Discover
Chemeketa
Community College

2021–2022
CHEMEKETA
Community College Catalog

Chemeketa Community College
Catalog • 2021–2022

Area Contact Information

Admissions 503.399.5006
admissions@chemeketa.edu
Advising.....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
Cooperative Work Experience Internships 503.399.5028
cwe@chemeketa.edu
Copy Center.....503.399.5166
copycenter@chemeketa.edu
Counseling Services 503.399.5120
counseling@chemeketa.edu
Department of Diversity, Equity, and Inclusion 503.584.7323
Financial Aid.....503.399.5018
financialaid@chemeketa.edu
Food Services.....503.399.5180
foodservice@chemeketa.edu
Foundation 503.365.4747
foundation@chemeketa.edu
Graduation Services 503.399.6588
graduation@chemeketa.edu
Human Resources.....503.399.5009
humanresources@chemeketa.edu
International Programs.....503.365.4686
international@chemeketa.edu
Library.....503.399.5043
library@chemeketa.edu
Occupational Skills Training 503.399.7398
Placement Assessment.....503.399.5120
Public Safety.....503.399.5023
publicsafety@chemeketa.edu
Registrar 503.399.5001
registrar@chemeketa.edu
Student Accessibility Services.....503.399.5192
studentaccess@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
4000 Lancaster Dr. NE, Salem
Chemeketa Brooks.....503.399.5163
4910 Brooklake Rd. NE, Brooks
Center for Business & Industry.....503.399.5181
626 High Street NE, Salem
Chemeketa Polk ..... 503.623.5567 or 503.399.5206
1340 SE Holman Avenue, Dallas
Chemeketa Eola 503.584.7272
215 Doaks Ferry Rd. NW, Salem
Chemeketa Woodburn.....503.981.8820
120 E. Lincoln St., Woodburn
Yamhill Valley Campus ..... 503.472.9482 or 503.399.5219
288 NE Norton Lane, McMinnville

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.

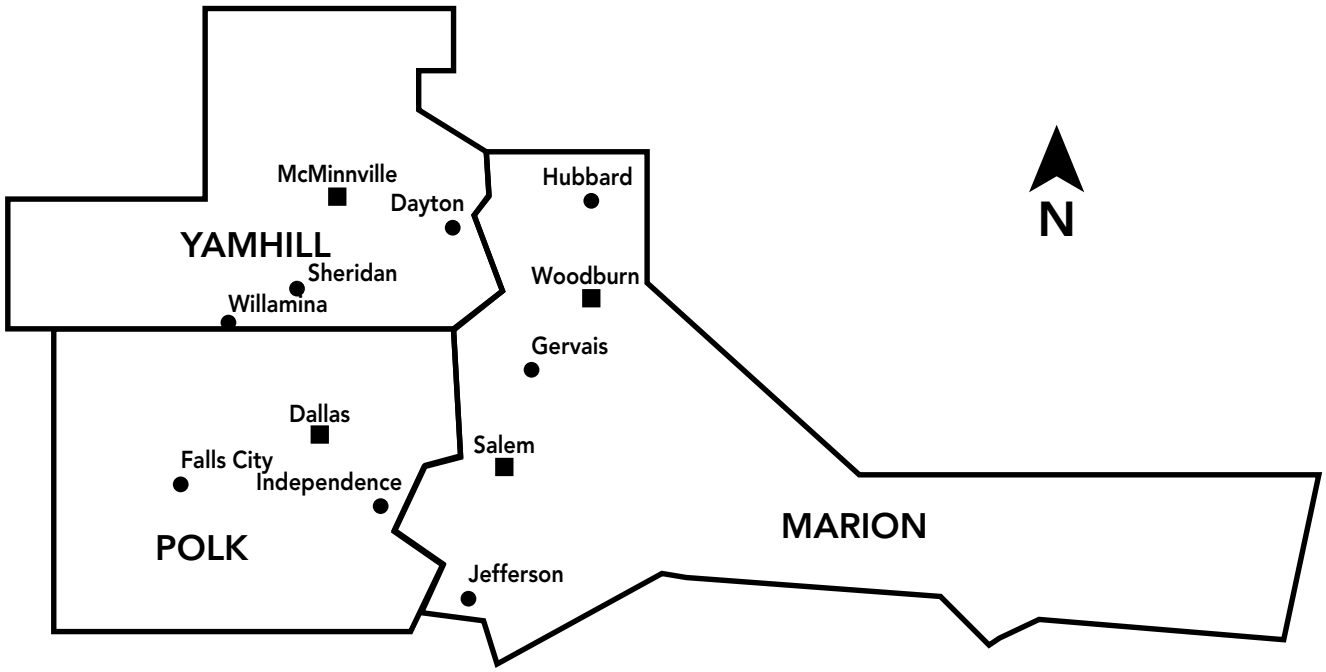
Under College policies, equal opportunity for employment, admission, and participation in the College's programs, services, and activities will be extended to all persons, and the College will promote equal opportunity and treatment through application of its policies and other College efforts designed 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 503.584.7323, 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

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 education 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. As a part-time student, you can take the perfect amount of classes to match your own schedule.

You can attend classes and special events on the Salem or Yamhill Valley campuses, or at the College's Brooks, Polk County (Dallas), Eola, or Woodburn locations. We also offer classes in schools and other community locations throughout the College district. You can even stay home and take a class 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 education.

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 95 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 the 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 66 for general education information.

- **College transfer courses** prepare you to continue your education at a four-year college or university. You can complete the one-year Oregon Transfer Module (see page 55) or the two-year college transfer program (see page 56). If you successfully complete the two-year program, you can earn an Associate of Arts Oregon Transfer degree.

  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** are 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 2021			Fall 2021	Winter 2022	Spring 2022
	Intensive courses Five weeks June 21–July 24	Standard Eight weeks June 21–Aug. 14	Specific programs Ten weeks June 21–Aug 28	Sep 27–Dec 11	Jan 3–Mar 19	Mar 28–Jun 11
College-wide Inservice (College closed to public)				Sept 14		April 29
Employee Inservice				Sept 13–24		
Student registration: Check registration status on My Chemeketa						
Beginning of Term	June 21	June 21	June 21	Sept 27	Jan 3	Mar 28
Academic Year and other Holidays	July 3	July 3	July 3	Sep 6 Nov 11 Nov 25 & 26 Dec 23, 24 Dec 30, 31	Jan 17	May 30
College Closure			July 4 (Saturday)	Nov 27 (Saturday) Dec 22	Feb 21	
Summer Friday Closure	Closed Fridays, July 2–Aug 27					
Winter Break/Spring Break				Dec 13–31	Mar 21–25	
Review & Final Exams	Final exams given during last class period			Dec 6–11	Mar 14–19	June 6–11
End of Term	July 24	Aug 14	Aug 28	Dec 11	Mar 19	June 11
Graduation	**TBA**					

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 members 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 members 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 Chemeketa 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

Teaching and Learning Values

We are a college that:

- • *Creates a learning climate of mutual respect and fairness*
- • *Encourages creative and critical thinking*
- • *Engages participants in an active learning process*
- • *Facilitates learning that applies to and enriches lives*
- • *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.

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.

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 503.399.6531.

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 Polk County (Dallas) and Woodburn; and specialized centers at three other locations, which provide specialized education and training services to employers and the community:

- 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.
- Brooks Regional Training Center (Chemeketa Brooks), located at 4910 Brooklake Road NE, Brooks, 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.
- 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 noncredit 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

Chemeketa's Salem Campus is comprised of two primary zones: 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: Academic Advising, 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 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, Student Opportunity for Achieving Results (SOAR) program, faculty offices, and classrooms.

The South Campus Zone is located at 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. Complete the admission application online at go.chemeketa.edu/apply and follow the enrollment steps.

Many of Chemeketa's career and technical education programs have additional entry requirements that you must complete prior to starting the program. You may still be admitted to the as a certificate- or degree-seeking student while you are completing these entry requirements.

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 violence and stalking. In addition to contacting the Public Safety Office and/or local law enforcement officials, students are encouraged to contact the Title IX Coordinator, Jon Mathis, 503.584.7323.

If you are an international student, see page 9.

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 77.

If you have had a break in enrollment of longer than two years, you must reapply for admission.

New Student Orientation

503.399.5120
advising@chemeketa.edu

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

Placement Assessment

503.399.5120
testing@chemeketa.edu
go.chemeketa.edu/placement

If you are a new student pursuing a degree or certificate, you will be required to complete placement assessment. The purpose of the assessment t is to determine your skill levels in reading, writing, and mathematics so you can select the classes that are right for you.

Please visit the placement assessment website at chemeketa.edu for information about how to begin placement assessment. To request disability-related accommodations, call 503.399.5192.

Academic Advising for New Students

503.399.5120
placement@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 meet with an academic advisor. Schedule an appointment in My Chemeketa, "Services," "Advising."

Registration

503.399.5001
registrar@chemeketa.edu

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.

Students must be officially registered through the My Chemeketa registration system by the established registration deadlines listed in the Schedule of Classes.

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. For more information, call 503.399.5011.

Class Loads

503.399.5001

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

Política de Acción Afirmativa

Es la política de Chemeketa Community College que no existirá ninguna discriminación o acosamiento a base de raza, religión, color de piel, sexo, estado civil, origen nacional, origen étnico, estado de ciudadanía, edad, orientación sexual, identidad de género, discapacidad, embarazo y condiciones relacionadas, estado familiar, estado de veterano protegido, el uso de tabaco durante horas no laborables, denunciar a la compañía, víctima de violencia doméstica, información genética, existirá en ninguna área, actividad u operación del colegio, así como requiere el Título IX de las Enmiendas Educativas de 1972; la Sección 504 del Acto de Rehabilitación de 1973; los Títulos VI y VII del Acto de Derechos Civiles de 1964; el Acto contra la Discriminación a Base de la Edad; el Acto a Favor de los Americanos con Discapacidades de 1990; la Ley de Oregon de Derechos Civiles (ORS 659); y sus regulaciones correspondientes.

Contra el Acosamiento

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

- *se percibe razonablemente por el receptor como una conducta tan severa, penetrante y objetivamente ofensiva como para interferir con el trabajo o rendimiento académico de la persona.*
- *se refiere de forma ofensiva a la raza, religión, color de piel, sexo, estado civil, origen nacional, origen étnico, estado de ciudadanía, edad, orientación sexual, identidad de género, discapacidad, embarazo y condiciones relacionadas, estado familiar, estado de veterano protegido, o el uso de tabaco durante horas no laborables; creando un ambiente educativo y de trabajo hostil o adverso; y/o somete a los empleados o estudiantes a términos diferentes o condiciones basadas en las características ya antes mencionadas.*

Preguntas o quejas deben ser dirigidas a Alice Sprague, Oficial de Acción Afirmativa, P.O. Box 14007, Salem, Oregon 97309-7070, 503.399.5009.

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. 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 coordianodora de titulo IX, Jon Mathis, 503.584.7323.

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 an academic advisor or counselor approve changes. You may incur additional fees or charges when making registration changes.

Enrollment Limitations

Even though Chemeketa has an open door policy, 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 career and technical education programs that limit enrollment or have special admission requirements (see "Career Choices and Programs of Study" on page 67).

If you have questions about 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. Admission to these programs is initiated at the 4-year partner school. More information is available at chemeketa.edu/programs-classes/degrees/ and click on the Dual Enrollment link.

