware including desktops, tablets, laptops, and various mobile devices. Prepares students to obtain the CompTIA A+ industry Certification exam. **Prerequisite:** CIS140B with a grade of C or better; or consent of instructor. **Sp**

**CIS178I 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 responsive web design. Focuses on the overall production processes surrounding web site design. Emphasizes design elements involving layout, navigation, interactivity, usability, and search engine optimization. **Prerequisite:** CIS101 or CIS120, either with a grade of C or better; or consent of instructor. **F, W**

**CIS179 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 Solutions Associate (MCTS) 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, Su**

**CIS195 Web Site Development
4 class hr/wk, 4 cr.**

Covers web site planning, organization, and implementation. Explores web development applications. Discusses HTML, 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 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 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**

**CIS275 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. Introduces Structured Query Language (SQL). **Prerequisite:** CIS101 or CIS120, either with a grade of C or better; or consent of the instructor. **F**

**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**

CIS278 Data Communications

4 class hr/wk, 4 cr.

Examines computer networks and fundamental concepts in data communication including definition of terms, communicating concepts, comparison of voice and data communication, encapsulation and encryption, medium access, elementary data link protocols, topologies, servers, and operating system standards implemented in local area and wide area networks (LAN and WAN). Uses hands-on software activities related to protocols, switching, routing, and peer-to-peer networking. Students use the course materials as resources for preparing for the Network + industry certification exam. **Prerequisite:** CIS120 with a grade of C or better; or consent of instructor. **W**

CIS279 Server Management 1

4 class hr/wk, 4 cr.

Focuses on the logical design, construction, operation, maintenance, and management of a network using directory services. Includes installation of network server(s), configuring and managing server roles, file and print services, network connectivity, group policies, system updates, and network security. Provides resources that can be used to prepare for the Microsoft Certified Solutions Associate (MCSA) 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 Server Management 2

4 class hr/wk, 4 cr.

Provides hands-on experience, configuring, customizing, administering, maintaining a server, and outlining the various roles in an enterprise environment. Includes installation and administration of DHCP, DNS, remote access, virtualization, domain management, and group policy design. Provides resources that can be used to prepare for the Microsoft Certified Solutions Associate (MCSA) certification. **Prerequisite:** CIS279 with a grade of C or better; or consent of instructor. **W**

CIS289 Network Systems Management

4 class hr/wk, 4 cr.

Provides a project-based centric curriculum directed towards the most current trends in global technology used by both private sector and public enterprises. Includes the ability to use both hands-on and research directed materials to selectively refine studies towards, but not limited to, LAN IT Administration, secure firewall and router implementation, data analytics, and PowerBI for the IW (Information Worker). Includes extended concepts of integrated Cloud implementation, server strategies for a virtualized environment and cross platform code development, and data design-integration required for an IT administrators. **Prerequisite:** CIS278 and CIS288, 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. Discusses scalability and security. **Prerequisite:** CIS178I, or CIS195, or VC237; or consent of instructor. (Prerequisite course 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**

CJ104A CJ Personal Defense—Beginning

3 lab hr/wk, 1 cr.

Designed to introduce the knowledge and safety of personal defense to Criminal Justice students. Uses the elements of responding to surprise attacks, principals of leverage, and active movements as key factors in the methods. Develops skills to defend oneself and others, if needed.

Prerequisite: CJ103 with a grade of C or better, or consent of instructor. **Offered as needed**

CJ104B CJ Personal Defense—Intermediate

3 lab hr/wk, 1 cr.

Designed to introduce the knowledge and safety of personal defense to Criminal Justice students. Uses the elements of responding to surprise attacks, principals of leverage, and active movements as key factors in the methods. Develops skills to defend oneself and others, if needed.

Prerequisite: CJ103 with a grade of C or better, or consent of instructor. **Offered as needed**

CJ104C CJ Personal Defense—Advanced

3 lab hr/wk, 1 cr.

Designed to introduce the knowledge and safety of personal defense to Criminal Justice students. Uses the elements of responding to surprise attacks, principals of leverage, and active movements as key factors in the methods. Develops skills to defend oneself and others, if needed.

Prerequisite: CJ103, and CJ104A or CJ104B; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

CJ110 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

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. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Offered as needed**

CJ125 Public Safety Communications and Documentation

2 class hr/wk, 2 cr.

Provides students with specific reading and writing skills needed by Public Safety professionals. Emphasizes proper conventions, grammar, and the factual style used by Public Safety professionals, both computer-generated and handwritten reporting methods. **Prerequisite:** CJ103 with a grade of C or better; or current professional in the field; or consent of instructor. **Offered as needed**

CJ130 Corrections Process

3 class hr/wk, 3 cr.

Introduces the corrections process, including historical development through contemporary issues. Reviews the history, current practices, and future considerations of corrections. Identifies the subcomponents of corrections: variations in correctional institutions, levels of custody, administrative practices, correctional staff roles and responsibilities, institutional policies, procedures, and programs. Covers changing inmate demographics, special needs inmates, safety and security concerns, and current issues. **F, Sp, Su**

CJ132 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 Search/Contraband/ Restraints

2 class hr/wk, 2 cr.

Focuses on the proper forms and processes for conducting searches of persons such as inmates, staff, volunteers, contractors, visitors, those arrested, and suspects detained by police and corrections officers. Includes proper forms and processes for searches of correctional facilities, private homes, other buildings and common areas, and patrol and non-patrol vehicles. Covers practical techniques for the transportation, restraint, and escorting of those in custody within a correctional facility, in the public, and in court proceedings. Promotes the importance of the safety, security, and orderly operation inside and outside a correctional facility. **Prerequisite/ Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Offered as needed**

CJ138 Security Threat Groups

2 class hr/wk, 2 cr.

Explores the criminal subcultures of security threat groups (STGs) and gangs. Includes the management concepts for individuals at risk of involvement in STGs or gangs, the identifying characteristics of involvement, intervention strategies, and the importance of interagency networking and information-sharing. Outlines concepts of covert communications used by STGs and gangs in communicating within facilities, jail, and on the streets. **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ142A Managing the Mentally Ill Offender

2 class hr/wk, 2 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

2 class hr/wk, 2 cr.

Addresses management strategies for long-term offenders. Covers inmate perception about serving longer sentences, their views of establishing relationships, and accountability challenges. Includes management of death row inmates, the elderly inmate population with unique special needs, and the security risk posed by lifers attempting to escape. **Prerequisite/ 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

2 class hr/wk, 2 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 Same now on the criminal mind. **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **F**

CJ153 CJ-Ethical Dilemmas/ Decision Making

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

2 class hr/wk, 2 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. **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ200 Family Violence and Deviancy

3 class hr/wk, 3 cr.

Discusses the role of criminal justice practitioners in maintaining community relations, networking, and multi-disciplinary approaches to crimes of family violence. Examines the role expectations of involved agencies and covers red flag behaviors and detection of family-related crimes and their patterns of escalation. **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, diffusion 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 CJ Diversity Issues

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 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:** 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:** and CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **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 Substantive Law/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
2 class hr/wk, 2 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, email, 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 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 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 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. **Offered as needed**

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 Public Safety Telecommunications 1

3 class 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, Offered as needed**

CJ246 Public Safety Telecommunications 2

3 class 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 Oral Boards & 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:** 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

2 class hr/wk, 2 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. **Prerequisite/ Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W**

CJ271 Law Enforcement K-9s

2 class hr/wk, 2 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. **Prerequisite/ Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **Sp**

CJ272 Recognizing Child Molesters

3 class hr/wk, 3 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, and cyber pedophiles. **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor. **W, Offered as needed**

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 Intro to Chicano/Latino Studies 1

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, W, Sp, Su**

CLA202 Intro to Chicano/Latino Studies 2

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 Intro to Chicano/Latino Studies 3

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. **F, W, Sp, Su, 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 completion of 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 completion of 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 completion of 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 completion of 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: email, 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. **Offered as needed**

CS

Computer Science

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 completion of 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 completion of 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, Offered as needed**

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, Offered as needed**

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, Offered as needed**

CS271 Computer Architecture and Assembly

4 class hr/wk, 4 cr.

Introduces the low-level architecture and programming of digital computers. Covers the fundamentals of data encoding, digital logic, processor design, and instruction execution. Explores assembly language and low-level programming; arithmetic operations, decisions, addressing, stacks, modularization, linkers, and debuggers.

Prerequisite: CS160 and CS161, each with a grade of C or better; or consent of instructor. **W**

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 work skills.

Prerequisite: CVL143 with a grade of C or better; or consent of instructor. **Corequisite:** MTH082 (or higher). **W**

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**

CVL280B-L Cooperative Work Experience

See **CWE—Cooperative Work Experience**

CWE

Cooperative Work Experience

See also **FE—Field Experiences**

Cooperative Work Experience 280B-L 2-12 cr.

Assist students in finding an internship/CWE at a business, or agency for on-the-job training and experience related to instruction in student's program of study. Field experience is 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 and 3 lab hr/wk, 3 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; performs 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; pit and fissure sealant placement, and tooth whitening.

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 improve radiographic techniques by completing at least one full mouth patient x-ray series. Includes information in taking pediatric Images, images in edentulous areas, images taken while the patient is in a supine position, endodontic Images, occlusal Images, and extra-oral Images. Students learn utilization of the panoramic x-ray unit, film duplicators, and automatic film processors. Students expose and evaluate all Images, 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

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**

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**

DRF262 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**

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

EC

Economics

EC200 Introduction to Economics **4 class hr/wk, 4 cr.**

Introduces the economic concepts and analysis in the process of studying important issues in modern society such as unemployment, inflation, pollution, poverty, income distribution, health care, and development. **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 commodity production, price elasticity, revenue, production and cost, profit, marginal analysis, competitive and imperfectly competitive markets, market power, antitrust, externalities and other market failures, (de)regulation of business, pecuniary emulation, conspicuous consumption, income distribution, poverty, and labor (factor) markets. **Prerequisite:** MTH095 (or higher), 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

ECE086 Family Day Care 1 (Basics) **1 class hr/wk, 1 cr.**

Provides the caregiver with basic information on managing a family day care home. Includes practical suggestions for working with parents, keeping business records, providing healthy and safe environments for children, and establishing a home business. **Offered as needed**

ECE150 Introduction and Observation

3 class hr/wk, 3 cr.

Focuses on the history of early childhood education (birth to 8 years) 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**

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 birth to 8 years. 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 completion of ECE150 with a grade of C or better; or consent of instructor. **W**

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 (birth to 8 years). 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**

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**

ECE154 Children's Literature and Literacy

3 class hr/wk, 3 cr.

Explores in depth how children develop literacy. 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. **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 and Toddler Practicum

1 class and 6 lab hr/wk, 3 cr.

Provides experience working with infants and toddlers in a community with a professional teacher. Will observe and practice high-quality care. **Prerequisite:** HDF249 with a grade of C or better; or consent of instructor. **W**

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 working with young children in laboratory setting and assisting with supervision of the various daily activities in a full-day child care 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 curriculum planning for the young child. **Prerequisite:** HDF225, HDF247, HDF248, 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 Young Children Environments

3 class hr/wk, 3 cr.

Focuses on planning, implementing, and evaluating environments for typically and atypically developing children from birth to 8 years of age. Includes using observation and facilitating play in the environment, room arrangements, outdoor areas, equipment selection and sources, children's furniture, and incorporating recycled materials in the classroom. **Prerequisite:** Second year standing in the Early Childhood Education program; and placement into RD090 and WR090; or consent of instructor. **F**

ECE261 Student Teaching 1

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

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 ECE 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

ED114 Instructional Strategies in Math and Science

3 class hr/wk, 3 cr.

Introduces the development of math and science concepts and presents a systematic approach to math and science instruction. Students learn to link math and science instruction and assessment to state content standards. **Prerequisite:** ED100 and MTH060, both with a grade of C or better; or consent of instructor. **Sp**

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**

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. **Offered as needed.**

ED229 Learning and Development

3 class hr/wk, 3 cr.

Application of theory regarding children's learning and development from kindergarten through middle school, including intelligence, motivation, and the process of learning. Applies theory to teaching strategies and the connection between teaching and learning. Covers varied learning styles and multiple intelligences. Designed for students seeking initial teacher licensure in elementary and middle school teaching. **F, W, Sp, Su; CL**

ED230 Children's Literature in the Diverse Classroom

3 class hr/wk, 3 cr.

Discusses high quality children's literature and how to use it to promote literacy in children in elementary and middle school. Explores the cognitive, emotional, and social process of literacy development, with a special focus on literacy development in bilingual and bicultural students. **F, W, Sp, Su; CL**

ED233 Adolescent Learning and Development

3 class hr/wk, 3 cr.