Dropping or Withdrawing from Classes

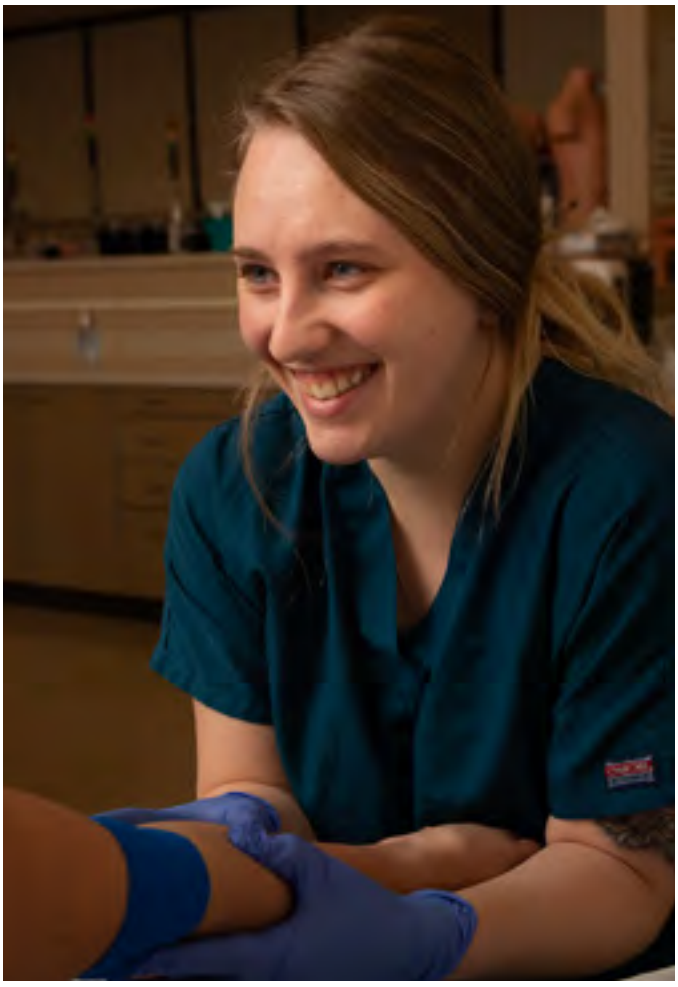
503.399.5001
registrar@chemeketa.edu

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. See more information in the refunds policy section under "Money Matters." 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.

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 sixth week of each term for full-term courses.

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.



No Show Drop

If you cannot attend the first class session, you must contact your instructor. For online courses, you must participate (log in to the course) by Thursday of the first week of term.

If you do not contact your instructor, you will be dropped. If the College drops you, you will be notified through your student email account. **Note:** This may affect your eligibility for tuition assistance if you are a veteran, on financial aid, or sponsored by an agency.

Immunizations

The Oregon Department of Health requires community college students born on or after Jan. 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 program or 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

1.503.365.4686; Fax 1.503.365.4768
internationaladmissions@chemeketa.edu

Each year about 100 international students attend Chemeketa. Representing a variety of cultures and ethnicities, they come from more than 30 different countries. International students may enroll in any career and technical education program or college transfer program. 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's website.

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.

U.S. 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 other 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, contact International Programs at 1.503.365.4686 or internationaladmissions@chemeketa.edu.

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. For more information, refer to the current term Schedule of Classes or visit go.chemeketa.edu/paytuition.

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 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, 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. See the chart on this page to estimate the cost of your course. Some classes include additional fees.

Noncredit Courses

Noncredit courses do not use the tuition rates established by the Board of Education and may vary from program to program. Noncredit courses are offered through a variety of programs and departments including Continuing 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 noncredit classes. The fee is $35 per credit for credit classes and $0.40 per hour for noncredit classes.

Differential Fees

Certain Career and Technical Education (CTE) programs and science courses have a differential fee applied as of Fall term 2019. Select CTE programs have a differential fee applied to all core classes in that program. Science classes that have a lab component also have a differential fee. The differential fee is $5 per credit hour. For a full list of programs and courses that have differential fees, visit the "Tuition & Fees" page on our website.

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, 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 certain terms. Please

Cost per credit academic year 2021–2022

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

	Oregon Resident Students			Out of State & International Students		
# of credits	Tuition	Universal Fee	Total Cost	Tuition	Universal Fee	Total Cost
1	$96	$34	$130	$261	$34	$295
2	$192	$68	$260	$522	$68	$590
3	$288	$102	$390	$783	$102	$885
4	$384	$136	$520	$1,044	$136	$1,180
5	$480	$170	$650	$1,305	$170	$1,475
6	$576	$204	$780	$1,566	$204	$1,770
7	$672	$238	$910	$1,827	$238	$2,065
8	$768	$272	$1,040	$2,088	$272	$2,360
9	$864	$306	$1,170	$2,349	$306	$2,655
10	$960	$340	$1,300	$2,610	$340	$2,950
11	$1,056	$374	$1,430	$2,871	$374	$3,245
12	$1,152	$408	$1,560	$3,132	$408	$3,540
13	$1,248	$442	$1,690	$3,393	$442	$3,835
14	$1,344	$476	$1,820	$3,654	$476	$4,130
15	$1,440	$510	$1,950	$3,915	$510	$4,425
16	$1,536	$544	$2,080	$4,176	$544	$4,720
17	$1,632	$578	$2,210	$4,437	$578	$5,015
18	$1,728	$612	$2,340	$4,698	$612	$5,310

Differential Fees: Science and certain CTE program courses will include a $5/credit differential fee.

*Out of State and International Tuition total of $262 per credit is comprised of the base tuition of $97 per credit plus the out of state/ international rate of $165 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.

see the official procedure for more information (PRO 5120).

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 Veterans Affairs (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, which is generally the Friday of the second week of the term for full-term classes, 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 online 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 (NelNet), refunds are issued as a check or direct deposit
- For classes paid by third party or agency payments, refunds are issued to the original payor
- For classes paid by financial aid resources, credits will be reviewed by the Financial Aid department and may be applied to offset financial aid resources. Any remaining refund authorized by Financial Aid will be issued as a refund check or direct deposit.

Refunds are not issued for amounts under $5.

Changes in the number of hours for which you are registered may affect your financial aid, agency, or veteran's benefits.

Other Costs and Fees

503.399.5011
businessservices@chemeketa.edu

The cost of books and supplies for full-time students is about $500 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 see page 67.

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 Bldg. 7 of the Salem Campus is $15 per term if you are not enrolled in a Physical Education class; otherwise, it is free for you to use during the term of that class.

Veterans' Services—Educational Benefits

503.399.5004
veterans@chemeketa.edu

Our Veterans' Services office in Bldg. 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 Veterans Affairs (VA) educational programs.

The Veterans' Services office will assist you in requesting an initial determination of eligibility for VA educational benefits and electronically submitting your benefit request each term. Courses you receive benefits for must be required for your declared Chemeketa degree or certificate as outlined in the College's academic catalog.

We monitor class registration, changes in enrollment status, applicability of classes taken toward program completion, and your grades. We will notify VA of

any changes that impact benefit payment status and amounts.

Students using any type of federal VA education benefit, including Vocational Readiness and Employment, are required to have all prior college credit evaluated. This includes evaluation of your official military training transcript, if applicable. Transcripts will be evaluated and credit given where possible to meet the requirements of your Chemeketa degree or certificate. It is your responsibility to request official transcripts from all previous colleges and universities attended and submit them to our Admission office. This includes schools attended where VA benefits were not received.

You 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. Your 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 benefits for and maintain a 2.0 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 GI Bill®, benefits you have received if you withdraw from a class after the term begins. Questions on these policies should be directed to the Veterans' Services staff.

(GI Bill® is a registered trademark of the U.S. Department of Veterans' Affairs.)

Financial Aid

503.399.5018
financialaid@chemeketa.edu

Financial aid in the form of scholarships, grants, loans, and employment is available to eligible students who need assistance to attend school. Information on financial aid programs can be found in this publication, on the Financial Aid office's website, and at the Financial Aid office on the Salem Campus, Bldg. 2, Rm. 200.

Are You Eligible?

To qualify for federal financial aid, you must:

- Be a United States citizen or an eligible non-citizen
- Have a high school diploma, a General Educational Development (GED) certificate, or have completed a home-school program at the secondary level
- Be registered with the Selective Service, if required
- Be admitted and enrolled in coursework towards an eligible certificate or degree
- Not be in default on a federal student loan or owe a repayment of federal financial aid of any type
- Maintain satisfactory academic progress

To qualify for financial aid from the state of Oregon, you must meet all the criteria above, except some Oregon-based financial aid programs are open to non-citizens who are residents of Oregon. Students ineligible for federal aid, but potentially eligible for Oregon-based financial aid, should apply for financial aid using the Oregon Student Aid Application (ORSAA).

How and when to apply?

You should complete the Free Application for Federal Student Aid (FAFSA) at studentaid.gov as soon as possible each year after Oct. 1. If you are ineligible for federal financial aid, but are a resident of Oregon, you can complete the Oregon Student Aid Application

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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.

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
- **Woodburn Area** • 503.981.8820 or 503.399.5207
- **Yamhill Valley Area** • 503.472.9482 or 503.399.5219

(ORSAA) at oregonstudentaid.gov as soon as possible each year after Oct. 1. Applications can be filed later in the year, but some funding is limited and may be exhausted.

You should file your FAFSA or ORSAA no later than three months prior to the term in which you plan to start receiving financial aid. Specific recommended timelines are posted to the financial aid website annually. If you apply less than three months prior to the term, you should be prepared to pay for your tuition, fees, and books with your own money while your financial aid application is processed.

Once Chemeketa receives your FAFSA record, we will post any necessary requirements in the financial aid section of My Chemeketa and email you at your Chemeketa email address to notify you of receipt of your FAFSA and to check your financial aid requirements in My Chemeketa. You must submit all requirements before a financial aid offer can be made to you.

Once all requirements have been submitted, your file reviewed, and a financial aid offer generated, we will email you at your Chemeketa email address with instructions on how to review and accept or decline each type of financial aid.

What type of financial aid is available?

Financial aid is money offered to help you pay for tuition, fees, books, supplies, rent, food, transportation, and personal expenses related to attending school in an eligible degree or certificate program at Chemeketa.

There are four types of financial aid programs available: grants, loans, work-study, and scholarships. These funds come from various sources. Program details, including eligibility criteria and dollar amounts, may differ from the following descriptions if applicable laws or regulations governing the programs change after publication of this material.

Grants

Grants are mostly awarded on the basis of financial need. Grants do not have to be repaid after leaving school. Student financial aid offers include grant funds whenever student eligibility and funding levels permit. Funding for the grant programs administered at Chemeketa come from the U.S. Department of Education and the state of Oregon.

Federal Pell Grant

The Federal Pell Grant program offers awards from $0–$2,165 per term depending on your level of financial need demonstrated on the Free Application for Federal Student Aid (FAFSA). The Pell Grant is the first type of federal financial aid awarded to eligible students with other aid awarded after consideration of Pell Grant eligibility. Students who have already earned a Bachelor's Degree are ineligible for Federal Pell Grant. There is a lifetime limit of the equivalent of 18 full-time quarters of Pell Grant. You apply for the Pell Grant each year by completing a new FAFSA.

Federal Supplemental Education Opportunity Grant (SEOG)

SEOG awards are federally funded and are offered to students with exceptional financial need. Students who receive a Federal Pell Grant are the first group of students considered for SEOG. SEOG awards range up to $900 per year. You apply for SEOG each year by completing a new Free Application for Federal Student Aid (FAFSA).

Oregon Opportunity Grant

The Oregon Opportunity Grant offers awards of up to $926 per term to residents of Oregon who demonstrate financial need as determined annually by the Oregon Office of Student Access and Completion (OSAC). You must have lived in Oregon for at least one year and be enrolled at least half-time (six credits).

Funding for this program is available during Fall, Winter, and Spring terms; there is no funding for Summer term. Students who have already earned a bachelor's degree are ineligible for Oregon Opportunity Grant.

There is a lifetime limit of the equivalent of 12 full-time quarters for the Oregon Opportunity Grant. You apply for the Oregon Opportunity Grant each year by completing a new Free Application for Federal Student Aid (FAFSA) if you are eligible for federal aid. Residents of Oregon who are ineligible for federal aid may apply for the Oregon Opportunity Grant by completing the ORSAA.

Oregon Promise Grant

The Oregon Promise Grant provides grant funding to eligible students who enter college within six months after completing a high school diploma or General Educational Development (GED) certificate. A separate application for the Oregon Promise Grant is required and available at oregonstudentaid.gov.

Grants range from $116–$1,135 per term at Chemeketa. You must have lived in Oregon for at least one year and be enrolled at least half-time (six credits). Funding for this program is available during Fall, Winter, and Spring terms; there is no funding for Summer term.

You apply for the Oregon Promise Grant by completing the application and either the Free Application for Federal Student Aid (FAFSA) or Oregon Student Aid Application (ORSAA), as appropriate.

Eligibility for funding under this program ends once you have attempted 90 or more college credits, from any source, at any time (including credits earned in high school). This program may have an eligibility cutoff based on Expected Family Contribution (EFC) due to funding levels. Visit oregonstudentaid.gov for the most current eligibility criteria.

Loans

Federal Direct Student Loan Program (Subsidized and Unsubsidized Loans)

To be eligible for any student loan, you must be enrolled at least half-time (six or more credits). Prior to disbursement of a student loan, you must complete Entrance Loan Counseling from the U.S. Department of Education at studentaid.gov. Additionally, you must complete a valid Master Promissory Note (MPN) with the U.S. Department of Education online at studentaid.gov. The MPN serves as your legal agreement that you understand you have accepted loan funds and you agree to repay them. The MPN contains detailed information about the terms and conditions of the loan and your rights and responsibilities as a borrower.

You may be offered student loans to help cover your educational costs. You are encouraged to borrow the least amount of money possible to fund your education. To qualify for any student loans, you must file a valid Free Application for Federal Student Aid (FAFSA) each year. The amount of loan funding you are eligible for depends on factors such as your enrollment level, cost of attendance, number of credits completed, and dependency status on the FAFSA.

The chart below lists the maximum loan amounts offered per year; not all students are eligible for the maximum amounts. The College determines the amount of your student loan offer based on eligibility rules. The College maintains the right to refuse to create or to limit the amount of student loan available to any student on a case-by-case basis.

There are aggregate limits on the student loan programs. You may not borrow more than:

- $31,000 for dependent students, of which no more than $23,000 may be in subsidized loan
- $57,500 for independent students, of which no more than $23,000 may be in subsidized loan

Interest rates on student loans are fixed for the life of the loan. Interest rates are reset annually on July 1 for loans first disbursed after that date. The interest rate on student loans for undergraduate students for loans first disbursed from July 1, 2021, to June 30, 2022, is 3.73%. For the most current rates, visit studentaid.gov.

Student loans have an origination fee withheld from the proceeds of the loan. Loan fees are changed each Oct. 1. The origination fee for student loans first disbursed from Oct. 1, 2021, to Sept. 30, 2022, is 1.057%. For the most current fees, visit studentaid.gov.

Students borrowing their first student loan will have the proceeds of the loan delayed until 30 days of the term has passed. Students borrowing a loan for one term only will receive half of the proceeds at the time of first disbursement and the second half of the loan once the midpoint of the term has passed.

Loan repayment on Federal Direct Student Loans begins six months after you cease to be enrolled at least half-time (six credits). Online exit loan counseling must be completed at studentaid.gov at the time you cease to be enrolled at least half-time.

Federal Direct Subsidized Loan

Students must demonstrate financial need to qualify for the Federal Direct Subsidized Loan. The Federal Direct Subsidized Loan has the interest paid (subsidized) by the U.S. government while you are in school at least half-time and during times of deferment and grace period.

Federal Direct Unsubsidized Loan

Federal Direct Unsubsidized Loans are available to students who do not qualify, in whole or in part, for the Federal Direct Subsidized Loan. Student borrowers are responsible for the interest on these loans, which begins to accrue on the date of disbursement. Interest that is not paid while the student is in school or during the grace period will be capitalized (added to the principal balance of the loan) when repayment begins.

Federal Direct PLUS Loan

The Federal Direct PLUS Loan is a loan option for parents of dependent students. Loan amounts are limited to the cost of attendance minus any estimated financial assistance the student will receive. Parents interested in applying for the Federal Direct PLUS Loan must apply for the loan at studentaid.gov. The loan requires a credit check and is not available to borrowers with an adverse credit history. Current interest rates and fees for the Federal Direct PLUS Loan can be found at studentaid.gov. Repayment of Federal Direct PLUS Loans begins 60 days after the final disbursement of the loan.

Alternative Student Loans

Privately-funded student loans from a bank or a credit union are not based on financial need and no federal formula is applied to determine eligibility. However, the amount borrowed cannot exceed the cost of attendance minus other estimated financial aid. Interest rates, fees, and repayment terms vary widely but are generally less favorable than Federal Direct Student Loans. Alternative student loans can be used

	Dependent Students on FAFSA			**Independent Students on FAFSA**		
Credits Completed	Maximum Subsidized Loan	Additional Unsubsidized Loan	Maximum Total Loan	Maximum Subsidized Loan	Additional Unsubsidized Loan	Maximum Total Loan
0–35	$3,500	$2,000	$5,500	$3,500	$6,000	$9,500
36+	$4,500	$2,000	$6,500	$4,500	$6,000	$10,500

About this catalog

Chemeketa publishes this catalog to give you—our students and the 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: **chemeketa.edu**.

to supplement the federal financial aid programs when the cost of education minus federal financial aid still leaves unmet costs. Students interested in applying for an alternative student loan would do so directly with a bank or credit union.

Work

Federal Work-Study Program

The Federal Work-Study Program provides part-time job opportunities on campus for students with financial need. The amount a student may earn is determined by College policy and fund availability. Students earn an hourly wage based on the type of work, their skills, and their experience. Students may work a maximum of 20 hours per week while school is in session.

Federal Work-Study funds typically range up to $1,200 per term at Chemeketa. Eligible students are selected for Federal Work-Study based on their answer to the Federal Work-Study screening question on the Free Application for Federal Student Aid (FAFSA), financial need, and timing of application.

Students interested in Federal Work-Study who did not receive that funding type in their financial aid offer may contact the Financial Aid Office to be placed on a waiting list should additional funds become available. There is no guarantee that students offered Federal Work-Study will find a job placement or earn the full amount of their Federal Work-Study allocation.

Part-Time Employment

Chemeketa may have job opportunities available to students enrolled half-time (six credits) or more regardless of Federal Work-Study eligibility. Pay varies based on the type of work, employee's skills, and experience. No FAFSA is required. Contact our Human Resources office for more information.

The Chemeketa Career Center maintains listings of job opportunities in the community for interested students. Pay varies depending on the employer, type of work, employee's skills, and experience. No FAFSA is required. Contact our Career Center for more information.

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 during the Winter term each year for the following academic year. Assistance funds are available upon request. More information can be found at foundation.chemeketa.edu or contact us at foundation@chemeketa.edu.

Chemeketa Scholars

Chemeketa Scholars is a tuition scholarship for recent, high-achieving high school graduates or home-schooled students. The scholarship covers the cost of tuition at Chemeketa for up to two years. For more information about eligibility requirements, the application process, and other important information, visit scholars.chemeketa.edu.

How to Maintain Financial Aid Eligibility

To maintain eligibility for financial aid, you must meet Satisfactory Academic Progress (SAP) standards. Federal regulations (34 CFR 668.34) require you to move toward the completion of a degree or certificate within an eligible program when receiving financial aid. Specific requirements for academic progress for financial aid recipients are applied differently than College academic standards (warning, probation, and denied). Federal regulations state that Satisfactory Academic Progress standards must include a review of all periods of enrollment, regardless of whether or not aid was received. You must meet all the minimum standards in order to receive financial aid.

Evaluation of Financial Aid Eligibility

- Standards of Satisfactory Academic Progress (SAP) are applied at the end of every term to determine eligibility for the following academic term. SAP standards are calculated using the cumulative GPA and cumulative completion rate. You must maintain an overall grade point average (GPA) of 2.0 or higher and a completion rate of 67% or more.
- Students in good standing will be placed on financial aid warning if they have not met the standards of SAP. If you are on warning, you will need to meet the cumulative 2.0 GPA requirement and complete all classes during the following term to retain your aid eligibility.
- On financial aid warning, you will need to have a cumulative 2.0 GPA and an overall completion rate of 67% the following term or you will be placed into denied status. While on denied, you may need to attach an Academic Plan that is signed off on by an advisor or counselor to the Academic Progress Appeal. If an appeal is granted, you will be placed on probation for the following term.
- If you use financial aid and either officially withdraw or do not complete any credits, you will automatically be placed on denied status and are ineligible for further financial aid. You will need to raise your GPA and/or completion rate to meet the minimum SAP requirements to regain financial aid eligibility or appeal your financial aid denied status, if applicable.
- The evaluation period will be based on attendance in all prior term(s), including transfer credits and all classes attempted whether federal aid was received or not. SAP will be reviewed after each term. Your cumulative GPA and completion ratio must meet the minimum standards or you will be placed on warning, if appropriate, or denied.
- Credits evaluated will include credits attempted at Chemeketa, transfer credits accepted by Chemeketa, and courses funded through consortium agreement.
- If you are on probation and following an approved appeal plan, you will be evaluated according to the agreed upon terms of the appeal.
- If you do not meet the standards of SAP, you will be notified via your My Chemeketa email and your status will be available on My Chemeketa under the "Financial Aid" tab.
- You may follow the appeal process or the reinstatement procedures as outlined in the Appeal Process and Reinstatement of Financial Aid sections below. You will not have eligibility for any further federal aid at Chemeketa until you have met the standards of SAP or have been granted an appeal approval.

Eligibility

You must meet the following criteria:

1. You must complete 67% of all credits attempted with a passing grade
2. You must maintain a cumulative 2.0 GPA
3. You must complete your program of study within a 150% time frame of your degree or eligible certificate program. For example, if a program is 90 credit hours, you must complete all required coursework within 135 hours. This includes repeated grades and college preparatory coursework.

Note: Grades of F, I, NP, and X and courses not yet graded are considered attempted but not meeting progress standards for the purposes of financial aid.