Examines adolescent cognitive and social development and how it relates to learning theory. Discusses best practices of teaching in middle and high school settings. Explores varied learning styles and cultural factors that impact adolescent learning and instructional strategies that create a productive learning environment. **Sp; CL**

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**

ED240 Education Practicum and Seminar**2 class and 3 lab hr/wk, 3 cr.**

Practicum portion of course provides experience in educational settings working with students and school groups. Seminar portion of course links theory to practice and informs activities and task in the practicum. Presents educational topics that link themes of social justice, equity, and serving diverse student needs to real world situations, school policy, and current legislation. Course may be repeated for a maximum of six credits. Prerequisite: Consent of instructor. Recommended that course be taken in the term prior to transfer to four-year university. **F, W, Sp, Offered as needed**

ED258 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; CL**

ED265 Inclusion: Special Needs Students**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 Individuals with Disabilities Education Act (IDEA) with special attention to the diverse population of today's schools. **W, Sp, Su**

ED267 Working with Students with Autism Spectrum Disorders
3 class hr/wk, 3 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 ELT161, 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 EMT, 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). Must be BLS Health Care Providers CPR certified in accordance with current national standard curriculum. Must meet standards as set by the Oregon State EMS Office for certification which includes health, driving, immunization and criminal record check. **F, W, Su, Offered as needed**

EMT152BEMT, 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. **W, Sp, Su, Offered as needed**

EMT163 Advanced EMT, 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, introsseous, 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 both an emergency department and 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 EMT, 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 both an emergency department and an ambulance. Students successfully completing this course will be recommended to the National Registry of EMTs and 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; systems; radio types; reports; codes; and correct techniques. **F, W, Sp, Su**

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 course, which includes EMT296, EMT297, EMT298, and EMT280H. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; and respiratory, cardiovascular, neurological, behavioral, and acute abdominal emergencies. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. Failure of this course will require retaking the full sequence of Paramedic courses (EMT296, EMT297, EMT298, and EMT280H). **Prerequisite:** Fourth term standing in the Emergency Medical Technology program. **F, Sp**

EMT297 Paramedic, Part 2

10 class and 12 lab hr/wk, 14 cr.
Offers second term 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 term of a three-term course, which includes EMT296, EMT297, EMT298, and EMT280H. Focuses on review of Advanced Cardiac Life Support (ACLS), 12-Lead ECG interpretation, documentation, legal issues, practical skills and research and evidence-based medicine. Applies didactic knowledge to clinical patient care in the hospital setting. Failure of this course requires retaking the full sequence of Paramedic courses (EMT296, EMT297, EMT298, and EMT280H). **Prerequisite:** EMT297 with a grade of C or better. **F, Sp**

ENG

English

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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed**

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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed; 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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed; 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 completion of WR090, or WR115 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Offered as needed; 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 completion of WR115 (or higher) with a grade of C or better; or consent of instructor. **Offered as needed**

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 completion of WR115 (or higher) with a grade of C or better; or consent of instructor. **Offered as needed**

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 completion of 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 completion of 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 completion of 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 completion of 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 completion of 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 completion of 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 completion of 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 completion of WR115 (or higher) 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 completion of 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 completion of 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 completion of WR115 (or higher) with a grade of C or better; or consent of instructor. **Offered as needed;** CL

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; 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; 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; 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 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. Conducts a feasibility analysis and defines the business in terms of mission, product, service, and structure. 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 and customer analysis, marketing strategy, and operational plan. **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.**

Conclude 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 completion of 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 completion of 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 completion of WR090 with a grade of C or better; or consent of instructor. **Sp**

FE

Field Experiences

See also **CWE—Cooperative Work Experience**

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. **Recommended:** FR101: None; FR102: FR101, or one year of high school French; FR103: FR102, or two years of high school French. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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. **Recommended:** FR201: FR103, or three years of high school French; FR202: FR201, or four years of high school French; FR203: FR202, or four years of high school French. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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 completion of 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 completion of 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

2 class hr/wk, 2 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

4 class 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, Su; 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, Su**

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. **Offered as needed**

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**

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 Middle Childhood Development

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**

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. **F, W**

HDF248 Learning Experiences for Young Children

4 class hr/wk, 4 cr.

Covers theories of intellectual development and includes: 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 for children of all developmental levels. **Prerequisite:** HDF225 and HDF247, both with a grade of C or better; or consent of instructor. **Sp**

HDF249 Introduction to Working with Infants and Toddlers

3 class hr/wk, 3 cr.

Focuses on understanding, facilitating, and respecting the brain development of infants and toddlers. Prepares individuals to work with infants and toddlers in a variety of settings. Provides opportunities for discussion, demonstration, 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**

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 and 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**

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. **Offered as needed**

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 a professional attitude and point of view. Also covers the development of the early childhood education field and profession. **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 and Fitness

3 class hr/wk, 3 cr.

Examines basic concepts of nutrition and physical fitness. Emphasizes the application of behaviors and practices that contribute to individuals' health and wellness. Topics include, but are not limited to, essential nutrients, digestion, dietary guidelines, energy balance, exercise, weight management, and the role of nutrition in health and disease. **F, W, Sp, Su**

HE209 Human Sexuality

3 class hr/wk, 3 cr.

Examines several aspects of human sexuality through the scope of physiological, psychological, and social perspectives. Emphasizes the understanding of the spectrum of sexual experience and behavior to develop awareness and make informed sexual decisions. **F, W, Sp, Su**

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. **F, W, Sp, Su**

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 emergencies ranging from minor to life-threatening. Upon successful completion, students may earn a completion card 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

8 class and 10 lab hr/wk, 13 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. Covers machine set up and preparation, collection of specific patient information, and monitoring of the patient during the treatment. Explores the role of the hemodialysis technician in relation to the patient, and the professional team, including documentation and professional behaviors and communication. 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. Develops an understanding of the process of determining treatment goals and providing the prescribed treatment. Also discusses Personal Protective Equipment (PPE) and the Health Information Privacy and Portability Act (HIPPA). **Prerequisite:** Admission to Hemodialysis Technician Program; and proof of current health care provider first aid/CPR certification; or consent of instructor. **Offered as needed**

HEM102 Hemodialysis Technology 2

6 class and 14 lab hr/wk, 13 cr.

Focuses on safety and infection control in response to alarms, urgent, and emergent changes in patient's condition. Integrates the knowledge of the hemodialysis patient and the treatment process to deliver a hemodialysis treatment plan 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. Examines the effects of renal failure on all body systems, and the emotional and social effects of renal failure for patients and their families. 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:** HEM101 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. **S**

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

See also **SOIL—Soil Science**

HOR105 Spanish for Horticulture

3 class hr/wk, 3 cr.
Covers practical Spanish terms and phrases specific to agriculture and horticulture in Oregon. Designed for beginning Spanish speakers to develop communication skills to work with Spanish-speakers in the workplace. Surveys cultural differences of native Spanish-speakers. Focuses on pronunciation, technical vocabulary, greetings, and basic grammar. **Sp**

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**

HOR203 Fall Horticulture Practicum

1 class and 3 lab hr/wk, 2 cr.

Applies practical horticultural skills and techniques used in the fall in the areas of nursery, greenhouse, and organic food production. Includes plant propagation, soil and media preparation, transplanting, irrigation, fertilization, pest management, and growth regulation. Provides skills and experience in crop scheduling, production, processing, marketing, and sales. Industry field trips and guest lectures included.

Prerequisite: HOR111, HOR211, and SOIL205; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **F**

HOR204 Winter Horticulture Practicum

1 class and 3 lab hr/wk, 2 cr.

Applies practical horticultural skills and techniques used in the fall in the areas of nursery, greenhouse, and organic food production. Includes plant propagation, soil and media preparation, transplanting, irrigation, fertilization, pest management, and growth regulation. Provides skills and experience in crop scheduling, production, processing, marketing, and sales. Industry field trips and guest lectures included.

Prerequisite: HOR111, HOR211, and SOIL205; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

HOR205 Spring Horticulture Practicum

1 class and 3 lab hr/wk, 2 cr.

Applies practical horticultural skills and techniques used in the spring in the areas of nursery, greenhouse, and organic food production. Includes plant propagation, soil and media preparation, transplanting, irrigation, fertilization, pest management, and growth regulation. Provides skills and experience in crop scheduling, production, processing, marketing, and sales. Industry field trips and guest lectures included.

Prerequisite: HOR111, HOR211, and SOIL205; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **Sp**

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

3 class and 2 lab hr/wk, 4 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

3 class and 2 lab hr/wk, 4 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

3 class and 2 lab hr/wk, 4 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.

Offered as needed

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**

HOR251 Growing Fruit in the Willamette Valley

2 class and 2 lab hr/wk, 3 cr.

Introduces important fruit crop production in the Willamette Valley for both commercial and personal use. Presents management systems and cultural practices for 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, fertilization practices, and pest identification and management. **Offered as needed**

HOR255 Identification of Herbaceous Plants 1

2 class and 2 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. **Offered as needed**

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**

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 and 2 lab hr/wk, 3 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. Stresses hands-on application of scientific principles to create sustainable food production systems. **Offered as needed**

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 Services

3 class hr/wk, 3 cr.

Introduces professional issues, codes of ethics, Federal and State laws, and regulations associated with the field of human services, traditional health workers, and substance use treatment. Explores factors related to ethical service delivery and the adaptation of helping strategies cross-culturally. **Prerequisite:** HS150 with a grade of C or better; or consent of instructor. **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- Substance Disorder Treatment

2 class hr/wk, 2 cr.

Explores the historical, sociological and physiological implications for women with substance use disorders. **Offered as needed**

HS129 Understanding Grief, Loss, and Transition

3 class hr/wk, 3 cr.

Course explores individual attitudes, beliefs, misconceptions, and responses toward death, dying, trauma, and out-of-sequences losses. Includes therapeutic tools used by professionals in assessing and addressing grief and mourning. Offers information on professional boundaries, compassion fatigue, and the importance of dealing with personal unresolved issues. Class is highly interactive. **Offered as needed**

HS140 Addressing Client Violence

1 class hr/wk, 1 cr.

Introduces the recognition, prevention, and management of clients demonstrating aggressive behavior. Stresses prevention of violence through early intervention and includes information on pre-aggression warning signs, as well as practice with defusing behavior. **Sp**

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. **Offered as needed**

HS150 Personal Effectiveness in Human Services

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 HS170. **Prerequisite:** Enrollment in the Human Services program. **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 Fundamentals of Interviewing

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 and HS170, each with a grade of C or better; or consent of instructor. **W, Sp**

HS156 Counseling Theories

3 class hr/wk, 3 cr.

Introduces the major counseling theories and evidence based practices 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 re-traumatization 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. **W, 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

4class hr/wk, 4 cr.

Provides the background and specific skills needed to select and succeed in the practicum placement. Introduces the history and values of community resources designed to meet the needs of vulnerable populations. Familiarizes students with local social service and addiction treatment agencies and organizations to make appropriate referrals. **Recommended:** Concurrent enrollment in HS150. **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 youth and substance use. 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 Involuntary Clients, Criminality, and Substance Use Disorders 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 3 class hr/wk, 3 cr.

Covers basic information about integrated assessment and treatment for individuals with both substance use disorders and mental health conditions. **Prerequisite:** HS101; and HS266 or HS216; or consent of instructor (All prerequisites must be completed with a grade of C or better.) **Sp**

HS211 Wellness 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 (STIs) and hepatitis. Explores different health issues such as diabetes, asthma, obesity, and medication adherence. Examines personal issues and discomforts arising from frankly discussing sexual and health behaviors of clients. Provides counseling techniques for assisting clients to identify personal risk and practice harm reduction of STIs and other health issues. **Recommended:** HS101 and HS155. **Prerequisite:** HS150 with a grade of C or better; or consent of Instructor. **F, W, Sp**

HS213 Multicultural Issues 4 class hr/wk, 4 cr.

Examines the effects of cultural differences on the client and human service provider. Increases awareness of cultural differences and the skills to develop and apply appropriate intervention strategies in cross-cultural situations. Focuses on course group work as a method to navigate cross-cultural interactions. **Prerequisite:** HS150 and HS155, each 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:** HS155 with a grade of C or better; or consent of instructor. **Sp**

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 Assessment and TX Planning 3 class hr/wk, 3 cr.

Introduces diagnostic criteria for substance use disorders as well as a non-substance related disorder. Provides a systematic approach to screening, assessment, identification of and placement in appropriate level of care, 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. **F**

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, each 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 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, substance use and disorders, 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. **Corequisite:** HS284-HS288. **Sp**

HS266 Comprehensive Case Management

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. **F**

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 Addiction Studies students two different practicum sites, each at least two terms in length, during the Addiction Studies degree acquisition. The second practicum is more comprehensive and provides an opportunity to develop more advanced skills. Students in the post-baccalaureate Addiction Counselor Certification Program remain at one site for three terms. **Prerequisite:** HS103, HS150, HS155, and HS170 for Human Services Addiction Studies (AS) degree students; or consent of instructor. Students in the Addiction Counselor Certification Preparation Post-Baccalaureate Program (ACCP) must have satisfactorily completed one term in the program including HS103 and HS155 or similar courses, and attend an orientation prior to consideration for practicum. Students must also register with the Addiction Counselor Certification Board of Oregon (ACCBO) prior to starting the first term of practicum.) Students must have completed or be concurrently enrolled in HS216 (or HS217 once HS216 is completed) to commence (or continue in) practicum at a second site. (All prerequisite courses must be completed with a grade of C or better.) **F, W, Sp, Su**

HS284-288S Practicum-Human/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. Second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. **Prerequisite:** HS103, HS150, HS155, and HS170; or consent of instructor. Students must have completed or be concurrently enrolled in HS265 (or HS266) to commence (or continue in) practicum at a second site. (All prerequisite courses must be completed with a grade of C or better.) **F, W**

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 World Civilization: 3500 B.C. to 1450

4 class hr/wk, 4 cr. each

Surveys human cultural, social, economic, intellectual, and political development of world civilizations. **F, W, Sp, Su**

HST105 World Civilization: 1450 C.E. to 1870

4 class hr/wk, 4 cr. each

Surveys human cultural, social, economic, intellectual, and political development of world civilizations. **F, W, Sp, Su**

HST106 World Civilization: 1870 to the present

4 class hr/wk, 4 cr. each

Surveys human cultural, social, economic, intellectual, and political development of world civilizations. **F, W, Sp, Su**

HST157 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. **Offered as needed**

HST201 United States: to 1840

4 class hr/wk, 4 cr. each

Explores the cultural, economic, social, and political developments of the United States. **F, W, Sp, Su; CL**

HST202 United States: 1840 to 1900

4 class hr/wk, 4 cr. each

Explores the cultural, economic, social, and political developments of the United States. **F, W, Sp, Su; CL**

HST203 United States: 1900 to Present

4 class hr/wk, 4 cr. each

Explores the cultural, economic, social, and political developments of the United States. **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. **Offered as needed**

HST237 America in the Sixties **4 class hr/wk, 4 cr.**

Presents an overview of American/U.S. history during the turbulent years of the Sixties. Covers a broad range of themes and ideas that occurred during the Sixties. **Sp**

HST257 Native American **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. **Offered as needed; CL**

HST258 African American **4 class hr/wk, 4 cr.**

Recounts and explains experiences which lie at the heart of America's struggle to deal with its racial composition. Examines historical forces which denied African Americans the opportunity to secure meaningful first-class citizenship. Focuses on the political and social lives of African Americans. Additionally, examines the decisions and social institutions that determined public policy regarding Americans of African descent. **Sp; CL**

HST262 Women in U.S. **4 class hr/wk, 4 cr.**

Studies the transformation of the role of women in American society. **W, Sp, Su; CL**

HST269 Pacific Northwest **4 class hr/wk, 4 cr.**

Examines the diverse history of the Pacific Northwest. Discusses political, economic, social, and cultural transformations in the region, placed in a national and international context. **F, Sp; CL**

HTM

Hospitality and Tourism Management

(All courses in this section are offered online.)