Maximum Time Frame Eligibility

- If you have attempted more than 150% of the credits required for your program of study, you are not considered to be meeting Satisfactory Academic Progress (SAP) standards and are ineligible for financial aid funds.
- If you are seeking a second degrees or double major, you are monitored like any other students under this policy. If, or when, you exceed the maximum time frame allowed for your respective

programs, you may appeal if you have mitigating circumstances. All transfer hours accepted by Chemeketa will be included when determining maximum time frame eligibility.
- You may file a Maximum Credit Hour Appeal. The Financial Aid office will make a decision regarding approval or denial of the appeal.
- In most cases if you have a bachelor's degree or higher, you will be considered to have exhausted maximum time frame eligibility. These will be looked at on a case-by-case basis in order for a decision to be made regarding financial aid eligibility. All Chemeketa credits and all transfer credits will be counted.

Repeated, Audited, Consortium, Remedial Courses, Enrollment

- Financial aid eligibility will include repeating a course if you earned prior credit for the course with a grade of a D or F. Any class can be repeated and paid for two times only. All classes taken must be counted as attempted classes.
- Audited courses, continuing education, credit by examination, and any credit for prior learning option (as outlined in the catalog) are excluded when determining eligibility for financial aid.
- Courses funded through a consortium agreement are included in determining academic progress.
- All attempted remedial credits will be included when evaluating Satisfactory Academic Progress (SAP). A maximum of 45 remedial credit hours may be funded.
- Enrollment in any part of term will be considered in the respective Summer, Fall, Winter, or Spring term for SAP.

Appeal Process

If you lost financial aid eligibility due to extenuating circumstances, you may file an Academic Progress Appeal.

- Extenuating circumstances that may be considered include: personal illness or accident, serious illness or death within immediate family, or other circumstances beyond your reasonable control.
- All appeals must be in writing to the Financial Aid office and must include appropriate documentation.
- Examples of documentation that could be included: an obituary notice, divorce decree, or a letter from a physician, attorney, social services agency, employer, etc. Letters from friends and family members do not meet the standards for appropriate documentation.
- The condition or situation must be resolved, the resolution of which will allow the student the ability to complete coursework successfully. If the condition or situation is not resolved, an appeal will not be granted.
- The outcome of an appeal may include a denial or probationary period.

- You will be notified via your My Chemeketa email of the results of the appeal and any restrictions or conditions pertaining to your appeal.

The decision on the Academic Progress Appeal is final and there are no additional appeals. If the decision is to uphold the denial, you may not submit any subsequent requests for funding consideration. In order to regain eligibility for financial aid, you would need to meet Satisfactory Academic Progress (SAP) standards or meet specific criteria outlined in the appeal response. Students who do not meet the terms of financial aid probation may permanently lose eligibility for federal student aid at Chemeketa.

Reinstatement of Financial Aid Eligibility

- If you lose financial aid eligibility, you may be reinstated if your appeal is approved or after you have taken classes to meet the minimum requirements of a 2.0 GPA and a cumulative completion rate of 67% of all credit hours being evaluated.
- You must be able to complete your degree or certificate within the 150% time frame.
- It is your responsibility to notify the Financial Aid office when this condition has been met.
- After exhausting the 150% time frame and your appeal, you cannot be reinstated for financial aid at Chemeketa.

What happens if I withdraw from classes or receive all F grades after receiving financial aid?

As a result of the Higher Education Act amendments of 1998, if you completely withdraw from classes, receive all F's, or do a combination of both during the term, you may be required to repay a percentage of the Title IV financial aid funds received.

The federal regulations assume that students "earn" their financial aid over the course of a term by attending and participating in classes. You cannot "earn" all of your financial aid unless you attend and/or academically participate in more than 60% of the term. This calculation counts all calendar days, including the first and last day of each term, weekends, and holidays. A student who completes more than 60% of the term has earned all of their financial aid assistance.

If you withdraw or stop attending before 60% of the term, you have not "earned" all of your financial aid funds. Federal regulations require the College to perform a Return to Title IV (R2T4) calculation to determine the amount of any unearned aid you received that must be returned to the federal programs.

EXAMPLE: If you withdraw after completing 30% of the term, you will have "earned" only 30% of the Title IV financial aid, the remaining 70% must be returned.

If you fail to receive a passing grade in any class, you are considered unofficially withdrawn and the midpoint (50%) of the term is used to determine the amount of funding that must be repaid.

The Financial Aid office will review official records periodically throughout the term and at the end of each term for student withdrawals. The College returns funds to financial aid programs received in the following order:

- Unsubsidized Federal Direct Student Loan*
- Subsidized Federal Direct Student Loan*
- Federal Direct PLUS Loan*
- Federal Pell Grant**
- Federal Supplemental Educational Opportunity Grant (SEOG)**
- Other Title IV Funds**

*Federal loans are repaid under the terms and conditions of the Master Promissory Note (MPN)

**Amounts to be returned by you to federal grant programs will be reduced by 50% of the total grant aid disbursed

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.

You will be mailed a written copy of the withdrawal calculations, showing the amount of unearned aid the school will refund from institutional costs and the amount you must pay. You have 45 days from the date of the bill to pay the amount shown in full or to make arrangements with the Financial Aid office for a payment plan. If the amount is not paid, or if arrangements are made for a payment plan but payments are not made as scheduled, the balance will be turned over to the U.S. Department of Education for collections.

Tuition Waiver for 65+ Eligibility

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

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) affords 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:

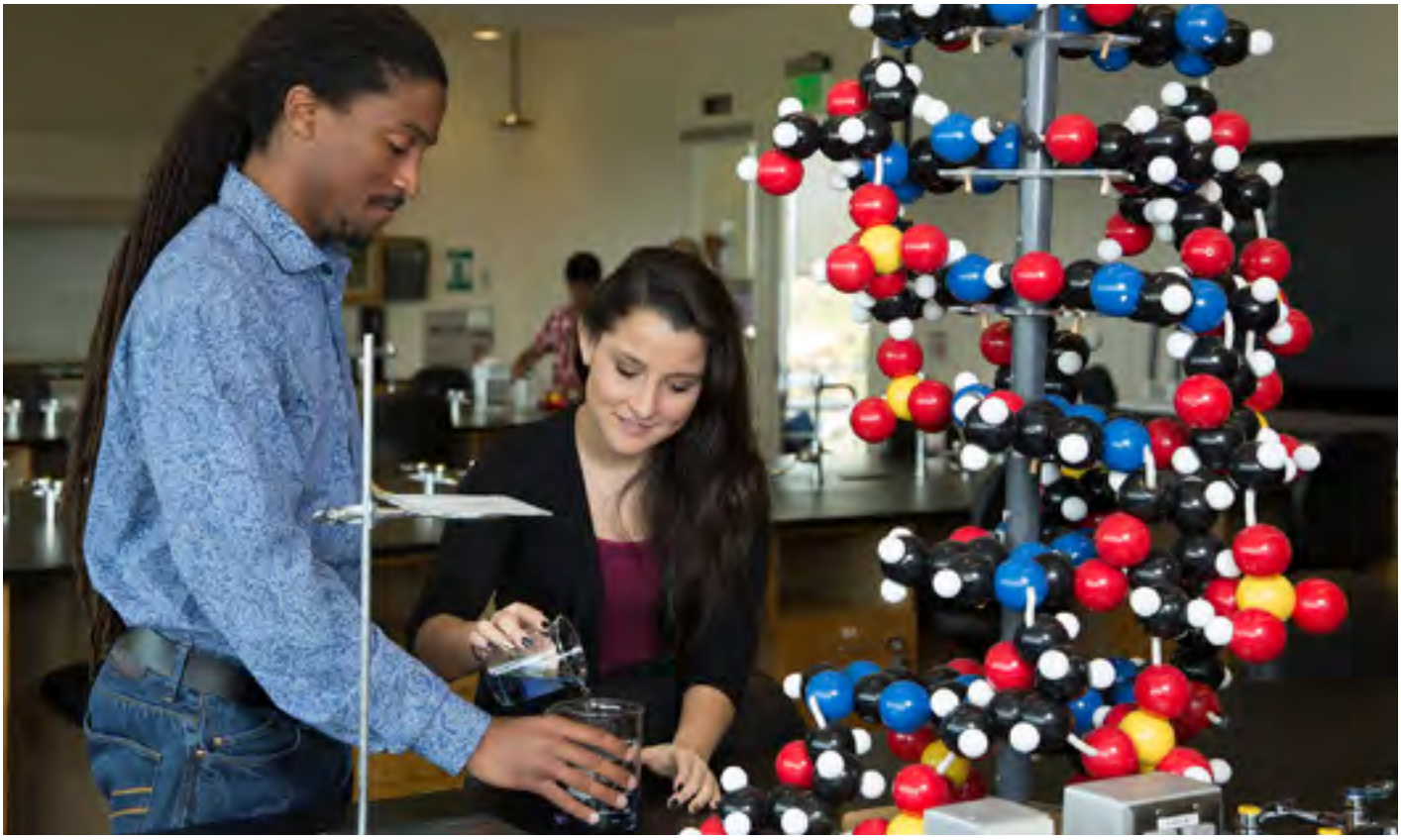
- The right to inspect and review the student's education records within 45 days after the day the college receives a request for access. Students should submit written requests to the Registrar's Office that identifies the record(s) the student wishes to inspect. The Registrar will make arrangements 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.
- 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 regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.
- 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.
- 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, D.C. 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 (first, middle, last, and current preferred first name)
- Credit hour status (enrollment status, e.g. full-time, part-time, half-time, not enrolled)
- Dates and terms of enrollment
- Diplomas, certificate or degree earned and date earned
- Certificate or degree candidacy and anticipated graduation date (including GED certificate and Chemeketa high school diploma)
- Athletic honors and statistics
- Height and weight of athletes
- Honors, awards, scholarships (released only to other academic institutions; or to the general public for Chemeketa-sponsored events)



You 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. You should consider all aspects of the decision to withhold directory information prior to filing such a request. Such designation will call for Chemeketa not to release any or all of this directory information. Any future requests for such information from non-institutional persons or organizations will be denied. Regardless of the effect upon you, Chemeketa 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 will honor your request to withhold directory information, but cannot assume responsibility to contact you for subsequent permission to release information.

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: develop, validate, or administer predictive tests; administer student aid programs; or 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 Jan. 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 you.

You have the right to know how and on what basis your performance is being evaluated.

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

Grade/Points

A/4 **Excellent.** An indication that you have 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 you have 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 you have 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 you have 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 you have not adequately met the stated outcomes and criteria of the course.

IB/0, IC/0, ID/0, IF/0 Incomplete 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 satisfy a prerequisite for another course. For more information, see the "Incomplete" section below.

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.

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

CEU Continuing education unit earned.

NOC Continuing education unit not earned.

Your grade point average (GPA) 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 your transcript and are assigned by Enrollment Services:

Mark Meaning

X **Audit.** This mark is used when you participate in the class but do not wish to receive a grade or credit for the course.

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 your transcript for any class dropped after the deadline to receive a refund and prior to the end of the sixth week of term. Courses marked with a W are not reflected in GPA or total credits calculated.

Incomplete

Incomplete grades are awarded at your request 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 you are 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 pass grade satisfies the prerequisite of C or better required for entry into some courses.

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.

You are limited to receiving no more than 16 P/NP credits for an associate degree and eight 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 Enrollment Services by the end of the fourth week of the term. P/NP grades cannot be changed back to a standard letter grade.

Continuing Education Classes

A Continuing Education Unit (CEU) course is one that provides general or technical information that is applicable to the professional or technical field and will be of value wherever you are employed. CEUs are not equivalent to credit hours and therefore cannot be used toward Chemeketa credit certificates or degrees. Some programs offering CEU classes offer CEU certificates. One CEU is awarded for each 10 hours or their

equivalent. Chemeketa transcript records are available for CEU hours.

Tuition for CEU courses is charged regardless of the number of credit hours for which the student enrolls. CEU classes do not meet the federal requirements for financial aid or veterans' benefits.

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. Meet with an advisor to develop a success plan for completing the course and include your plan with your appeal.

If you repeat a course Summer 2020 or later, only the latest attempt with the highest grade will count toward your credit hours, degree, and GPA.

All attempted courses will show on your transcript, but the courses that do not count toward your GPA will be marked as repeated.

Criteria for a course to be considered repeated is below:

- Both the original course and repeated course(s) must have been taken at Chemeketa
- Both the original course and repeated course(s) must be equivalent

If you repeated a course prior to Summer 2020, before the above rules took effect, you should meet with an advisor to discuss repeating the course.

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 transcript 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. Transcript 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, but the grades are not included in your grade point average (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).

Alternate Approaches to Credit

In addition to regular coursework, you may earn Credit for Prior Learning (CPL). This includes credit by exam, industry certifications, institutional challenge exams, military credit, prior learning portfolio, and professional licensure. Credit awarded through CPL must be directly applicable to meet requirements for general education, a certificate, a degree or electives as outlined in the College catalog. Chemeketa will evaluate the following for college credit: Advanced Placement, Challenge Exam, College Level Entrance Examination Program, Credit for Professional Certification, International Baccalaureate, Military Service Credit, and Prior Learning Portfolio. A maximum of 25% of a degree or certificate may be recorded for Prior Learning Portfolio.

CPL will not be graded or calculated in the Chemeketa grade point average (GPA) except for Challenge Exams and Prior Learning Portfolio. Each type of CPL will appear with a unique notation on a Chemeketa transcript. CPL may not be used to establish the residency requirement.

EC Credit by Exam 0.0
MI Military 0.0
PB Proficiency/Assessment Based 0.0
PL Prior Learning 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. Credit awarded will vary based on scores received. A list of AP exams accepted by Chemeketa and credit received is available on our 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 nonrefundable 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 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. Credit awarded will vary based on scores received. A list of CLEP exams accepted by Chemeketa and credit received is available on our 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 programs such 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: nationally certified paramedics 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. A list of IB exams

accepted by Chemeketa and credit received is available on our website.

Military Service Credit

Students using any type of federal Veterans Affairs (VA) education benefit, including vocational readiness and employment are required to have all prior credit history evaluated. Chemeketa awards college credit for military training and coursework based on American Council on Education (ACE) 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, noncredit courses or workshops, individual study, homemaking, and travel. There is a fee for each course assessed. Students register for PLP121. For more information, call 503.399.5114.

Academic Recognition

recognition@chemeketa.edu

Chemeketa recognizes outstanding academic performance by placing students on one of three lists:

- **Honor Roll** recognizes students who earn a term grade point average (GPA) of at least 3.0 while completing six or more credit hours.
- **The Dean's List** recognizes students who earn a term GPA between 3.5 and 3.99 while completing 12 or more credit hours.
- **The President's List** recognizes students who earn a perfect 4.0 GPA 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 that commemorate their achievement.

Academic Standing

503.399.5120

The college requires credit-seeking students to maintain satisfactory academic progress. Students who are not meeting academic standards may not be eligible for continued enrollment, per college procedure #5030. Financial aid recipients must ensure they meet the financial aid Satisfactory Academic Progress (SAP) policy, which may have separate standards in order for students to maintain financial aid eligibility.

Academic Standing Review

Chemeketa wants to help you reach your academic goals. To accomplish this, the College has initiated an Academic Standing Review that provides intervention at certain points throughout your enrollment at Chemeketa. These intervention points are determined by term and/ or cumulative grade point average (GPA) and number of attempted credits. Listed below are the criteria used for determining academic standing:

Good Standing; student meets all below standards:

- A student who has a 2.00 or higher cumulative GPA
- A student who has a 2.00 or higher term GPA

Academic Warning; student meets at least one of the below criteria:

- A student who has earned a term GPA below 2.00, or
- A student who has attempted 1–36 credits and has below a 2.00 cumulative GPA

Academic Probation; student meets at least one of the below criteria:

- A student is already on Academic Warning or Academic Probation standing and has a consecutive term below 2.00 and has attempted 18 or more credits, or
- Any student who has attempted 37 or more credits and has a cumulative GPA below 2.00

Academic Suspension

A student meeting all of the criteria below will be administratively dropped from any courses that they are enrolled in for the suspension term. A student suspended based on their performance in spring term will be dropped from summer and fall enrollment. They will be eligible to enroll in fall term classes once the reinstatement process is complete. Students will be suspended from enrollment for a period no less than one academic term. The student may appeal their suspension through the Academic Standing Review Committee or designee.

- A student who is in Academic Probation standing and has 37 or more attempted credits

  And
- Has earned a term GPA below a 2.00

  And
- Has a cumulative GPA below 2.00

Academic Reinstatement

Once suspended, a student will not be allowed to register for credit classes for a period of one academic

term. After the one academic term, a student must complete the reinstatement process below.

- Meet with a Chemeketa Counselor and submit an Academic Reinstatement Form prior to the start of the academic term the student plans to enroll
- Once the Academic Reinstatement process is complete, a student will be able to enroll in courses
- Students reinstated will return to Academic Probation status

Academic Standing Appeal for Exception

If suspended, a student with extenuating circumstances may file an appeal with the Academic Standing Review Committee or designee.

- Students filing for an appeal must meet with a Chemeketa Counselor prior to submitting the Academic Standing Appeal for Exception Form
- Extenuating circumstances that may be considered include: personal illness or accident, serious illness or death within immediate family, or other circumstances beyond a student's reasonable control
- Examples of documentation that could be included: an obituary notice, divorce decree, or letter from a physician, attorney, social services agency, employer, etc. Letters from friends and family members do not meet standards for appropriate documentation.
- The outcome of an appeal may include a denial or return back to Academic Probation status
- Students will be notified via their My Chemeketa email of the results of the appeal and any restrictions or conditions pertaining to your appeal
- Upon suspension, students will be administratively dropped from their courses. If the Appeal for Exception is approved, students will need to re-enroll in courses. Re-entry into the classes that a student was dropped from is not guaranteed

Questions? Call Advising & Counseling at 503.399.5120 or email academicstanding@chemeketa.edu

Course Prerequisites

Prerequisites are specified in the course descriptions. These are conditions you must meet before enrolling in a course. It is your responsibility to fulfill the prerequisite.

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

If you do not meet the prerequisite for a course, you may be dropped.

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. Chemeketa students have the opportunity to complete the Oregon Transfer Module (OTM), as well as numerous degrees and certificates.

Degrees

Associate of Arts Oregon Transfer (AAOT), Associate of General Studies (AGS), Associate of Applied Science (AAS); Accounting, AAS; Accounting Administrative Assistant, AAS; Administrative Office Professional, AAS; Entrepreneurship and Small Business Management, Fire Prevention, AAS; Hospitality and Tourism Management, AAS; Management, AAS; Legal Administrative Assistant, AAS; Procurement and Supply Chain Management, AAS; Speech-Language Pathology Assistant, AAS; Virtual Office Assistant, AAS; and Associate of Science Oregon Transfer (ASOT) in Business.

Certificates

You can earn a certificate in Accounting, Business Software, Business Technology, Event Management, Food and Beverage Management, Hospitality and Tourism Management, Legal Administrative Assistant, Lodging Management, Micro Business Operations, Office Fundamentals, Payroll, Procurement 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.

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.

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. The 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 more information, see page 73 in the Programs of Study.

On-the-Job Evaluation 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 noncredit, nongraded 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.

Service Learning and Study Abroad
503.365.4686
international@chemeketa.edu

Chemeketa provides opportunities to travel abroad while earning college transfer credits. Courses are taught by Chemeketa faculty. For specific offerings, visit chemeketa.edu/international.

Previous programs have included: Service Learning in Belize and Mexico and our Japanese Language Exchange with Otemae University. For an appointment to learn more about these programs or other opportunities, call 503.428.0399 or email international@chemeketa.edu.

Student Development Services

Tours of Campus
503.399.5000
getstarted@chemeketa.edu

Tours of the Salem Campus are conducted by Chemeketa's Student Ambassadors. For information about tours, contact us or see the college website.

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

Student Email Accounts
503.399.7899
Salem Campus, Bldg. 9, Rm. 128

Every Chemeketa student receives 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

Students have drop-in access to the computer center at each of Chemeketa's campus libraries. Stop in before or after class to work on assignments, check email, or work on personal projects. Computers have many software applications used in Chemeketa courses. You can use tools like Adobe Creative Suite, QuickBooks, and Microsoft Office for free. See our website for a list of available software and hours of operation. Instructional technicians and tutors are available to help.

Our most popular services include:

- eLearn and online course help
- Wi-Fi help and personal device assistance

- Printing, photocopying, and scanning
- Tutoring for computer-intensive classes

The Salem Campus computer center is located in the Library in Bldg. 9, second floor. Student ID card required (available at Student Life, Bldg 2).

The Yamhill Valley Campus computer center is located in Bldg. 1, Rm. 204. Student ID card required.

Student Accessibility Services (SAS)

503.399.5192 voice
studentaccess@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.

Student Accessibility Services (SAS) is located in Bldg. 2, Rm. 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 SAS 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, Bldg. 22, Rm. 109

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 over 50 computers with webcams and multimedia headsets. The helpful and knowledgeable lab staff is eager to help students and instructors make the best use of our resources.

For more information, call 503.399.5290 or visit Bldg. 22, Rm. 109.

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:

- **Student Support Services** partners with the Chemeketa Completion Program (together known as TRIO/CCP) to offer individualized academic support, advising, scholarship support, individual tutoring, and mentoring to Chemeketa students. All students working towards a degree

at Chemeketa can qualify for one of these programs. Students earn free college credits through selected program-sponsored classes and have access to a lending library with textbooks, calculators, and laptops at no cost. Students also have access to the computer resource center with free printing, and a place to connect with other students. Transfer assistance, and college visits are available to students thinking about 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 you thrive at Chemeketa. Talent Search also prepares you to continue your education at a college or university through campus visits and assistance with 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.

For more information, contact the TRIO coordinator in Bldg. 2, Rm. 230, on the Salem Campus or visit go.chemeketa.edu/trio.

Tutoring & Study Skills Center

All enrolled Chemeketa students can access a variety of tutoring and study skills services:*

- Peer tutoring in math, science, reading, writing, and languages—drop-in or schedule ahead
- Real-time online eTutoring in math, sciences, accounting, and other subjects
- Workshops on study skills, including time management, avoiding procrastination, test-taking strategies, and more
- Workshops on writing, including sentence skills, MLA and APA documentation, revising/editing/proofreading, and more
- Meet with a consultant about developing effective learning habits
- Quiet study area with computers, printing, textbooks, and calculators

Locations and Contact Information:

Chemeketa Salem
Bldg. 2, Rm. 210 and 212
Tutoring, 503.399.5190, tutor@chemeketa.edu
Study Skills, 503.399.5162, studyskillscenter@chemeketa.edu

Chemeketa Yamhill Valley
Bldg. 1, Rm. 200
503.316.3238

Chemeketa Woodburn
Commons Area
503.399.5207

Chemeketa Polk
Commons Area
503.623.5567

For more information, see the "Studying" tab on My Chemeketa or visit go.chemeketa.edu/tutoring.