See also NFM—Nutrition and Food Management

HTM100 Hospitality Industry **4 class hr/wk, 4 cr.**

Introduces the hospitality industry as a single, interrelated industry composed of food and beverage; catering and banquets; resorts and lodging; and managed services. 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. **Offered as needed**

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HTM104 Tourism and Travel Industry

4 class hr/wk, 4 cr.

Explores the major concepts in tourism, what makes tourism possible and how tourism can become an important factor in the economics of any nation, region, state or local area. Discusses the fundamentals of the tourism system and the key costs and benefits of a tourism economy. Promotes understanding and knowledge of the diverse elements that comprise the travel and tourism industry and the factors that influence growth and development. Uses examples of tourism development practices in Oregon. **Offered as needed**

HTM105 Restaurant Operations **4 class hr/wk, 4 cr.**

Covers the food service industry, including its structure, organization, size, economic impact, regulatory industries, and peripheral industries. Explores the industry from the back-of-the-house (BOH) and front-of-the-house (FOH) perspectives to uncover traditional operational procedures and practices to maximize profitability. Discusses current industry operational topics. **Offered as needed**

HTM107 Hospitality Cost Control **4 class hr/wk, 4 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. **Offered as needed**

HTM114 Travel Destination Geography

4 class hr/wk, 4 cr.

Focuses primarily on the tourism attributes of geographical areas of North America, with a brief look at the other major tourism destinations on Earth. Provides in-depth geographical and tourism-related information on the countries emphasized. **Offered as needed**

HTM125 Special Events Planning **4 class hr/wk, 4 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. **Offered as needed**

HTM127 Selling in Hospitality and Tourism

4 class hr/wk, 4 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. **Offered as needed**

HTM131 Customer Service **4 class hr/wk, 4 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. 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. Includes combined discussions of management theory, systems, decision-making, and leadership directly relevant to any profession with emphasis on the hospitality industry. **Offered as needed**

HTM138 Foods and Beverages: Gastronomy

4 class hr/wk, 4 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. Investigates creating marketable culinary experiences. **Offered as needed**

HTM143 Computer Reservation Systems

4 class hr/wk, 4 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. **Offered as needed**

HTM203 Service Marketing **4 class hr/wk, 4 cr.**

Studies how marketing activities direct the flow of goods and services from product to consumer in the hospitality and tourism industry. Explores 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. Analyzes various industry marketing strategies. **Offered as needed**

HTM209 Lodging Operations **4 class hr/wk, 4 cr.**

Focuses on specific functions of lodging operations at a hotel, motel, or resort. Includes reservations, registration, room and rate assignment, guest services, room status, maintenance and settlement of guest accounts, and creation of guest history records. Discusses guest information database development and maintenance, coordination of guest services, and practices for ensuring guest satisfaction. Includes an analysis of staffing, housekeeping, and revenue management. Room accounting and auditing procedures are also covered. **Offered as needed**

HTM224 Catering and Banquets **4 class hr/wk, 4 cr.**

Studies on-premise catering facilities, including operations, sales, and relationships with outside vendors, related departments, and industries. Emphasizes logistical operations and seeking and servicing various market segments. Includes a discussion of safety and sanitation issues specific to food and beverage service. Explores career opportunities and requisite skill sets. **Offered as needed**

HTM226 Meetings and Conventions **4 class hr/wk, 4 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. **Offered as needed**

HTM290 HTM Strategic Management **4 class hr/wk, 4 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. Uses an industry-validated hotel management simulation tool to provide students with an applied learning experience. **Prerequisite:** Second-year standing in Hospitality Management or Tourism and Travel Management programs. **Offered as needed**

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**

HUM221 Global Leadership **3 class and 1 lab hr/wk, 4 cr.**

Provides students with a methodology to assess their leadership skills and style. Develops personal leadership skills and applies them to a global perspective. Examines global perspectives and builds consciousness about issues of poverty in the United States and provides direct global experience by living and working in the community, with emphasis on the unequal distribution of wealth and power evident both locally and globally. Develops a broad understanding and critical thinking about global forces and culture through the integration of works of literature, contemporary multicultural readings, exercises and films. Prepares students to participate thoughtfully and responsibly in an immersive, intercultural and global service learning experience. **Su, 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**

JNL216 News Writing **3 class hr/wk, 3 cr.**

Focuses on gathering and processing the news. Includes specific treatments on lede formats, organizing and constructing news stories, developing a news writing style and both straight and feature materials. Covers editorial and column writing with considerable time devoted to the craft of writing. **F**

JNL217 Feature Writing **3 class hr/wk, 3 cr.**

Emphasizes feature, in-depth, and investigative reporting beyond gathering and processing of news. Requires presenting material for possible publication in the student newspaper. **W**

JNL224 Introduction to Mass Communication **3 class hr/wk, 3 cr.**

Survey of communication media with emphasis on historical, social, technological, and economic considerations in mass media in the United States. Examines important current legal and ethical dilemmas facing journalists. Recommended for journalism majors; open to others. **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**

JNL240 Multimedia Journalism

2 class and 2 lab hr/wk, 3 cr.

Introduces students to the reception and production of multimedia texts designed for circulation in the mass media landscape and presents opportunities to practice media literacy skills related to both theory and practice. Engages students with key historical and contemporary texts in writing, photography, data visualization, layout and design, audio, and video journalism. Write for digital platforms, distribute news via social media, and present text, photography, audio and video. **Prerequisite:** Placement into WR115; or completion of WR090 with a grade of C or better; or consent of instructor. Previous computer experience. **Sp**

JPN

Japanese

JPN101, 102, 103 First Year

Japanese, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Introduces the Japanese language (including listening, speaking, reading and writing) and Japanese culture (including geography, customs, daily life, heritage and literature), facilitated by the study of vocabulary, grammar, short readings and guided conversation. Instructor and students use Japanese as the primary language of the class. **Recommended:** JPN101: None; JPN:102: JPN101, or one year of high school Japanese; JPN103: JPN102, or two years of high school Japanese. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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.

Recommended: JPN201: JPN103, or three years of high school Japanese; JPN202: JPN201, or four years of high school Japanese; JPN203: JPN202, or four years of high school Japanese. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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

LING

Linguistics

LING210 Introduction to Linguistics

4 class hr/wk, 4 cr. each

Examine the fundamentals of linguistic analysis: phonetics, phonology, morphology, syntax, and semantics, and explore the similarities and differences in the languages of the world. Explore language variation and language use and attitudes towards ethnic minorities and social dialects. Understand the process of language acquisition and language issues in the field of education.

Prerequisite: WR115 with a grade of C or better; or concurrent enrollment; or consent of instructor. **W, Sp**

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. **W, Su**

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 Technologies

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**

MT130 Motors, Pumps, and Generators

2 class hr/wk, 2 cr.

Develops key knowledge about motor, generator, and pump fundamentals for use in industrial facilities and consumer products. DC, AC, three-phase, Servo, stepper, hydraulic, and pneumatic motors and generators are covered. Provides a working knowledge for those entering all industries including green technologies. **W, 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**

MT216 Statistical Process Control 2 class hr/wk, 2 cr.

Introduces the fundamentals of Statistical Process Control (SPC) as applied to modern factory production processes. Reviews basic statistical measurements and how factory decisions are made. **Sp, 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**

MT260 Factory Floor Networks **3 class hr/wk, 3 cr.**

Introduces the fundamentals of industrial networks on the factory floor for the connection of programmable logic controllers and other industrial appliances together. Explains the various needs for specific network protocols in a harsh environment, low-latency, and safety-driven facilities. Covers current, potential future, and legacy networks, and interconnections of those systems, as well as safety awareness of factory floor personnel. **W, 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**

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**

MT291 Robotic Capstone Preparation

1 class hr/wk, 1 cr.

Provides fundamental and working knowledge of planning and managing a material-based or infrastructure project from conception to finished product. Students will develop a plan for managing capstone project. **Prerequisite:** ELT121, WR227, and MT232; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W, Offered as needed**

MT292 Robotic Capstone **2 class and 8 lab hr/wk, 6 cr.**

Focuses on the development of an advanced robotic control system within a supervised industrial robotic environment. **Prerequisite:** MT291 with a grade of C or better; or consent of instructor. **Sp, Offered as needed**

MTH

Mathematics

MTH020 Basic Mathematics **4 class hr/wk, 4 cr.**

Includes fundamentals of addition, subtraction, multiplication, and division in problems involving whole numbers, fractions, decimals, ratios, percentages, and geometric measurements and formulas. Emphasizes analysis and solution of application problems. **Corequisite:** SSP060. **F, W, Sp, Su**

MTH052 Intro to Algebra/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 completion of MTH020 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **F, W, Sp, Su**

MTH053 Intro to Trigonometry/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 completion of 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 completion of 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 completion of 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, except MTH098); or completion of MTH070 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, W, Sp, Su**

MTH098 Quantitative Literacy

6 class hr/wk, 6 cr.

An intensive study of the quantitative, algebraic, and problem-solving skills necessary to be successful in non-mathematical fields of study. Focuses on developing mathematical maturity through problem solving, critical thinking, and communicating about mathematics. Integrates numeracy, proportional reasoning, algebraic reasoning, and functions. **Prerequisite:** Placement into MTH060 (or higher); or completion of MTH020 with a grade of C or better, or equivalent course as determined by instructor; and placement into RD090 (or higher); or completion of RD080 with a grade of C or better; 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 completion of 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 completion of 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 completion of MTH111 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. **F, W, Sp, Su**

MTH211 Elementary Mathematics 1

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 completion of MTH095 (or higher), except MTH098 and MTH105) with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor. **F, W**

MTH212 Elementary Mathematics2

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 Elementary Mathematics3

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

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 completion of 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

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

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 completion of 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 completion of 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

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 completion of 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

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

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 Performance

See also MUS-Music

MUP100 Applied 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**

MUP102 Beginning Concert Band

1 class and 2 lab hr/wk, 2 cr.

Offers an introductory instrumental experience that focuses on performing standard concert band literature of many styles. Emphasizes beginning ensemble skills, and musicality in various band performance practices. Course may be repeated for a maximum of eight credits. **F, W, Sp**

MUP103 Intermediate Concert Band

1 class and 2 lab hr/wk, 2 cr.

Offers an introductory instrumental experience that focuses on performing standard concert band literature of many styles. Emphasizes beginning ensemble skills, and musicality in various band performance practices. Course may be repeated for a maximum of eight credits. **Prerequisite:** MUP102 with a grade of C or better; or consent of instructor. **F, W, Sp**

MUP104 Advanced Concert Band

1 class and 2 lab hr/wk, 2 cr.

Offers an advanced instrumental experience that focuses on performing standard concert band literature of many styles. Emphasizes ensemble skills, musicality, and expertise in various band performance practices. Course may be repeated for a maximum of eight credits. **Prerequisite:** MUP103 with a grade of C or better; or consent of instructor. **F, W, Sp**

MUP105 Jazz Ensemble

1 lab hr/wk, 1 cr.

Offers applied study and performance on musical instruments played in ensemble or solo formats. **Offered as needed**

MUP106 Beginning String Ensemble

1 class and 2 lab hr/wk, 2 cr.

Offers an introductory instrumental experience that focuses on performing standard string ensemble literature of many styles. Emphasizes beginning ensemble skills and musicality in various strings performance practices. Course may be repeated for a maximum of eight credits. **F, W, Sp**

MUP107 Intermediate String Ensemble

1 class and 2 lab hr/wk, 2 cr.

Offers an instrumental experience that focuses on performing standard string ensemble literature of many styles. Emphasizes ensemble skills, musicality and expertise in various strings performance practices. Course may be repeated for a maximum of eight credits. **Prerequisite:** MUP106 with a grade of C or better; or consent of instructor. **F, W, Sp**

MUP108 Advanced String Ensemble

1 class and 2 lab hr/wk, 2 cr.

Offers an advanced instrumental experience that focuses on performing standard string ensemble literature of many styles. Emphasizes ensemble skills, musicality, and expertise in various strings performance practices. Course may be repeated for a maximum of eight credits. **Prerequisite:** MUP107 with a grade of C or better; or consent of instructor. **F, W, Sp**

MUP174 Voice

1 class and 2 lab hr/wk, 2 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**

MUP175 Beginning Choir

1 class and 2 lab hr/wk, 2 cr.