*In-person services may be affected fall term 2021

Chemeketa Completion Program (CCP)

go.chemeketa.edu/collegeaccess
503.399.5147

The Chemeketa Completion Program (CCP) provides a support system for students not eligible for the College Assistance Migrant Program (CAMP) or TRIO programs. You must be completing a Chemeketa degree or certificate, attending a minimum of nine credits each term, and on the path to complete your degree or certificate within three years of being accepted into the program.

CCP provides assistance with navigating the College's systems, such as financial aid, including the Oregon Student Aid Application (ORSAA) and other resources, registration, academic advising, the transfer process, and success coaching to ensure students persist and complete. CCP students have access to the Chemeketa Textbook Lending Library and the same services as TRIO programs.

Writing Centers

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

The Chemeketa Writing Center (CWC) and Chemeketa Online Writing Center (COWC) help students with any writing assignment or project. Both writing centers are free courses you can register for using My Chemeketa. 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 by the center, located in the Salem Campus library. Instructions for using the COWC can be found at online.chemeketa.edu/student-services/online-writing-center/.

Career Center
503.399.5026
careercenter@chemeketa.edu
go.chemeketa.edu/careercenter
Bldg. 2, Rm. 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

Associated Students of Chemeketa (ASC)
503.399.5185 or 503.399.5116
asc@chemeketa.edu

The ASC Student Council represents the Chemeketa student voice on committees through the college. Its mission is to represent, advocate, and promote the well-being of students at Chemeketa. 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.

To find out more about ASC, visit go.chemeketa.edu/asc.

Bookstore
503.399.5131
bookstore.chemeketa.edu

Bookstore hours, Salem Campus
8 am–5 pm, Monday–Thursday, 8 am–3 pm, Friday

Extended hours during the beginning of each term

Services

At the bookstore you'll find: USPS and UPS shipping, postage stamps, faxing, scanning, bus passes for Cherriots and Cherriots Regional, a friendly smile and discounted movie tickets.

Course materials

The Bookstore sells textbooks at the Salem campus and online at bookstore.chemeketa.edu. Free delivery to Woodburn, Polk Center, and Yamhill Valley Campus for orders placed online. New, used, and e-books are available. Many classes offer digital course materials delivered to your class website by the first day. Your student account is charged a Digital Course Material Fee (DCMF) with tuition and other possible fees, which means no more standing in line to buy your textbook.) For Fall, Winter and Spring Term go to bookstore.chemeketa.edu for information regarding no cost digital course materials, as many courses will provide no charge course materials.

Buyback

During finals week, the Salem campus bookstore pays cash for books, that's right, cash! Visit bookstore.chemeketa.edu to see how much we will pay for books starting the week before finals and what you need to participate.

Other items

The bookstore also sells Chemeketa apparel, school supplies, art supplies, earbuds, flash drives, dreams and more.

Chemeketa Food Pantry
503.399.5116
collegelife@chemeketa.edu

The 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 Food Pantry is coordinated by the Student Retention and College Life department. If you need food or would like to donate to the Food Pantry, you can stop by the Salem Campus, Bldg. 2, Rm. 176.

Child Care

Chemeketa offers child care at the Child Development Center on the Salem Campus. Our Center is a Spark/QRIS rated program.

Child Development Center
Bldg. 39
503.399.5107 or 503.399.5048

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.

Child Care Access Means Parents in School (CCAMPIS) Childcare Assistance

This assistance is available for eligible, low-income student parents through Chemeketa's Support to Expectant and Parenting Students (STEPS) program. STEPS offers a limited number of child care grants available to assist with up to 50% of child care costs, depending on the student's enrollment each

term. Funding for this assistance is provided by Chemeketa's federally-funded CCAMPIS grant. For information, contact the Child Development Center at 503.399.5048 or the STEPS office at 503.365.4603. You may also visit us in the Student Parent Resource Center on the Salem Campus in Bldg. 2, Rm. 229.

The Financial Aid office has a list of other child care centers in the Salem area. Local child care providers advertise their services on a bulletin board located in the Student Center on the Salem Campus in Bldg. 2. Local child care information may also be available at other Chemeketa locations.

Design OP
503.584.7151

Design OP provides hands-on opportunities for Visual Communications students who are interested in putting into practice skills they are learning in graphic design and/or interactive media. These opportunities help students succeed in their program and in the graphic design industry as business leaders. Simultaneously, they learn to manage a small business, work with a team of graphic designers, critique and consult with each other, develop project management processes and skills, build a working relationship with vendors, design for various medias, and consult with clients and assist them with their design needs. Various duties may also include photography, videography, web design, graphic design, and collaboration with other departments to design recruitment and retention materials.

Students not in the Visual Communications program who are proficient in and have a passion for photography, videography, graphic design, or web design are encouraged to apply.

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 a staff member. There are also emergency phones located throughout the Salem Campus that 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.

Intercollegiate Athletics
503.399.5082

Chemeketa is a member of the Northwest Athletic Conference (NWAC), which includes community colleges in Oregon, Washington, Idaho, and the province of British Columbia. 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, softball, cross-country, and distance running.

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 Opportunities

503.399.5116
collegelife@chemeketa.edu

Student Retention and College Life offers a variety of leadership courses for students who want to grow and develop leadership skills.

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 one of our four pick-up sites. 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 can also be requested.

Some of our most popular services include:

- Textbook Lending Library
- Free checkout of material
- Wireless Internet access and wireless printing
- Computers, laptops, and calculators
- Printing and copying
- Quiet study and group work space
- Daily delivery of material from regional libraries and beyond
- New York Times Online

Chemeketa's librarians are available to help students with assignments and research. Reference service is available in person, over the phone, and via chat. Chat reference is available 24/7 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.

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 locations. If you have lost or found an item, please visit 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 SLD121A 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 (MSS) Team

503.399.5143

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

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 community. For more information, call 503.399.5143.

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 the Public Safety office in Bldg. 2, Rm. 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's 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. For more information, contact 503.399.5023 or publicsafety@chemeketa.edu.

Electric Vehicles

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. They provide information and referrals, locate resources, and assist students to use the services within the Advising, Counseling, Career, and Information centers.

Peer Assistants are paid through an hourly rate, tuition waiver, or Federal Work Study.

Public Bus Services

Local bus service to the Salem Campus is available through Cherriots. Regional Service provides transportation to the Salem Campus from Woodburn, Silverton, and Dallas. If you are attending classes at one

of the other Chemeketa locations, please contact that location to find out what local transportation options are available to you.

Student Ambassadors

503.399.5000
getstarted@chemeketa.edu

Student Ambassadors conduct campus tours and provide assistance to students through personal contact and correspondence. They are involved in recruitment, admissions, promotional and special events, and high school visitations.

Student Ambassadors are paid through an hourly rate, tuition waiver, or Federal Work Study.

Student Clubs and Organizations

503.399.5185 or 503.399.5116
asc@chemeketa.edu

Chemeketa has a number of student organizations that provide a variety of activities for students and community members. For a list of current clubs and organizations, visit go.chemeketa.edu/clubs or contact the Student Retention and College Life on the Salem Campus, Bldg. 2.

Student Leadership Opportunities

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:

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

For more information, visit collegelife.chemeketa.edu.

Student Parent Resource Center

503.365.4603
go.chemeketa.edu/studentparents

Chemeketa's Student Parent Resource Center offers a supportive environment for student parents and their families. The center offers a study area with computers, printing, and a place to take a break in a family-friendly setting. It serves as a centralized, multi-purpose campus resource for student parents.

Chemeketa is committed to supporting student parents and helping them achieve their academic goals. We offer parenting classes, parent support

groups, resources for parent and child health, child care assistance, a children's clothing closet, and referrals to a wide range of College and community programs and services. For more information, visit the Student Parent Resource Center on the Salem Campus, Bldg. 2, Rm. 229, or call 503.365.4603.

Student Retention Assistants

503.399.5116
collegelife@chemeketa.edu

Student Retention Assistants learn clerical skills and work on retention activities to improve student success outcomes. Assisting in the Student Retention and College Life department, you'll gain customer service experience by answering phones, scheduling meetings, replying to emails, and assisting with the food pantry. Members of this team also help with traditional fundraisers and contribute ideas for new fundraisers to bring in donations for the food pantry.

Testing Center

503.399.6556, testing@chemeketa.edu

The Testing Center offers exams by appointment only. Testing offers multiple exams to support our students and community partners, e.g., GED, CLEP, academic, state building code exams, pesticides, ASE, etc. Please contact the Testing Center at 503.399.6556 or testing@chemeketa.edu for more information.

Textbook Lending Programs

503.399.5116, collegelife@chemeketa.edu
503.399.5043, library@chemeketa.edu

There are a variety of programs available for students to borrow textbooks at no cost. The College Life (CL) collection allows students to borrow a textbook for the entire term, on a first-come, first-served basis. Students can request to pick up these items at the Salem Campus library, Yamhill Valley Campus library, Polk Center, and the Woodburn Public Library.

To learn more about eligibility requirements, visit go.chemeketa.edu/affordablebooks. Library Reserves offers free access to textbooks and materials provided by instructors for use in the library. Textbook collections are available for other programs, such as Academic Development and TRIO. For more information, contact the library.

Where to Eat on the Salem Campus

Food Central, Bldg. 2

This commons area is open Monday through Friday from 7:30 am–2 pm. It has a six-station food court offering 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, Bldg. 2

A 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, Bldg. 2

Also located in the commons area, this spot offers made-to-order hot or cold sub sandwiches and pizza by the slice or by the pie. It's open extended hours.

Convenience Store, Bldg. 2

The Convenience Store carries a wide variety of snacks, candy, hot box foods, fresh fruit, grab-n-go items, pastries, and beverages. It is open on Saturdays.

Café Eight, Bldg. 8

This café offers espresso drinks, gourmet coffees and teas, juices, and a variety of convenient and healthy grab-n-go items, such as salads, sandwiches, fruits and veggies, wraps, and specialty desserts.

Catering

For all Chemeketa catering needs, including lunches, dinners, snacks, and coffee services, contact Chemeketa Event Services at 503.399.6444.

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

Advising and Counseling Services

Chemeketa Polk Center, 503.623.5567
Chemeketa Salem, 503.399.5120
Chemeketa Woodburn, 503.981.8820
Chemeketa Yamhill Valley, 503.472.9482
advising@chemeketa.edu
counseling@chemeketa.edu

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

Academic Advising

503.399.5120, Bldg. 2, Rm. 115
advising@chemeketa.edu

Chemeketa academic advisors, who are available by appointment, will assist you with choosing your

program or transfer degree, developing an education plan, and interpreting your academic degree audit. Additional help with accessing student records and understanding college policies such as Academic Standing is available.

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.

Counseling Services

503.399.5120, Bldg. 2, Rm. 115
counseling@chemeketa.edu

Counselors are available for free, confidential, short-term counseling services for currently enrolled Chemeketa students. They can help with career exploration, research, decision-making and planning, personal counseling and support, academic counseling, and finding community resources to address barriers to success.

Career Center—Salem Campus

The Career Center connects you with potential employers: for jobs while you are in school, for jobs when you graduate or complete your program, and for real-world training opportunities.

Career Services

503.399.5026, Bldg. 2, Rm. 115
careercenter@chemeketa.edu
chemeketa.edu/students/career-services/

We provide job search assistance, job listings for part-time and full-time employment, one-on-one appointments for resume and cover letter writing and review, and practice job interviews. We hold recruiting events and career fairs throughout the year to assist you in achieving your career goals. Chemeketa students and alumni at all stages of their academic and professional careers

Services to the Community

Chemeketa Cooperative Regional Library Service (CCRLS)

503.399.5165
ccrls.org

Chemeketa Cooperative Regional Library Service (CCRLS) facilitates the operation of member libraries,

including the College library, Grand Ronde Tribal Library, and 16 public libraries in the College district and adjacent areas. Enrolled college students are eligible to access materials and services through any member library.

Funded by a regional library tax, CCRLS provides essential technologies and logistics to members. CCRLS-provided resources include: computer networks and hardware; a courier service to distribute materials between member libraries; a full-featured library services platform accessed via the online catalog (catalog.ccrls.org) or mobile application (CCRLS Mobile for Android or iOS); inter-library loan; and popular digital content such as e-books, audiobooks, streaming video, and specialty websites.

Community Locations

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

Chemeketa's Yamhill Valley Campus, Polk Center, and Woodburn Center 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

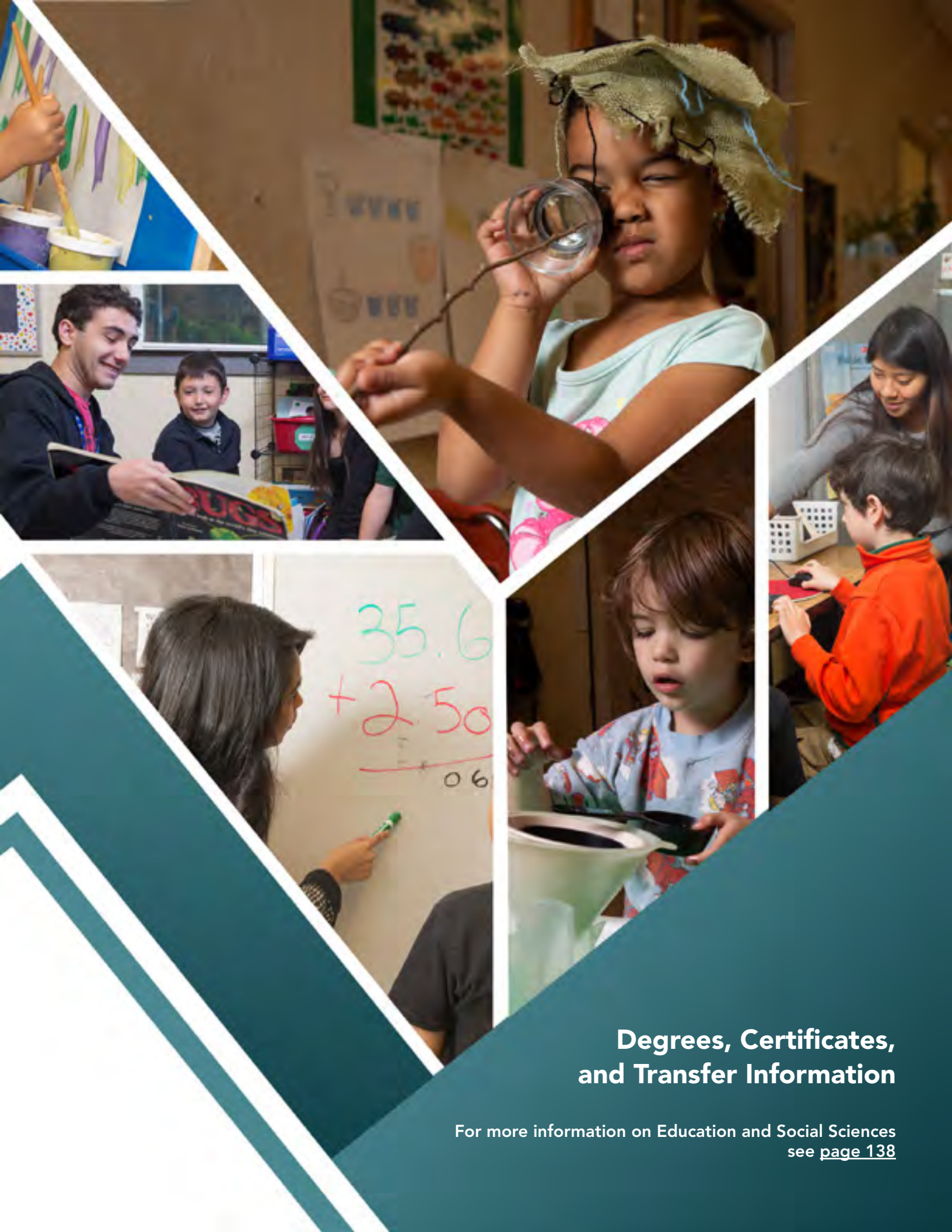
The Gretchen Schuette Art Gallery
503.399.2533

The Gretchen Schuette Art Gallery is located on the Salem Campus, Bldg. 3, Rm. 122. The gallery introduces contemporary art to our students and community. It 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 poetry readings and roundtable discussions organized within the College community. To learn about a current exhibit, check gallery hours or survey the upcoming season, visit chemeketa.edu/programs-classes/program-finder/art/gretchen-schuette-art-gallery or call 503.399.2533.

Planetarium
503.399.6256
Salem Campus, Bldg. 2, Rm. 171

Chemeketa's Planetarium presents museum-quality sky shows on Friday evenings during the Fall, Winter, and Spring terms. The planetarium also features a Spitz model 512 sky instrument that projects 2,500 stars, five planets, and the sun, moon, and sky coordinated on a 35-foot dome. The projector can project the sky for any date, past, present or future, as seen from any location on earth. Come explore the skies with a show and accompanying star talk.

Admission is $5, with special rates for students. Call to arrange group showings at other times for schools, clubs, and organizations. Call 503.399.6256 or email beatriz.arevalo@chemeketa.edu



Degrees, Certificates, and Transfer Information

For more information on Education and Social Sciences see page 138

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 Oregon public universities 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 page 55. 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 earn 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 page 56 for Cultural Literacy courses).

See the program guide "Certificates, Two-year Degrees, and Transfer Guide" on page 48 for a complete list of our transfer programs. Information and curriculum guidelines for "Career and Technical Education Programs" on page 71

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 for page 60 and for page 62.

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 page 65.

Associate of Applied Science degree

Chemeketa, with its emphasis on career and technical education, offers preparation in more than 50 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. See the program guide "Certificates, Two-year Degrees, and Transfer Guide" on page 48 for a complete list of Associate of Applied Science degree programs. Information and curriculum outlines for these programs begin page 71.

To qualify for an Associate of Applied Science degree, you must meet the requirements listed page 64.

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 page 66.

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 "Certificates, Two-year Degrees, and Transfer Guide" on page 48 for a complete list of Certificate of Completion programs. Information and curriculum outlines for these programs page 71.

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 minimum cumulative grade point average of 2.00.
- Complete a minimum of 12 credit hours at Chemeketa.
- Apply courses numbered 050 or higher toward a certificate.

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.

Digital Literacy

Students enrolled In an Associate of Science, Associate of Applied Science, or an Associate of General Studies degree program will need to meet a digital literacy requirement. The purpose of the requirement is for the student to be able to use digital technology, communication tools, and networks to create, access, analyze, evaluate, and communicate information to

successfully enter the workforce or the university setting.

Outcomes:

1. Demonstrate critical thinking skills and employ correct terminology to effectively, efficiently, and productively use technology to communicate, collaborate,contribute, and solve problems in the workplace and our digital society.
2. Understand how electronic devices process information and how they network with other devices for communication and for locating, sharing, and storinginformation.
3. Recognize the human responsibility of interpreting and evaluating the reliability of information gained via technology-related sources.
4. Use a variety of applications and devices, confidently transfer skills among applications and devices, and apply an understanding of how the rapidly changing technology environment affects workplace and other decisions.
5. Apply critical thinking skills to decisions regarding ethics, environmental/societal responsibility, and safety/security/privacy issues associated with the use of technology in the digital world.

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 Graduation Services 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 should meet with an academic or program advisor.

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 77.

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
800.547.8887

Linfield College
800.452.4176

Oregon State University
800.291.4192

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 Advising and First-Year programs or a program advisor to complete the admissions process.

General Degrees						
	Certificate	**AAS/ AGS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Oregon Transfer Module (OTM)			✔			page 55
Associate of Arts Oregon Transfer (AAOT)			✔			page 56
Associate of Arts Oregon Transfer Education (AAOT-Ed)			✔			page 56
Associate of Science / Oregon Transfer in Business (ASOT-Bus)			✔			page 60
Associate of Science / Oregon Transfer in Computer Science (ASOT-CS)			✔			page 62
Associate of Applied Science (AAS)		✔				page 64
Associate of Science (AS)			✔			page 65
Associate of General Studies (AGS)		✔				page 66
Transfer Course Disciplines						
For specific information about baccalaureate degrees at Oregon's public universities, see oregon.gov/highered/plan-pay-for-college/Pages/community-colleges.aspx			✔			
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
American Sign Language			✔			page 212
Art			✔			page 107
Anthropology			✔			page 213
Biology			✔			page 219
Business Administration			✔			page 117
Chemistry			✔			page 228
Chicano/Latino Studies			✔			page 240
Communication			✔			page 107
Computer Science			✔			page 194
Counseling And Guidance			✔			page 228
Economics			✔			page 247
Education			✔			page 249
Engineering			✔			page 250
English			✔			page 254
Entrepreneurship			✔			page 257
Film Arts			✔			page 258
French			✔			page 258
General Engineering			✔			page 261
General Science			✔			page 263
Geography			✔			page 261
Geology			✔			page 262
Health, Health Education			✔			page 264
History			✔			page 271

Humanities			✔			page 273
Japanese			✔			page 274
Journalism			✔			page 274
Linguistics			✔			page 274
Mathematics			✔			page 277
Music			✔			page 281
Nutrition and Food Management			✔			page 282
Philosophy			✔			page 286
Physical Education and Human Performance			✔			page 283
Physics			✔			page 285
Political Science			✔			page 288
Psychology			✔			page 289
Religious Studies			✔			page 290
Russian			✔			page 291
Sociology			✔			page 294
Spanish			✔			page 295
Social Science			✔			page 296
Writing			✔			page 301
Women's Studies			✔			page 303
Agriculture, Food, and Natural Resources						
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Horticulture Program		✔	✔			page 79
• Crop Health	✔					page 80
• Irrigation Technician	✔					page 82
Wine Studies Programs	✔	✔				page 103
• Vineyard Management		✔				page 185
• Vineyard Operations	✔					page 103
• Winemaking		✔				page 105
Arts, Information, and Communication						
Visual Communications Programs						page 110
• Graphic Design		✔		✔		page 110
• Multimedia Arts		✔		✔		page 110
Business and Management						
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Accounting Programs	✔	✔				page 113
• Data Analytics for Accounting	✔					page 114
• Payroll	✔					page 115
• Tax Preparation	✔					page 115
Business Management Programs	✔	✔				page 117
• Entrepreneurship and Small Business Management	✔					page 119
• Procurement and Supply Chain Management		✔				page 120
• Procurement	✔					page 118
• Sustainability in Management	✔					page 118
Office Administration and Technology Programs	✔	✔				page 131
• Accounting Administrative Assistant		✔				page 132
• Administrative Office Professional		✔				page 133
• Business Software	✔					page 129
• Business Technology	✔					page 130
• Legal Administrative Assistant	✔	✔				page 130
• Medical Administrative Assistant		✔				page 135
• Micro Business Operations	✔					page 131
• Office Fundamentals	✔					page 131
• Virtual Office Assistant	✔	✔				page 132