Offers singing in a beginning mixed voice (soprano, alto, tenor, bass) choir. Includes an introduction to proper singing habits, basic musical terms and expressions, rehearsal technique, and exposure to a wide variety of music literature, culminating in a final performance. Course may be repeated for a maximum of eight credits.

Recommended: Previous experience singing with a school, civic, or church choir. **F, W, Sp**

MUP176 Intermediate Choir

1 class and 2 lab hr/wk, 2 cr.

Offers singing in an intermediate level mixed voice (soprano, alto, tenor, bass) choir. Includes continued development of proper singing habits, basic musical terms and expressions, rehearsal technique procedures, and exposure to a wide variety of music literature, culminating in a final performance. Course may be repeated for a maximum of eight credits. **Recommended:** Previous experience singing with a school, community, or church choir. **Prerequisite:** Consent of instructor. **F, W, Sp**

MUP177 Advanced Choir

1 class and 2 lab hr/wk, 2 cr.

Offers singing in an advanced level mixed voice (soprano, alto, tenor, bass) choir. Includes continued development of proper singing habits, basic musical terms and expressions, rehearsal techniques, and exposure to a wide variety of music literature, culminating in a final performance. Course may be repeated for a maximum of eight credits. **Recommended:** Previous experience singing with a school, community, or church choir. **Prerequisite:** Consent of instructor. **F, W, Sp**

MUS

Music

See also MUP-Music Performance

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. **F, W, Sp**

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. **F**

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. **W**

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. **Sp**

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. **F, W, Sp, Su**

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 Haydn, 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 email 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. **Prerequisite:** NET142 with a grade of C or better; or equivalent experience; or consent of instructor. **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, Offered as needed**

NET271 IP Telephony

3 class and 3 lab hr/wk, 4 cr.

Introduces Cisco IP Telephony, a converged voice and data network. Includes the challenges faced by these different technologies. Covers Voice over IP and Quality of Service concepts as they apply to the Cisco CallManager Express environment. **Offered as needed**

NFM

Nutrition and Food Management

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 completion of BI232 and MTH095 (or higher), each with a grade of C or better. **Corequisite:** BI232 (may be completed prior to enrollment). **F**

NUR108 Acute and Chronic Conditions 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. Focuses on theoretical concepts of the care of individual patients with acute and chronic conditions..

Prerequisite: NUR106 with a grade of C or better. **Corequisite:** BI233 (may be completed prior to enrollment). **W**

NUR109 Acute and Chronic Conditions 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. Focuses on the care of individual patients with acute or chronic conditions.

Prerequisite: NUR108 with a grade of C or better. **Corequisite:** CIS101 (may be completed prior to enrollment). **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 Complex Health Conditions

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 Care in Urgent 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 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; and Social Science and sociology electives (or concurrent enrollment). (All prerequisite courses must be completed with a grade of C or better.) **W**

NUR209 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; and Arts and Letters, and general education electives (or concurrent enrollment). (All prerequisite courses must be completed with a grade of C or better.) **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. **Offered as needed**

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—Skills Training**

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 plyometric, 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**

PE185ES – Emergency Service Tactical Athlete
3 lab hr/wk, 1 cr. each

Focuses on fitness demands specific to emergency service personnel. Includes information on proper warm-ups, exercise principles, circuit and strength training concepts, and exercise formats that utilize minimal setup or gear for continued fitness after completing the course. Promotes the development of health and skill-related components of fitness, including speed, power, cardiovascular endurance, flexibility, muscular strength, and muscular endurance. **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**

PE185FT, FU, FV Cardio and Core Fitness — Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Introduces cardio conditioning to improve fitness, health, and overall wellness through structured group fitness exercises. Activities promote and emphasize improved cardiorespiratory conditioning as well as muscle strength and endurance, flexibility, body composition, and skills to help students incorporate exercise into their lifestyle. **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**

PE185PD, PE, PF—Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Emphasizes proper technique and mindfulness through exercises that target the core muscles, including the abdominal, back, hip, pelvis, and lateral trunk muscles. Promotes improved flexibility, muscle endurance, breath, and body awareness. Presents techniques to improve fitness, health, and overall wellness, as well as skills to help students incorporate exercise into their lifestyle. **F, W, Sp, Su**

PE185PR, PS, PT Backpacking—Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Introduction to 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**

PE185TO, TP, TQ Total Body Training—Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each

Incorporates cardio and strength segments to help students achieve a higher level of conditioning. Utilizes a combination of exercise techniques and formats, including cardio endurance training, interval training, calisthenics, plyometric training, body weight training, strength training, functional training, and flexibility exercises. To improve cardiorespiratory endurance, muscular strength and endurance, flexibility and overall health. **F, W, Sp, Su**

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

Educatess, 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 (asana), proper breathing techniques and stress reduction. **F, W, Sp, Su**

PE185ZA, ZB, ZC**3 lab hr/wk, 1 cr. each**

Introduces Zumba fitness to improve health and overall wellness through structured group exercise. Promotes improvement of cardiorespiratory conditioning, muscle endurance, and flexibility. Presents movements to four basic Latin rhythms (meringue, salsa, cumbia, reggaeton) to create a dynamic fitness program. Covers knowledge and skills needed to perform safe and proper group and individual Zumba exercises. Includes activities that promote and emphasize improved cardiorespiratory conditioning, as well as muscle strength, endurance, flexibility, and body composition. **F, W, S, 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, except MTH098); 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, except MTH098); or completion of MTH070 (or higher, except MTH098 and MTH105) 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, except MTH098); or completion of MTH081 (or higher, except MTH098 and MTH105) 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 completion of MTH112 (or higher, except MTH098 and MTH105) with a grade of C or 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, except MTH098); or completion of MTH070 (or higher, except MTH098 and MTH105) 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 spectroscopy, and the birth and death of stars. **Prerequisite:** Placement into MTH095 (or higher, except MTH098); or completion of MTH070 (or higher, except MTH098 and MTH105) 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, except MTH098); or completion of MTH070 (or higher, except MTH098 and MTH105) 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 completion of 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, each 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 completion of 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 completion of 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 completion of WR115 with a grade of C or better. **F, W, Sp; CL**

PHM

Pharmacy Technician/ Pharmacy Management

PHM101 Intro 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, Sp**

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, Su**

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, Sp**

**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, Sp**

PHM130 Pharmacy Info: Law and Ethics**3 class hr/wk, 3 cr.**

Focuses on collecting, organizing, screening, and evaluating information/patient 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. **F, Sp**

PHM150 Pharmacy Tech 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. **F, Sp**

PHM151 Pharmacy Tech 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. **F, 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. **F, Sp**

PHM210 Over-the-Counter (OTC) Product**2 class hr/wk, 2 cr.**

Covers medications, both prescription (legend) and non-prescription OTC drugs available to pharmacy customers. **W, Su**

**PHM215 Sterile Compound/
Cytotoxic Med****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, Su**

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, Su**

PHM230 Pharmaceutical Drug Classifications**3 class hr/wk, 3 cr.**

Covers the sources, classifications, and prototypes of drugs. Examines pharmaceutical names; routes of administration; pharmacokinetics and pharmacodynamics of xenobiotics; pathophysiology of various systemic body systems. Studies 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, Sp**

PHM232 Pharmacology 2**5 class hr/wk, 5 cr.**

Provides a basic understanding of structure and function of certain biological systems within the human body, including the 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, Su**

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**

Procurement and Supply Chain Management**See BA—Business Administration****Procurement Management****See BA—Business Administration****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 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 RD080 and RD085 (or concurrent enrollment), 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 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 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.) **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.) **Offered as needed**

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 RD090 and WR090 (or concurrent enrollment), each with a grade of C or better; or consent of instructor. **F, W, Sp; CL**

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 completion of RD080 and RD085, or RD090; or consent of instructor. Also placement into WR090; or concurrent enrollment in WR080; 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 completion of 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 completion of 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 completion of 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**

Retail Management

See BA—Business Administration

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. **Recommended:** RUS101: None; RUS102: RUS101, or one year of high school Russian; RUS103: RUS102, or two years of high school Russian. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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. **Recommended:** RUS201: RUS103, or three years of high school Russian; RUS202: RUS201, or four years of high school Russian; RUS203: RUS202, or four years of high school Russian. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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. **Offered as needed; 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**

SOIL

Soil Science

See also HOR—Horticulture

SOIL205 Soil Science

3 class and 3 lab hr/wk, 4 cr.

Explores soil ecosystems as a medium for plant and crop growth, the cycling of nutrients, supply and purification of water, and a habitat for diverse population of soil organisms. Also studies the relationship of human activities to the sustainability of soil ecosystems. **F**

SOIL206 Plant Nutrition

2 class hr/wk, 2 cr.

Provides an introduction to the general concepts of plant nutrition, soil fertility, fertilizers and fertilizer practices. Discusses essential plant nutrients and their behavior in soil and water and role in plant growth and production; soil fertility; environmental issues associated with fertilizers; and nutrient deficiencies. Interpret and understand soil, water and plant tissue analyses, the various types of fertilizers and application methods, and make fertilizer calculations. Covers case studies of balanced fertilizer regimes for common horticultural crops grown in the Willamette Valley. **Recommended:** Completion of HOR111 and SOIL205, each with a grade of C or better. **W**

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. **Recommended:** SPN101: None; SPN102: SPN101, or one year of high school Spanish; SPN103: SPN102, or two years of high school Spanish. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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.

Recommended: SPN111: None; SPN112: SPN111, or one year of high school Spanish; SPN113: SPN112, or two years of high school Spanish. (With a grade of C or better.) 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. This course is equivalent to SPN101 and the first half of SPN102. Spanish is the primary language of the class. **Recommended:** SPN150: None; SPN151: SPN150, SPN102, or two years of high school Spanish. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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.) **Offered as needed**

SPN160 Spanish for Educators

4 class hr/wk, 4 cr. each

Obtain the base of academic language to be a successful bilingual teacher in Spanish and English. Gain Spanish skills in academic topics of math, science and language arts, plus classroom management vocabulary and strategy. Ideal for Education majors.

Recommended: SPN103 with a grade of C or better; or 3 years of high school Spanish; or equivalent experience. Instructor will assess student background when needed. **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. **Recommended:** SP201: SPN103, SPN151, or three years of high school Spanish; SPN202: SPN201, or four years of high school Spanish; SPN203: SPN202, or four years of high school Spanish. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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**, **Offered as needed**; SPN202: **W**, **Offered as needed**; 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. **Recommended:** SPN211: SPN113, or two years of high school Spanish; SPN212: SPN211, or three years of high school Spanish; SPN213: SPN212, or three years of high school Spanish. (With a grade of C or better.) SPN211: **F**; SPN212: **W**; SPN213: **Sp**, **Offered as needed**

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. **Recommended:** SPN214: None; SPN215: SPN214; SPN216: SPN215. (With a grade of C or better.) **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. **Recommended:** SPN250: SPN103, SPN151, or three years of high school Spanish; SPN251: SPN250, SPN202, or four years of high school Spanish. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher); or completion of 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.) **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 RD—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**

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

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**

Sustainability in Management

See BA—Business Administration

TA

Theatre

TA110 Theatre Appreciation

4 class hr/wk, 4 cr.

Explores the theatre arts from the audience perspective. Introduces styles and genres, theatre architecture, play analysis, and elements of production, with a focus on contemporary theatre in the United States. Students develop a critical and informed response to performances of all types. Requires viewing of two local theatre productions. **W**

TA141 Acting 1

4 class hr/wk, 4 cr.

Introduces the skills and techniques of acting for the stage focusing on the actor's instrument of body, voice, and mind. Includes voice and movement, improvisation games, script analysis, performance evaluation, and the rehearsal process. Improves public speaking and confidence for the non-actor and develops stage presence and essential skills for the beginning actor. **F, Sp**

VC

Visual Communications

See also ART

VC111 Intro 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 Intro 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 Intro 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 documents for print, and design and development 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. Includes instruction in document setup, pages, typography, images, color, and output for print. **Prerequisite:** Previous computer experience. **Offered as needed**

VC134 Dreamweaver 1

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 Adobe Illustrator. Includes practical instruction in advanced tools, layers, colors, visual effects, symbols, and output. **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 syntax 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 layouts, images, and design 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. **Sp**

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. **Prerequisite/ Corequisite:** VC224 and VC225, both with a grade of C or better; or consent of instructor. **F**

VC271A-VC273A 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; and completion of VC225 (or concurrent); or consent of instructor. **Offered as needed**

VC271B-VC273B 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**

VC271C-VC273C 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; or consent of instructor. **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; or consent of instructor. **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. **W**

VMW114 Winter Vineyard Practices

3 class and 2 lab hr/wk, 4 cr.

Surveys winter vineyard management practices. Covers training, pruning, propagation, bench grafting, and simple trellis designs. **Prerequisite:** VMW101 with a grade of C or better; or consent of instructor. **W**

VMW115 Spring Vineyard Practices

3 class and 2 lab hr/wk, 4 cr.

Surveys spring vineyard management practices. Focuses on preparing a vineyard site for planting, spring canopy management and other site issues. Covers pest and disease control. **Prerequisite:** VMW114 with a grade of C or better; or consent of instructor. **Sp**

VMW116 Summer Vineyard Practices

3 class and 2 lab hr/wk, 4 cr.

Surveys summer vineyard management practices. Covers planting, training of young vines, disease and weed control, canopy and vineyard floor management, and nutritional applications. **Prerequisite:** 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. **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 completion of MTH095 (or higher), and VMW222; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **W**

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:** VMW224; 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:** 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:** 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**

VMW260 Vineyard Nutrition and Irrigation Management

3 class hr/wk, 3 cr.

Introduces basic principles of soil science. Emphasizes grapevine mineral nutrition and the relationship of water and soils. Covers soil conservation and improvement. **Su**

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)

4 class hr/wk, 4 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**

VMW280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience

VMW290 Wine Studies Capstone

4 class hr/wk, 4 cr.

Provides the opportunity to demonstrate organization and leadership in a guided learning project. Promotes the application, further development, and deeper understanding of learned skills and techniques in Wine Studies program. Improves project management skills. Promotes career-readiness. **Prerequisite:** Must be in the last term of Vineyard Management and/or Winemaking program. Instructor approval required.

WFB

Welding Fabrication

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**

WLD105 Introduction to Welding

2 class and 3 lab hr/wk, 3 cr.
Introduces the fundamentals of spot welding (resistive welding), arc welding, oxyacetylene welding and cutting, metallic inert gas welding (MIG), and Tungsten Arc Welding (TIG) procedures. Includes safety awareness of factory floor personnel. **F, Offered as needed**

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**

WLD180 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**

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**

WLD256 Fabrication Practices 1

1 class and 6 lab hr/wk, 3 cr.

Studies of metal fabrication technology including, understanding weld distortion and control measures, along with the use and design of positioning and fixturing equipment commonly used in industry.

Prerequisite: Fourth-term standing in the Welding Fabrication program; or consent of program chair. **F**

WLD257 Fabrication Practices 2

1 class and 6 lab hr/wk, 3 cr.

Studies of metal fabrication technology including, a comprehensive overview of economic and cost factors related to this field (equipment and consumable costs, labor costs). Includes time studies regarding various welding processes. **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:** Sixth-term standing in the Welding Fabrication 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.

Introduces basic writing tasks and conventions associated with technical fields. Improves basic writing skills needed for effective workplace communication and assignments in career and technical education (CTE) programs such as Automotive Technology, Machining, and Welding. **Recommended:** CA121 with a grade of C or better. **Prerequisite:** Placement into WR088; or completion of WR080 with a grade of C or better; 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.

Builds on development of skills presented in WR080, and requires more complex writing and critical thinking skills. **Prerequisite:** Placement into WR090; or completion of WR080 with grade of C or better; or consent of instructor. **F, W, Sp**

WR091 Writing Essentials 1 class hr/wk, 1 cr.

Details the fundamental structural components of writing. Primary focus is on parts of speech and sentence types. Secondary focus and eventual outcome is college-level editing skill. **Offered as needed**

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 completion of 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 completion of 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 completion of 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 completion of 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 completion of 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**

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 completion of WR115 with a grade of C or better; or consent of instructor. **W**

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, 2017

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.

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
CERT, Auto Technician Mt. Hood Community College

Aguirre, Blanca A—Counselor, Student Support Services
MS, Counseling Oregon State University
BA, Psychology Western Oregon University

Alexander, Karen L—Director, Disability Services
MA, Psychology National-Louis University
BA, Behavioral Science National-Louis University

Alvarez, Maria E (Cleo)—Counselor, Student Support Services
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

Arbuckle, Chris A—Instructor, Emergency Medical Technology
AAS, Nursing Mt. Hood Community College
AAS, Paramedicine Chemeketa Community 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—Dean, 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

Beausoleil, Deanne G—Instructor, Art History
MFA, Art History Savannah College of Art & Design
BFA, Art History Savannah College of Art & Design

Beavert, Karie L—Instructor, Reading/Study Skills
MAT, Reading Education George Fox University
BA, Law University of California-Santa Barbara

Behmard, 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

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 Studies
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, L. Rebecca—Director, Threat Management Resources
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, Student Support Services
MS, Counseling Western Oregon University
BA, Liberal Arts Stephens College

Brase, Donald L (Don)—Dean, Liberal Arts & Social Sciences
MA, English University of Montana
BA, English University of Washington

- Brewer, Kevin W**—Instructor, Center for Individual Learning
MA, Education Antioch University
BS, Business-Mathematics Southern Oregon University
BS, Business Administration Southern Oregon University
- Buckholz, Cheryl J**—Instructor, Pharmacy Technician
PHD, Pharmacy Oregon State University
BS, Botany Oregon State University
- Budke, Michael G**—Coordinator, Corrections Education
MS, Management/Organizational Leadership Warner Pacific College
BS, Political Science Oregon State University
- Bunch, Kathleen (Katie)**—Director, Business Services
BS, Business Administration/Accounting Humboldt State University
- Bunnenberg-Boehmer, Kay**—Instructor, Arts, Literature
MFA, Painting San Francisco Art Institute
BA, Art Sonoma State University
- Burke, Clairice L (Clair)**—Instructor, Mathematics
MS, Mathematics California State University
BS, Mathematics University of California
- Burke, Michele LH**—Reference Librarian
MLS, Library Science Emporia State University
BA, Philosophy Portland State University
- Burns, Barbara A**—Instructor, Nursing-Clinical
MSN, Education United States University
BSN, Nursing Oregon Health Science University
- Burtis, Kerry P**—Instructor, Music
Doctor of Musical Arts University of Southern California
Master of Music University of Southern California
BA, Music Augustana College
- Butzner, Alexis M**—Instructor, English
PHD, English Fordham University
MA, English Literature Fordham University
BA, Liberal Arts/Philosophy The New School-Eugene Language College
- Caleffi Prichard, Viviani (Vivi)**—Compliance Director
MBA, Business Administration George Fox University
BA, Mass Communication/Journalism Centro Universitario do Sul de Minas
- Cammack, Janice H (Jan)**—Instructor, Physical Science
PhD, Chemistry Oregon State University
BS, Chemistry George Fox University
- Camp, Reanna L**—Instructor, Physical Science
MS, Geology East Carolina University
BS, Geology University of Nebraska
- 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
- Chernoh, Erica K**—Instructor, Horticulture OSU/Chemistry
MS, Science University of California-Davis
BA, Geography Humboldt State University
AA, Liberal Arts Los Medanos College
- Cheyne, Larry D**—Dean, Applied Technologies
MS, Sport Management California University of Pennsylvania
BA, English Drake University
- Chou, Cerbrina**—Instructor, Communication
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
- Christie, Jonathan E**—Instructor, Life Science
MS, Botany & Plant Pathology Oregon State University
BS, Botany Oregon State University
CERT, Russian Studies Oregon State University
- Claysmith, Christopher S**—Instructor, Astronomy-Planetarium
MA, Astronomy Boston University
BS, Physics Oregon State University
- Cobb, Nolan (Nol)**—Coordinator, Applied Technologies
MBA, Human Resources Management University of Phoenix
BS, Information Technology University of Phoenix
- Cogswell, Megan**—Director, Apprenticeship
MS, International Studies University of Oregon
BA, Geography Oregon State University
- Colantino, Kimberly A (Kim)**—Instructor, English
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
- Cortez, Julio**—Counselor, Student Support Services
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
- Csaky, Sara C**—Instructor, Education Programs
MAT, Teaching Western Oregon University
BA, Educational Psychology Dr. Domingo Cabred College
- 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 Information Management
MBA George Fox University
BS, Health Education University of Oregon
- Davis, Paul A**—Coordinator, Career and Technical Education,
Yamhill Valley Campus
MS, Adult Education & Training University of Phoenix
BS, Education Andrews University

- Davis, Jr., Peter C**—Instructor, Human Services
 Doctor of Behavioral Health Arizona State University
 MSW, Community Mental Health Northwest Nazarene University
 MA, Anthropology Idaho State University
 Master of Health Education Idaho State University
 BA, International Studies Idaho State University
- Dennison, Sara R**—Instructor, English
 MA, English Bemidji State University
 BFA, Creative/Professional Writing Bemidji State University
 BA, Spanish Bemidji State University
- Dern, Ashley AP**—Tutoring Center Coordinator
 BS, Chemistry Oregon State University
- Dishong McCormack, Michele D**—Instructor, Communication
 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
- Dwyer, Scott T**—Instructor, Winemaking
 BS, Biochemistry Virginia Polytechnic Institute & State University
 CERT, Public Health Sciences University of Virginia
- 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 Programs
 MBA, Business & Administration Willamette University
 BA, History Willamette University
- Ellis, Jane B**—Instructor, Health Information 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
 MET, Educational Technology Boise State University
 CERT, On-line Teaching Boise State University
 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
- 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

- Galey-Oldham, Denise**—Associate Dean, 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
- Goldblatt, Heather N**—Instructor, Adult Basic Education
MAT, Education
Marylhurst University
- Gonzalez, Megan E**—Instructor, Criminal Justice
BS, Chemistry/Forensic Science
Western Oregon University
- Goodyear, John M**—Executive Director, Cooperative Regional
Library Service
MS, Instruction Systems Technology
Indiana University-Bloomington
BA, Telecommunications
Indiana University-Bloomington
- Gort, Benjamin A (Ben)**—Instructor, Mathematics
MS, Mathematics
Wichita State University
BS, Math Sciences/Mathematics
Virginia Commonwealth University
- 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
- Grew, Heidi**—Instructor, Art
MFA, Ceramics
Ohio University
BFA, Crafts
University of Illinois-Urbana-Champaign
BFA, History of Art
University of Illinois-Urbana-Champaign
BA, Germanic Language & Literature
University of Illinois-Urbana-Champaign
- Grotewohl, Herbert A**—Instructor, Physics
MS, Physics
University of Oregon
BS, Physics
Colorado State University
- Guerra, Manuel**—Executive Dean, Student Development and
Learning Resources
AA, Social Sciences
Mendocino College
- Hale, Elizabeth E (Beth)**—Learning Technologies Facilitator
MA, Education-Curriculum & Instruction
University of Washington
CERT, ESL Initial Teaching Certificate
Seattle University
BS, Political Science
University of Washington
- Halkett, Genevieve N**—Instructor, English as a Second
Language
MAT, ESOL
SIT Graduate Institute
BA, English
University of North Carolina
- 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
- Hardesty, David S**—Instructor, Adult Basic Education
MS, Education: Policy Foundation & Administration
Portland State University
BA, Psychology
Southern Methodist University
- Hendrix, Paula J**—Coordinator, Health Sciences
MED, Curriculum & Instruction
Concordia University
BA, Dental Hygiene
Oregon Health Sciences University
- Herrera-Perez, Eusebio P**—Counselor, Student Support
Services
MSW
Portland State University
- Harris, Gregory S (Greg)**—Director, Marketing & Student
Recruitment/PIO
MBA, Business Administration
University of Southern California
BA, Asian Studies
University of Oregon
- Hattman, Alissa S**—Instructor, Developmental Writing
MA, English Literature
Portland State University
MFA, Writing
Pacific University
BA, Literature & Writing
Evergreen State College
- 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
- Henckel, Charisa L**—Instructor, English as a Second
Language
ME, Adult Education
Oregon State University
BA, Psychology
Oregon 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
MED, Education Leadership
Concordia University
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
- Hiatt, Jonathan R**—Instructor, Computer Information Systems
MS, Computer Science
Colorado State University
BS, Business Information Systems
Linfield College
AA, Drafting
Central Oregon Community College
- Hillis, H. David**—Instructor, Mathematics
MS, Mathematics
Colorado School of Mines
BS, Engineer Physics
Colorado School of Mines
- Hillyer, Rebecca L**—General Counsel
JD, Law
Willamette University
BS, Social Studies Education
Oregon State University
BS, Psychology
Western Oregon University

- Hodgson, Matthew J**—Instructor, Composition/Literature
MA, English Portland State University
BA, English/Comparative Literary Studies Occidental College
- 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
- Hoffman, Danielle A**—Director, Student Services YVC
MA, Counseling Lakeland University
BS, Consumer Science University of Wisconsin-Madison
- Hornbrook, Debra K (Debbie)**—Instructor, Communication
EDD, Educational Leadership: Curriculum & Instruction
Portland State University
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, Student Support Services
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, Mary T**—Instructor, English as a Second Language
MA, TESOL Seattle Pacific University
BS, Business Administration-International Business Rochester Institute of Technology
- Hughes, Moira L**—Instructor, Nursing
MS, Gerontological Nursing Oregon Health Science University
BSN, Nursing Oregon Health Science University
AA, Nursing College of San Mateo
- Jabin, Tammy I**—Instructor, English
MA, English Portland State University
BA, English Willamette University
AAOT, Lower Division Oregon Transfer Chemeketa Community College
- 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
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
- Keeling, Matthew J**—Instructor-Mathematics
MS, Mathematics Oregon State University
BS, Mathematics Southern Oregon University
- Kellogg, Sandra (Sandi)**—Dean, Health Sciences
MSN, Nursing University of Phoenix
BSN, Nursing Boise State University
- Kelly, Michael P (Mike)**—Instructor, Drafting, Architecture
AS, Drafting Chemeketa Community College
- Klein, William R (Bill)**—Instructor, Fire Protection Technology
AAS, Fire Protection/Fire Suppression Chemeketa 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

- Landa-Villalba, Liliana L**—CAMP & Latino Outreach
Coordinator
MA, Counseling Corban University
BA, Psychology Willamette 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
- Maksun, Leslie M**—Instructor, mathematics
MS, Mathematics University of South Alabama
MS, Mathematics Oregon State University
BS, Mathematics University of South Alabama
- Malley, Bret**—Instructor, Visual Communications
MA, Computer Art and Transmedia Syracuse University
BA, Film and Digital Media University of California-Santa Cruz
- Marrow, Taylor A**—Instructor, History
MA, History Ball State University
BA, History Indiana University
BA, Telecommunications Indiana University
- Martin, Kimberly G (Kim)**—Counselor, Student Support Services
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
- Masters, Christa K**—Instructor, Adult Basic Ed
BA, Education: Special Education Eastern Washington University
- McCabe, Jeffrey G (Jeff)**—Instructor, GED Options/High School Programs
MA, Coaching & Athletic Administration Concordia University
BS, Mathematics University of Arizona-Tucson
- McCaffrey, Susan L**—Coordinator/Site Developer-OST
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
- 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
- Milburn, Carolyn W**—Instructor, Nursing
MSN, Nursing Walden University
BSN, Nursing Oregon Health Sciences University
- Milhausen, Michael J**—Dean, Science, Engineering & Math
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**—Director, Dallas Center
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
DIPLOMA, 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, Education & Humanities
EDD Education University of Portland
MS, Education Portland State University
BA, English Lewis and Clark College
- Moore, Dorothy**—Faculty Grant Associate
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
- 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
- Myers, Michael J (Mike)**—Instructor, Welding/Fabrication
AS, Welding Chemeketa Community College
- Naas, Fauzi A**—Director, Institutional Research & Planning
Graduate Course Work, Education Technology Leadership
George Washington University
BS, Computer Sciences Western Oregon University
AS, Mathematics Chemeketa Community College
- Nambo, Eric A**—Instructional Accessibility Advocate
BBA, General Business Stephen F. Austin State University
- Navarro, Moses A**—Instructor, Electronics
MAT, Teaching George Fox University
BS, Physics Santa Clara University
Southern Oregon University
- Nelson, Christian L (Chris)**—Instructor, Physical Science
MS, Chemistry: Organic University of Illinois Urbana
BA, Chemistry Central University of Iowa
- Nelson, Holly D**—Executive Dean, Academic Progress &
Regional Education Services
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
- Noah, Mark W**—Occupational Skills Training Coordinator
BS, Biology University of Oregon
AS, Biology Lane Community College
CERT, Career Development Facilitator
- Nolan, Dana R**—Instructor, Health Information Management
AA, Health Information Management
Portland Community College
- 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
- Nunez, Celia**—Director, Small Business Development Center
MBA, Administration George Fox University
BA, Management George Fox University
- 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
- Olson, Kevin J**—Instructor, GED Options/High School
Programs
MAT, Teaching Western Oregon University
BA, English Western Oregon University
- Othus-Gault, Shannon M**—Instructor, Physical Science/
Geology
MS, Geology Central Washington University
BA, Geology-Environmental Studies Whitman College
- Padilla, Aspen**—Coordinator, Math and Science
MS, Museum and Field Studies University of Colorado
MS, Ecology and Evolutionary Biology
Iowa State University
BS, Geosciences University of Arizona
- Park, Joyce A**—Instructor, Nursing—Clinical
MSN, Education United States University
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
- 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, Psychology
 MA, Counseling Psychology Lewis & Clark College
 BS, Business Administration Oregon State University
- 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
 Oregon State University
 BS, Physical Education Oregon State University
- 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
- 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
- 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
- Richardson, Steven R (Steve)**—Director, Chemeketa Press
 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, Emergency Services
 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
- 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, Reading/Study Skills
 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**—Director, Wine Studies
 MS, Horticulture Science Oregon State University
 BS, Horticulture Science Oregon State University
- Scanlon, Bruce G**—Coordinator, Dual Credit
 MS, Education Western Oregon University
- Scharer, Miriam R**—Associate Vice President, Financial
 Management
 MA, Education: Policy Foundation & Administration Portland State University
 BS, Business Western Oregon University
- Schellenberg, Kellie S**—Dean, eLearning & 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, eLearning & Academic Technology
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/Bookstore
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
- Scofield, Mary Ellen M**—Program Review and Accreditation Specialist
MA, English Portland State University
BA, History Mount Holyoke College
- 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
- 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
- Smith, Kevin D**—Instructor, English
PHD, English University of Illinois-Chicago
MA, English University of Illinois-Chicago
- Solomon, Avelino V (Lino)**—Coordinator, Talent Search & Upward Bound
MBA, Business Administration
Texas A&M University-Commerce
- Sprague, Alice M**—Director, Human Resources
BS, Social Sciences Portland State University
AA, Lower Division Transfer
Chemeketa Community College
- Steiger, Christina R**—Instructor, Human Services
MED, Counseling University of Oregon
BS, Psychology Oregon State University
AAOT Linn-Benton Community College
- Stephens, Nancy L**—Instructor, Business Technology
MED, Business Education Oregon State University
BS, Business Education Oregon State University
- Stevens, Karen F**—Counselor, Student Support Services
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, Business, Technology, Early Childhood Education & Visual Communications
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
- Terrazas, John**—Coordinator, Veterans Outreach & Community Connections
MA, Organizational Management University of Phoenix
BA, Physical Education California State University-Chico
- Tobey, Allison S**—Instructor, English/Writing
MFA, Creative Writing Antioch University
BA, Psychology Grinnell College
- Torresdal, Kathleen D**—Instructor, Psychology
MS, Psychology Walden University
- 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
- Tucker, Jonathan (Jon)**—Executive Director, Corrections Education
EDD, Adult Education National Louis University
MA, English University of Mississippi
- Tuss, Lana L**—Instructor, Accounting
MS, Taxation Golden Gate University
MM, Management Southern Oregon University
BS, Business Administration-Accounting
Portland State University
- 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**—Director, Financial Aid & Veterans' Services
 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
- Withington, Michael A**—Instructor, Criminal Justice
 Certifications
 Department of Public Safety Standards & Training
- Wolfe, James D (J.D.)**—Director, Information Technology
 MED, Educational Leadership-Community College
 Northern Arizona University
 BS, Information Technology University of Phoenix
 AAS, Networking Technology: Cisco
 Maricopa Community College
- 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, Communication
 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 B**—Director, Capital Projects & Facilities
 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

Adopted July 1, 2017

A. Introduction

Chemeketa Community College provides opportunities for students to explore, learn and succeed through quality educational experiences and workforce training. The Student Rights and Responsibilities explains the rights and expectations for individuals who choose to become part of the Chemeketa community.

B. Student Rights

1. Right to Protection From Improper Academic Evaluation
 - i. Students have the right to consistent academic evaluation in relation to other students.
 - ii. Students are free to take reasoned exception to the data or views offered in the classroom and to reserve judgment about matters of opinion, but they are responsible for learning the content of the course.
 - iii. Students have the right to be informed about classroom requirements and college policies and procedures.
2. Right to Freedom From Harassment and Non-discrimination
 - i. Chemeketa is committed to providing everyone with an environment focused on learning and growth, free of harassment or discrimination.
3. Right to Access Student Records and Protection from Improper Disclosure
 - i. Chemeketa shall maintain student records procedures consistent with the requirements of applicable state and federal laws and guidelines and use student records to promote the growth and welfare of students within the mission of the college.
- ii. Confidentiality of student records. The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records.
4. Rights Concerning Participation in Co-Curricular Activities
 - i. Students have the right to form student clubs and organizations, which may use available college facilities according to college policy and procedures.
 - ii. Students have the right to freedom of expression, association and assembly, as referenced in the Free Speech Guidelines. This right may be exercised by the use of written or spoken words, by acts such as picketing and mass assemblies and demonstrations, subject to College regulations on time, place and manner of such activity.
 - iii. 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.
 - iv. Students have the right to participate in self-governing student bodies which provide channels of communication and means for using democratic processes to solve problems.
 - v. Students have the right to participate in the institutional governance and policy formation as defined by the appropriate governing body.

Office of the Executive Dean

Student Development and Learning Resources

Salem Campus Building 3/272 • 503.399.5076

studentconcerns@chemeketa.edu

Student Code of Conduct

A. Introduction

Admission to and participation at Chemeketa Community College requires students to conduct themselves as responsible citizens and members of the academic community. Students are afforded due process in regards to disciplinary concerns, as well as fair and balanced systems for other complaint resolution. This document is not intended to be exhaustive, and the College reserves the right to impose sanctions on students for personal actions, which may not be expressly identified.

B. Student Responsibilities

It is the responsibility of each student to know and abide by Chemeketa's Code of Conduct, policies and procedures, and academic department guidelines. Responsibility for good conduct rests with students as individuals.

C. Authority

1. The Student Code of Conduct will apply to conduct that occurs on college premises, at college-sponsored activities, on-line learning environments, and to off-campus conduct that impacts the college community and/or the pursuit of its objectives.

2. The Student Code of Conduct applies for the duration of enrollment, including conduct that occurs before classes begin or after classes end, even if the student withdraws from school after the alleged misconduct has occurred.
3. The Student Code of Conduct will apply to off-campus conduct that threatens Chemeketa, such as threats of violence or physical harm, unlawful harassment or other behavior which may have a negative impact or may place its community (inclusive of students, employees or faculty) at risk. The Executive Dean of Students will determine whether the Student Code of Conduct will be applied to incidents occurring off-campus, on a case-by-case basis.
4. College disciplinary proceedings are separate and independent of any civil or criminal proceedings.

D. Scope

The Student Code of Conduct establishes rules governing academic and social conduct of students, including due process rights.

The term "student" includes all persons taking courses at the college, both full-time and part-time, pursuing credit or non-credit classes or enrolled in any special program approved by the college, within the last year.

E. Community Standards

As members of a community of people seeking to foster growth through education, Chemeketa students are expected to act in a manner that promotes the college's mission, vision and values. In addition, choosing to join the college community obligates each member to adhere to the College's Community Standards as defined below:

1. **Civility**—Students are expected to uphold the dignity of all members of the College Community.
2. **Accountability**—Students are expected to bear the ultimate responsibility for the effects of their decisions and behavior.
3. **Academic Honesty and Personal Integrity**—Students are expected to be truthful, ethical and fair in their interactions with members of the college community. They are expected to practice academic honesty by not cheating, plagiarizing, or misrepresenting their coursework in any way.

F. Violations of Local, State, and Federal Law

Students bear the ultimate responsibility for the effects of their decisions and behavior. Students shall abide by all federal, state, and local laws. The Code of Conduct process may be instituted without regard to the status of civil or criminal litigation in court or criminal arrest and prosecution. Sanctions imposed, as a part of this process shall not be subject to change based on the outcome of any civil or criminal process.

The college will cooperate with law enforcement and other agencies in the enforcement of criminal law on campus. Members of the college community, acting in their personal capacities, are free to interact with governmental representatives, as they deem appropriate.

G. Conduct Violations

1. **Academic Honesty**—Understanding, developing and practicing academic honesty is expected of all students at Chemeketa Community College. Academic dishonesty is any form of cheating and/or plagiarism which results in students giving or receiving unauthorized assistance in an academic exercise or receiving credit for work which is not their own. Acts of academic dishonesty will not be tolerated, and students engaging in such conduct may be subject to classroom and/or institutional disciplinary sanctions. Refer to policy/procedure #5020
2. **Assaulting, endangering, unlawfully harassing, or threatening others**—

Examples include, but are not limited to:

- i. Any means of assault, abuse, unlawful harassment, intimidation, or threats toward a student, employee, vendor, visitor, or guest of Chemeketa;
- ii. Engaging in other forms of unwanted conduct directed at another person that:
 - a. Threatens, endangers or harms a person's physical or mental health or their property;

- b. Creates a reasonable fear of such a threat or action; or
- c. Interferes with the person's ability to participate in the educational or operational aspects of Chemeketa.

3. **Bullying**—Bullying is the systematic intentional behavior that may take many forms. It may be targeted at an individual or group, and it creates an intimidating and/or threatening environment which results in a fear of psychological and/or physical harm.

Examples include, but are not limited to:

- i. Repeated unwanted physical, verbal, or written acts which are hostile or offensive
 - ii. Cyber stalking or cyber bullying
 - iii. Exclusionary behaviors such as ignoring or dismissing individuals or groups
 - iv. Behaviors that express contempt, disgust, and/or incite confrontation toward an individual and/or their property
 - v. Behaviors that intimidate, threaten, disrupt, and humiliate individuals or groups
 - vi. Making derogatory remarks that mock, ridicule, condescend or insult
 - vii. Using obscene, vulgar language including profanity, shouting inappropriately, using obscene gestures or mimicking the actions of an individual in an attempt to mock them.
4. **Classroom Misconduct**—All students have the right to learn without interference from others. Classroom misconduct is any behavior which disrupts or interferes with the learning experience.

Primary responsibility for managing the classroom environment rests with the faculty. Faculty members are authorized to define, communicate, and enforce appropriate standards of behavior in classrooms, offices, and other instructional areas under their supervision.

Examples include, but are not limited to:

- i. Creating distractions and disturbances by talking in class while the faculty member or other students are speaking, holding side discussions irrelevant to the subject matter, using offensive language, sleeping, reading unrelated materials, and moving about the classroom.
- ii. Creating distractions and disturbances by using cell phones or other electronic devices in a way that disrupts the learning process or teaching environment such as viewing or interacting with unrelated content, sending and receiving communications unrelated to the class activity, or engaging in other off-task behavior.
- iii. Entering the classroom late or leaving the classroom prior to the end of class is considered a disruption to the learning process and should be avoided unless exceptional circumstances arise
- iv. Any conduct construed as disrespectful behavior or actions towards another student or faculty member

5. **Complicity in Violating the Student Code of Conduct**—If a student has knowledge of an individual or group of individuals committing or attempting to commit a violation of this Code, he or she is required to remove him or herself from the situation and report it to the College. This includes attempting, aiding, abetting, conspiring, hiring or being an accessory to any act prohibited by this Code.

6. **Copyright Infringement**—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, email, etc.). Refer to policy # 4210.

7. **Discrimination/Harassment**—Discrimination and harassment is misconduct incited by an individual’s perceived or real affiliation with a protected class. It can be defined by repeated, malicious mistreatment, verbal abuse, or conduct that is threatening, intimidating, humiliating, or insulting. Discrimination/harassment may also include behaviors that isolate people or undermines their reputation through verbal or non-verbal communications. See also Bullying. Refer to policy #1750

Engaging in discrimination/harassment against any member of the college community based on a protected class is prohibited in all programs, activities, services, employment and advancement including admissions to, access to, treatment in, or compensation in employment as required by state and federal law.

Discrimination or Harassment is prohibited when it is based on any of the following protected classes:

- Race
- Sexual orientation
- Color
- Gender identity
- Ethnic origin
- Family relationships
- National origin
- Marital status
- Religion
- Pregnancy and related conditions
- Age
- Citizenship status
- Disability
- Veterans status
- Sex (see Sexual Harassment Policy #1751)
- Tobacco usage during non-working hours

Individuals from these classes are protected from:

- i. The implicit or explicit expectation that they submit to harassing or discriminatory conduct as a condition of employment or as a basis for academic evaluation or participation;
- ii. Severe or pervasive conduct that creates an intimidating, hostile or offensive work or academic environment and has the purpose or effect of interfering with any individual’s work or academic performance.

8. **Disruptive Behavior**—Disruption may include: disorderly conduct, lewd or indecent behavior, breach of peace, or aiding, abetting or procuring another person to breach the peace on College premises or at functions sponsored by or participated in by the College. This includes the disruption of College activities and College business in classes, programs, meetings, office spaces/departments, and student activities. See also Classroom Misconduct.

Examples include, but are not limited to:

- i. Any behavior that is disorderly or disruptive to the educational or administrative processes of Chemeketa as determined by a Chemeketa official.
- ii. Conduct that interferes with Chemeketa’s educational responsibility of ensuring the opportunity for all members of Chemeketa community to attain their educational objectives.

9. **Ethical and Acceptable Use of Technology**—The use of Chemeketa Network, Technology and Communications resources is subject to all federal, state and local laws, and to the College’s applicable policies and guidelines, as outlined in the Chemeketa Use of College Network, Technology, Communications Resources policy # 1760.

10. **Forgery, furnishing false information, identity theft, or dishonest conduct**

Examples include, but are not limited to:

- i. Attempts to Defraud
- ii. Misrepresentation: Any activity intended to misrepresent any official document or identification used by or issued by the College. Includes representing or acting on behalf of the College or another individual when not authorized to do so.

11. **Gangs**—A gang is defined as a group of individuals with identifiable leadership that conspires and acts in concert, mainly for criminal purposes. Involvement in gang-related activities includes, but is not limited to, the display of gang symbols, gang paraphernalia, colors, signs, or graffiti. Behavior on or about College premises or at College-sponsored events that creates conflict or an atmosphere of intimidation, or creates a clear and present danger to life or property, or disrupts orderly operation is prohibited.

12. **Hazing**—Hazing means any act committed on Chemeketa property or in connection with any Chemeketa related group or activity that endangers the mental or physical health or safety of an individual including, without limitation, an act intended to cause degradation, cruelty, or humiliation, or that destroys or removes public or private property, for the purpose of initiation in, admission to, affiliation with, or as a condition for continued membership in a group or organization.

In response to allegations of hazing under this regulation, it is not a defense that:

- i. The victim gave consent to the conduct;
- ii. The conduct was not part of an official organizational event or sanctioned or approved by the organization;

- iii. The conduct was not required as a condition of membership in the organization
13. **Illegal or Unauthorized Possession/Use of Alcohol and Drugs**—Chemeketa Community College is committed to providing an environment which fosters excellence in learning for its students and community, and in work performance for all of its employees. The misuse and/or illegal use of alcohol and drugs is contrary to this effort. In keeping with federal and state statutes, the illegal use, possession, distribution, manufacture, or sale of alcohol and/or drugs is not permitted on college-owned or college-controlled property. Being under the influence of alcohol and/or drugs is not permitted on college-owned or college controlled property or while representing the college on business or in college-sponsored activities. Refer to Policy #2250.
 14. **Illegal or Unauthorized Possession/Use of Weapons**—The possession of any illegal weapon, firearm, or knife with a blade exceeding four (4) inches, 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.
 15. **Indecent or Obscene Behavior**—
Examples include, but are not limited to:
 - i. Indecent exposure
 - ii. Urinating or defecating in public
 - iii. Public indecency
 - iv. Lewd conduct
 - v. Obscene Displays
 - vi. Voyeurism
 16. **Misuse or Unauthorized Possession or Use of Public or Private Property**—
Examples include, but are not limited to:
 - i. Theft or the taking or unauthorized use or possession of public or private property or unauthorized use or acquisition of services.
 - ii. Conduct that defaces, destroys, damages, or litters any property of the College or any property of an individual or group whether on Campus or at a College function.
 17. **Obstruction/Abuse of Student Conduct Process**—
Examples include, but are not limited to:
 - i. Failure to comply with a request to participate in the student conduct process
 - ii. Falsification, distortion, or misrepresentation of information
 - iii. Disruption or interference with the orderly process of a conduct investigation
 - iv. Attempting to discourage an individual's proper participation in or use of the student conduct process
 - v. Attempting to influence the impartiality of a conduct officer prior to and/or after the student conduct process
 - vi. Verbal or physical harassment and/or intimidation of a conduct officer
 - vii. Failure to comply with decisions, recommendations or sanctions imposed
 - viii. Influencing or attempting to influence another person to commit an abuse of the conduct process.
 18. **Refusal to Identify and/or Comply**—
Examples include, but are not limited to:
 - i. Disobedience or insubordination toward College officials or designees acting in the performance of their duties
 - ii. Refusal to produce proper identification for a College official when asked.
 19. **Safety Violations**—
Examples include, but are not limited to:
 - i. Conduct that endangers the health or safety of others
 - ii. Intentionally or recklessly starting a fire or causing an explosion
 - iii. Misusing fire safety equipment, fire escapes or elevators
 - iv. Intentionally or recklessly endangering the welfare of any individual
 - v. Intentionally or recklessly obstructing fire, police, or emergency services
 - vi. Using, possessing, or storing dangerous chemical, fireworks, or explosives
 - vii. Using, possessing, or storing any object classified as a weapon by the State of Oregon on college property
 - viii. Utilizing any instrument in a manner that endangers or tends to endanger any person
 - ix. Obstructing the free flow of pedestrian or vehicular traffic
 - x. Falsely alerting others about an emergency
 - xi. Blocking or preventing the use of or access to exit doors, fire exits, and building hallways
 20. **Stalking**—Stalking is defined as a course of conduct directed at a specific person that would cause a reasonable person to fear for his, her or other's safety, or to suffer substantial emotional distress.
 21. **Theft or damage to property**—
Examples include, but are not limited to:
 - i. Theft or the taking or unauthorized use or possession of public or private property or unauthorized use or acquisition of services
 - ii. Conduct that defaces, destroys, damages, or litters any property of the College or any property of an individual or group whether on Campus or at a College function
 22. **Threatening Behavior**—A student can be found responsible of threatening behavior even if the person who is the object of the threat does not observe or receive it, so long as a reasonable person would interpret the maker's statement, communication, conduct or gesture as a serious expression of intent to harm.
Examples include, but are not limited to:

- i. Any written or oral communication, conduct or gesture, that is directed toward any member of the Chemeketa community including any conduct that threatens or causes physical injury or endangers another person's or one's own health or safety including, but not limited to, physical violence, assault, or the threat to use physical violence
- ii. Interference by force, threat, harassment or duress with personal safety, academic efforts, employment, and/or participation in College-sponsored activities

23. Unauthorized access and use of facilities and services—

Chemeketa Community College facilities, equipment and related property shall only be used for college-related activities.

Examples include, but are not limited to:

- i. Unauthorized access or entry to College buildings, structures or facilities, information systems, or obtaining or providing to another person the means of such unauthorized access
- ii. Unauthorized possession, duplication or use of keys or access cards for any College property
- iii. Continued occupation of any College facility after being requested to leave by a College employee, official or designee acting in the performance of their duties

24. Violations of College policies, procedures, and guidelines—

Students are responsible for making themselves aware of and complying with College policies, procedures and guidelines

Examples include, but are not limited to:

- i. Academic Honesty Policy and Procedure
- ii. Smoke-Free Policy
- iii. Use of College Network, Technology, Communications Resources Policy
- iv. Use of Copyright Materials Policy
- v. Harassment/Discrimination Policy
- vi. Sexual Harassment, Discrimination, and Misconduct Policy
- vii. Service Animals Policy and Procedure
- viii. Affirmative Action/Non-harassment/Hate Crimes/Bias Incident

H. Removal of Student from a Classroom/Office/Campus/Center

A student who is disruptive to the learning environment may be removed from a classroom, office, campus or center, using the one or more of the following measures:

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 procedures. A written report of the circumstances requiring this action shall be submitted to the appropriate Dean/Director and Executive Dean following the incident with specific directions, 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 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 Executive Dean of Students may impose suspension from classes in a program, from a service area, or from college-sponsored functions in consultation with the appropriate Dean/Director. Suspension may not exceed one term.
4. **Expulsion** is the permanent separation of a student from a program or service area or conditional separation from the college. The Executive Dean of Students may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.

I. Charges of Student Misconduct

The Student Code of Conduct procedures are designed to afford complainants and respondents a fair and accessible process that educates students about their rights and responsibilities, holds students accountable for their actions, and provides due process.

Chemeketa Community College emphasizes the importance of direct, courteous, and respectful communication to informally resolve concerns and complaints whenever possible. In most cases, issues involving student misconduct are able to be resolved using an informal process. This may include a meeting with the Executive Dean of Students and/or referral to Counseling or other college services. This meeting is typically considered a learning opportunity for the respondent to make behavioral changes and no further action is necessary. However, when the misconduct rises to a level that informal resolution cannot be reached, the formal disciplinary process, as outlined below, may be initiated.

Process

1. Any member of the college community may submit a complaint against a student for violation of the code of student conduct. Any formal complaint must be submitted in writing to the Executive Dean of Student's office ten (10) business days from the date the person became aware, or reasonably can be expected to have become aware, of the alleged violation.

2. The Executive Dean of Students or designee will schedule an initial meeting with the respondent to discuss the complaint.
 3. During the initial meeting, the Executive Dean of Students or designee will explain the process, the respondent's rights and responsibilities, and review the complaint and alleged violation(s) of the code of student conduct. The Executive Dean of Students or designee will seek information from the respondent regarding the allegations and gather additional information from other involved parties or observers as part of the investigatory process.
 4. If there is more than one respondent involved in the complaint, the Executive Dean of Students or designee has sole discretion to permit the conferences concerning each respondent to be conducted either separately or jointly.
 5. The Executive Dean of Students or designee will investigate to determine if there is a preponderance of evidence (i.e., more likely than not) that the complaint has merit and will take one of the following actions:
 - i. If determined that the case has no merit, the case will be dismissed;
 - ii. If determined that the case has merit, the Executive Dean of Students or designee will attempt to resolve the complaint informally through a meeting with the goal of creating a learning opportunity, and encourage behavior modification;
 - iii. If determined the case has merit, and behavior(s) are deemed egregious, a formal process of disciplinary steps and sanctions will be enforced to bring resolution to the complaint.
 6. If the respondent and the Executive Dean of Students or designee mutually agree to the resolution of the complaint, which may or may not include sanctions, the resolution will be put in writing and there will be no subsequent proceedings;
 7. If the respondent disagrees with the Executive Dean of Students or designee decision and resolution of the complaint, the respondent may appeal the decision to the Vice President of Instruction and Student Services within ten (10) business days, see Appeal Process section.
 8. At any time during this process, failure to respond to the Executive Dean of Students, or designee may subject the respondent to an academic hold and the outcome of the complaint will be reviewed in the respondent's absence.
2. **Reprimand:** Written action censuring a student for violation of college policy or otherwise failing to meet the college's standards of conduct. The written reprimand will be filed in the office of the Executive Dean of Students for the duration of the student's attendance at the college. A reprimand will include the statement that continuation or repetition of the specific conduct involved or other misconduct may result in one of the more serious consequences.
 3. **Probation:** Conditions placed upon the student's continued attendance for violation of this chapter. Notice will be made in writing and specify the period of probation and the conditions to be met by the student. Disciplinary probation may be for a specific term or for an indefinite period, which may extend to graduation. Violation of the terms of the probation or violation of any college policy during the probation period may be grounds for additional consequences.
 4. **Loss of privileges:** Denial of specified privileges for a designated period of time.
 5. **Restitution:** Compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.
 6. **Withholding admission or degree:** Admission to or a degree awarded from the college may be withheld for a specified amount of time.
 7. **Revocation of admission or degree:** Admission to or a degree awarded from the college is revoked and noted on the transcript. In general this action is reserved for conduct that includes, but is not limited to, acts of dishonesty.
 8. **Other possible consequences:** Work assignments, essays, service to the college, or other related discretionary assignments.
 9. **No contact:** The student may have no contact with other stated members of the college community.
 10. **Suspension:** Temporary dismissal from the college and termination of the person's student status. Readmission after Disciplinary Suspension requires a meeting with the Executive Dean of Students.
 11. **Expulsion:** Permanent dismissal from the college and termination of the person's student status.
 12. **Emergency suspension:** In certain circumstances, the Executive Dean of Students, may impose an emergency suspension. Emergency suspension may be imposed:
 - i. To ensure the student's own physical or emotional safety and well-being; or
 - ii. To ensure the safety and well-being of members of the college community or preservation of college property; or
 - iii. If the student poses an ongoing threat of disruption or interference with the normal operations of the college.
 - iv. During the emergency suspension, a student will be denied access to the campus (including classes) and/or all other college activities or privileges for which the student might otherwise be eligible, as the Executive Dean of Students determines to be appropriate.

J. Sanctions

Any student found to have violated the Code of Conduct will be subject to one or more of the following consequences:

1. **Warning:** Written notice to a student that the student has been in violation of college policy or has otherwise failed to meet the college's standards of conduct. Such warnings will include the statement that continuation or repetition of the specific conduct involved or other misconduct may result in one of the more serious consequences.

13. **Emergency suspension procedures:** The student will be notified in writing of this action and the reasons for the emergency suspension. The student will also be informed in writing of the time, date and place of an initial meeting.
 - i. An initial meeting will take place within five (5) business days of the emergency suspension. At the initial meeting the student may show cause why his or her continued presence on the campus does not constitute a threat.
 - ii. At the initial meeting, the Executive Dean of Students or designee will decide to uphold the emergency suspension, dismiss it, or impose other consequences. The student will be informed in writing of this decision within ten (10) business days of the meeting date.
 - iii. The emergency suspension does not replace the code of student conduct procedures, which will proceed on the normal schedule, up to and through the student conduct appeal process, if required.
14. Sanctions of suspension, expulsion or revocation or withholding of a degree will become a permanent part of a student's record in the Office of the Executive Dean of Students.
15. The following sanctions may be imposed upon groups or organizations:
 - i. Those listed above in Sanctions (a-l);
 - ii. Loss of selected rights and privileges for a specified period of time or indefinitely;
 - iii. Loss of Recognition—Chemeketa student organizations may lose recognition and will be deprived of the use of College resources, the use of the College's name and the right to participate in College or campus-sponsored activities. This loss of recognition may be for a specific period of time or for an indefinite period of time until all stated conditions are met.

K. Appeal Procedures for Conduct Sanctions

1. Grounds for appeal:
 - i. College policies and procedures were not followed
 - ii. New evidence previously unavailable may be presented
2. All appeals must be submitted in writing to the Vice President of Instruction and Student Services within ten (10) business days of the Executive Dean of Student's final determination.
3. This final level of appeal is a review of written documentation only. If it is not filed within this timeframe, the student will forfeit his or her final appeal opportunity.
4. If the student fails to follow through with the above outlined process or does not meet grounds for appeal, the appeal opportunity will be forfeited

5. After reviewing the Executive Dean of Student's written decision, along with the written appeal from the student, the Vice President shall have ten (10) business days to render a written decision to the student. The Vice President's decision shall be final, binding and mailed to the student by first-class mail and via email to the student's MyChemeketa account
6. The Vice President of Instruction and Student Services has the authority to:
 - i. Alter, amend and/or overturn disciplinary action if information on appeal merits such action
 - ii. Schedule a rehearing if specified procedural errors or errors in interpretation of College regulations were so substantial as to deny the student a fair hearing, or if new and significant evidence becomes available
 - iii. Dismiss the case if the finding is held to be unsupported by the evidence
7. Disciplinary action for suspension or dismissal may be deferred while an appeal is pending, unless, in the discretion of the Vice President of Instruction and Student Services, the continued presence of the student on the campus poses a substantial threat to him or herself, to others, or to the stability and continuance of normal College functions.

L. Non-conduct Related Conflict Resolution Process

1. **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. 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 (i.e. Director or Dean) 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 contact the next person in the chain of authority (i.e. Dean or Executive Dean).
2. **Charges of Harassment**—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. For complaints/reports of sexual harassment, discrimination, and misconduct. Refer to policy # 1750 or go.chemeketa.edu/titleix. The College has also established a Harassment Network of staff who can assist student with these issues. For more information, visit go.chemeketa.edu/harassment.

3. **Instructional Concerns and Complaints**—If students have instructional concerns or questions, they are encouraged to contact their instructor first to allow them the chance to address the student's concerns. If this has already been done without satisfaction, the student may contact the appropriate Academic Dean or Director for assistance.
4. **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.
 - i. 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.
 - ii. 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.
 - iii. The student will submit a Grade Appeal form, located on the college website.
 - iv. The form should be submitted to the Executive Dean of Students office where it will be forwarded to the appropriate Academic Dean/Director.
 - v. The Academic Dean/Director will review both the instructor's and student's facts related to the grade appeal (tests, papers, reports, participation, etc.).
 - vi. 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.
 - vii. The Academic Dean/Director will keep a copy of the appeal for one year.
5. **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.
 - i. The student will submit a complaint in writing to the Executive Dean of Students that include the student's name and nature of the complaint, and any necessary related supporting documentation.
 - ii. 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.
 - iii. 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 one of the following administrators, depending on the nature of the complaint:
 - Vice President of Instruction and Student Services
 - Vice President of Governance and Administration
 - Associate Vice President of College Support Services
 - Associate Vice President of Finance
 - iv. Upon receipt of the student's appeal, the Vice President/Associate Vice President shall schedule a meeting with the student to discuss the complaint.
 - v. The Vice President/Associate Vice President will issue a written decision to the student within thirty (30) calendar days of this meeting. A copy of the decision will be given to the Executive Dean of Students.
 - vi. The decision of the Vice President/Associate Vice President will be final and not subject to further appeal.

M. Retaliation

The College seeks to foster an environment in which all employees and students feel free to report incidents of misconduct without fear of retaliation or reprisal. Therefore, the College strictly prohibits retaliation against any individual for filing a complaint or for participating in an investigation. Retaliatory conduct is considered a violation of this code.

All allegations of retaliation will be swiftly and thoroughly investigated. If it is determined that retaliation has occurred, the College will take all reasonable steps within its power to stop such conduct. Individuals who engage in retaliatory conduct are subject to disciplinary action, up to and including expulsion and/or termination.

Any student or employee who believes that he or she has been harassed or retaliated against in violation of this policy should immediately report such incidents to the Executive Dean of Students or the Director of Human Resources.

N. Interpretation and Revision

1. Any question of interpretation or application of the code of student conduct will be referred to the Executive Dean of Students or his or her designee for final determination.
2. The code of student conduct will be reviewed every three years under the direction of the Executive Dean of Students.

O. Student Records

1. Disciplinary sanctions will be made part of both the complainant's and the respondent's education record. The records may be expunged of disciplinary consequences, other than expulsion, seven years after the college term in which the incident occurred. The exceptions are Academic Honesty infractions, which may be expunged after 2 years of the incident
2. Records of the process and of the sanctions imposed, if any, shall be considered to be the education records of both the respondent(s) and the student(s) claiming to be the victim.

College Contact Information

Office of the Executive Dean

Student Development and Learning Resources

Salem Campus Building 3/272 • 503.399.5076

studentconcerns@chemeketa.edu

College Policy and Procedures Web Resources

Academic Honesty

go.chemeketa.edu/academichonesty

go.chemeketa.edu/policies

Affirmative Action

go.chemeketa.edu/policies

Chemeketa Policies

go.chemeketa.edu/policies

Family Educational Rights and Privacy Act (FERPA) and Student Records

go.chemeketa.edu/studentrights

Free Speech Guidelines

go.chemeketa.edu/clubs

Harassment/Discrimination

go.chemeketa.edu/studentrights

Public Safety

go.chemeketa.edu/publicsafety

Removal of a student from a classroom/office/site

go.chemeketa.edu/policies

Service Animals

go.chemeketa.edu/disabilityservices

Sexual Harassment, Discrimination and Misconduct Policy and Procedure

go.chemeketa.edu/titleix

Smoke-Free Policy

go.chemeketa.edu/studentrights

Unlawful use or possession of firearms or illegal weapons

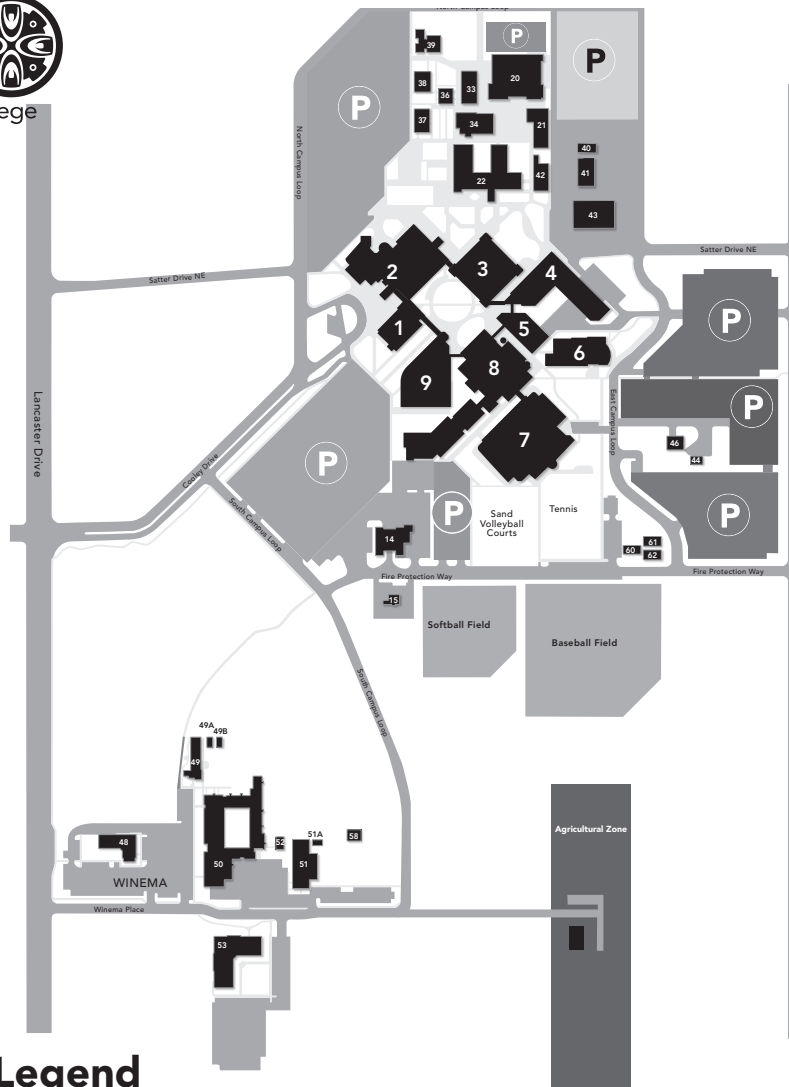
go.chemeketa.edu/publicsafety

Unlawful use or possession of drugs or narcotics

go.chemeketa.edu/publicsafety

Use of College Network, Technology, Communications Resources Policy

go.chemeketa.edu/policies



Campus Map Legend

- | | | |
|--|---|--|
| 001 1st Floor: Bookstore | 005 1st Floor: Art Classrooms | 037 Faculty Offices |
| 001 2nd Floor: Faculty Offices | 005 2nd Floor: Classrooms | 038 Faculty Offices |
| 002 1st Floor: Advising and Counseling; Career Center; Convenience Store; Disability Services; Food Court; Information Center; Multicultural Center; Occupational Skills Training; Planetarium; Public Safety; Student Retention & College Life; Student Support Services; Testing Services | 006 1st Floor: Auditorium; Classrooms | 039 Child Development |
| 002 2nd Floor: Business Office; CAMP; Chemeketa Completion Program; Enrollment Center; Financial Aid; Graduation Services; TRIO; Talent Search; Upward Bound; Tutoring Services; Veteran's Services; College Support Service's; Human Resources; Presidents Office; Public Information, Marketing and Student Recruitment | 006 2nd Floor: Classrooms; Employee Development | 040 Facilities and Operations |
| 003 1st Floor: Gretchen Schuette Art Gallery; Classrooms | 007 Gymnasium; Physical Education Classrooms | 041 Facilities and Operations |
| 003 2nd Floor: Classrooms; Math Learning Center; Extended Learning, Instruction and Student Services, Placement Testing | 008 1st Floor: Dental Clinic; Health and Science Classrooms | 042 Catering Kitchen; Northwest Innovations |
| 004 1st Floor: Automotive Program; Electronics Program | 008 2nd Floor: Health & Science Classrooms | 043 Copy Center; Mail Room; Recycling |
| 004 2nd Floor: Robotics; Visual Communications | 009 1st Floor: Chemeketa Online; Classrooms; IT Help Desk; Teaching and Learning (Curriculum Resource Center, Opportunity Center and Scheduling); Television Studio; | 044 Horticulture Potting Shed |
| | 009 2nd Floor: Library; Writing Center; Computer Lab; Study Rooms | 045 Activity Field |
| | 014 Public Safety | 046 Greenhouse |
| | 015 Burn Tower | 048 Conference Rooms; MaPS Credit Union; Winema Market & Deli |
| | 020 Drafting; Engineering; Machining Program | 049 Mid-Willamette Education Consortium, Youth GED Options |
| | 021 Welding Program | 050 High School Partnerships |
| | 022 Academic Development; HEP; Information Technology | 051 Winema High School; Robotics; Lab |
| | 033 Apprenticeship Program | 052 Classrooms |
| | 034 Conference Rooms; SOAR | 053 Department of Human Services |
| | | 058 Facilities and Operations Annex |
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| | | 061 Classrooms |
| | | 062 Classrooms |

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Chemeketa Community College
4000 Lancaster Dr. NE
PO Box 14007
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