Hospitality and Tourism Management Programs	✔	✔				page 122
• Event Management	✔					page 123
• Food and Beverage Management	✔					page 123
• Hospitality and Tourism Management	✔	✔				page 125
• Lodging Management	✔					page 124
• Tourism and Travel Management	✔					page 124
Wine Hospitality Operations	✔					page 127
Health Services						
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Anesthesia Technology Program		✔		✔	✔	page 148
Dental Assisting Program	✔			✔	✔	page 150
Dental Hygiene Program			✔	✔	✔	page 152
Emergency Medical Technology/Paramedic Program	✔	✔				page 178
• Paramedicine Program		✔			✔	page 179
• Emergency Medical Technician	✔					page 178
Medical Assisting Program	✔			✔		page 158
Nursing Programs	✔	✔	✔	✔	✔	page 162
• Practical Nursing	✔					page 159
• Nursing		✔				page 160
Pharmacy Programs	✔	✔				page 163
• Pharmacy Technician	✔			✔	✔	page 163
• Pharmacy Management		✔		✔	✔	page 164
Human Resources						
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Criminal Justice, Law Enforcement, and Corrections Programs			✔		✔	page 170
• Basic Corrections	✔				✔	page 174
• Basic Law Enforcement	✔				✔	page 167
• Corrections		✔		✔	✔	page 172
• Criminal Justice		✔			✔	page 172
• Juvenile Justice		✔			✔	page 173
• Law Enforcement		✔		✔	✔	page 176
Early Childhood Education Programs	✔	✔			✔	page 138
• Infant/Toddler	✔					page 139
• Preschool	✔					page 140
Fire Protection Technology Programs	✔	✔				page 180
• Fire Prevention		✔				page 180
• Fire Service Supervision and Management	✔			✔	✔	page 181
• Fire Suppression		✔	✔	✔	✔	page 182
Human Services Programs						page 154
• Addiction Counselor Certification Preparation	✔			✔	✔	page 154
• Addiction Studies		✔		✔	✔	page 155
• Direct Service Professional		✔		✔		page 156
• Social Services		✔		✔	✔	page 156
Speech-Language Pathology Assistant Programs	✔	✔		✔		page 165
Industrial and Engineering Systems						
		AAS	**Transfer**	**Limited**	**Addl Qual**	**Page**
Apprenticeship Programs						page 84
• Construction Trades and Apprenticeship Readiness	✔					page 84
• Construction Trades, General (Specializations in HVAC/R, Plumbing, and Sheet Metal)	✔	✔	✔		✔	page 85
• Electrician Apprenticeship Technologies: Inside Electrician	✔	✔	✔		✔	page 87
• Limited Electrician Apprenticeship Technologies		✔				page 88

Automotive Technology Programs						page 90
• Automotive Body Repair	✔					page 91
• Automotive Entry Level Technician	✔					page 92
• Automotive Machining	✔					page 92
• Automotive Technology		✔		✔		page 90
Building Inspection		✔				page 167
• Building Inspector	✔					page 168
Computer Information Systems Programs						page 188
• Computer Systems and Information Technology	✔	✔				page 191
• Computer Programming	✔					page 192
• Cybersecurity		✔				page 189
• System Administration and Network Security	✔					page 192
• Web Developer	✔					page 193
Drafting Technology–CAD Programs	✔	✔				page 184
• Architectural Drafting	✔					page 185
• Computer-Assisted Drafting (CAD)	✔	✔				page 185
Electronics Technologies Programs						page 195
• Electronic Engineering Technician		✔	✔			page 196
• Electronics	✔					page 195
• Industrial Electronics		✔	✔			page 197
• Renewable Energy Management		✔				page 198
Machining Technology Programs	✔	✔				page 95
• Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)		✔		✔		page 95
• Computer-Aided Manufacturing (CAM) Fundamentals	✔					page 95
• Computer Numerically Controlled (CNC) Operator	✔					page 96
Robotics Program		✔		✔		page 98
Welding Programs	✔	✔		✔		page 100
• Arc Welding	✔					page 100
• MIG Welding	✔					page 101
Other Programs						
	Certificate	**AAS**	**Transfer**	**Limited**	**Addl Qual**	**Page**
Adult Basic Education						page 51
Adult High School Diploma						page 51
College Assistance Migrant Program (CAMP)				✔		page 77
Early College High School						page 51
English as a Non-Native Language						page 51
English for Speakers of Other Languages						page 74
General Educational Development (GED)						page 75
GED Options	✔					page 51
High School Equivalency Program (HEP)				✔		page 76
Occupational Skills Training	✔			✔	✔	page 73
Winema						page 51
Personal Enrichment						
Non-degree seeking for 18 years and older						page 51

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. Most 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 56 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 301 for descriptions of the writing courses.

Oregon Transfer Compass

Core Transfer Maps

The Core Transfer Maps are broad descriptions of course requirements for students at any Oregon community college or public university. Students who have not yet declared a major and plan to transfer may take classes that fit these categories as requirements for a bachelor's degree at any Oregon public university.
Note that many majors have specific course requirements for categories within the Core Transfer Maps. The Core Transfer Maps are intended as starting points for students who plan to transfer to a university, but are unsure of their intended major or transfer destination. Students who are certain of their major, but not their transfer destination, should determine if there is a developed Major Transfer Map for their chosen discipline, and follow that as a guide. Students who are certain of both their major and their intended transfer destination should consult an advisor for information on an existing specific articulation agreement, Major Transfer Map, or degree map that will prescribe their course requirements.

Course Distribution Requirements

See an advisor for recommended courses

Subject	**General Core Transfer Map**	**STEM Core Transfer Map**
Writing	WR121 (3–4 credits)	WR121 (3–4 credits)
Arts & Letters	Two courses (6–8 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*	Two courses (6–8 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*
Social Sciences	Two courses (6–8 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*	Two courses (6–8 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*
Natural Sciences	Two courses (8–10 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*	Two courses (8–10 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*
Math	One course (4–5 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*	One course (4–5 credits) See list of AA/OT outcome courses. **See an advisor for recommended courses.*
ADDITIONAL REQUIREMENTS		
Subject	**General Core Transfer Map**	**STEM Core Transfer Map**
Cultural Literacy	At least one required course must also meet the Cultural Literacy outcomes.	At least one required course must also meet the Cultural Literacy outcomes.
At Least 30 Total Credits	If the credit total for the required courses is less than 30 credits, select a course of your choice from the AA/OT outcome courses. **See an advisor for recommended courses.*	If the credit total for the required courses is less than 30 credits, select a course of your choice from the AA/OT outcome courses. **See an advisor for recommended courses.*
Completion standards	All courses must be passed with a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time of award.	All courses must be passed with a grade of "C-" or better. Students must have a minimum cumulative GPA of 2.0 at the time of award.
COMPLETED CORE TRANSFER MAPS		
Subject	**General Core Transfer Map**	**STEM Core Transfer Map**
Total	At least eight courses (at least 30 credits)	At least eight courses (at least 30 credits)

Oregon Transfer Module (OTM)

Requirements	Courses	Courses which satisfy requirements
Complete a minimum of 45 credits. All courses must be passed with a grade of C- or better. One course with an (IL) Information Literacy and a (CL) Cultural Literacy indicator must be completed. These must include the following:		
General Education Requirements		
Writing (Two courses of college transfer composition.)	2 courses minimum	**WR**121(IL) and either 122(IL) or 227(IL).
Math (One course of college-level mathematics for which **MTH**095 is a prerequisite.)	1 course minimum	**MTH**105 or above.
Oral Communication	1 course minimum	**COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL)..
Arts and Letters (The second year of a foreign language may be included, but not the first year. American Sign Language (ASL) is considered a foreign language. The course taken to meet the Oral Communication requirement above may not be used to meet this requirement.)	3 courses minimum	**ART**101(CL), 115, 116, 117, 120, 121, 131, 201, 204, 205, 206, 207(CL), 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 265, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL). **ENG**100, 104, 105, 106, 107(CL), 108(CL), 109(CL), 201, 202, 204(CL), 205(CL), 206(CL), 216, 220(CL), 250, 253(CL), 254(CL), 260, 261, 269(CL). **FA**255, 256, 257. **FR**201, 202, 203. **HUM**106, 120(CL), 220(CL), 225(CL). **JNL**224 **JPN**201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 205(CL), 206(CL). **REL**160(CL), 201, 202, 203(CL). **RUS**201, 202, 203. **SPN**201, 202, 203, 214, 215, 216, 250, 251. **WR**240, 241, 242, 243, 244, 250, 262.
Social Sciences	3 courses minimum	**ATH**101(CL), 102(CL), 103(CL). **CLA**201, 202, 203. **EC**200, 201, 202. **ED**216, 229. **GEG**105, 106(CL), 107(CL), 140, 201, 202, 206, 207. **HST**104, 105, 106, 157, 201(CL), 202(CL), 203(CL), 228, 237, 257(CL), 258(CL), 262(CL), 269(CL). **PS**201, 202, 203, 205, 250. **PSY**101, 201, 202(CL), 213, 218(CL), 234(CL), 237, 239, 280(CL). **SOC**204(CL), 205(CL), 206(CL), 210(CL), 213(CL), 221, 223(CL), 224(CL), 232(CL). **WS**101(CL), 102(CL).
Science/Math/Computer Science (Three courses, including at least one biological or physical science with a lab.) 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.)	3 courses minimum	**Choose at least 1 course from the below list (must have a lab):** **BI**101, 102, 103, 112, 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, 108, 141, 142. **PH**201, 202, 203, 207, 208, 209, 211, 212, 213. **Choose additional courses from the list above or below:** **CIS**233J, 234J. **CS**160, 161, 162, 205, 260, 271, 290. **MTH**105 or above.
Electives (Complete additional courses to bring the total number of 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.
5. Courses with the (IL) indicator fulfill the Information Literacy requirement the AAOT. A minimum of one course fulfills this requirement.
6. 6.Course with the (CL) indicator fulfill the Cultural Literacy requirement for the AAOT. A minimum of one course fulfills this requirement.

Associate of Arts Oregon Transfer (AAOT) Degree Requirements

Requirements	Credits/ Courses	Courses which satisfy requirements
Complete a minimum of 90 credit hours with a GPA of 2.0 or higher. All foundational and discipline studies courses must be a minimum of 3 credits, except for Health/Wellness/Fitness courses which may be any number of credits. One course with an (IL) Information Literacy and a (CL) Cultural Literacy indicator must be completed. Electives may be any number of credits. All courses must be passed with a grade C- or better. Complete a minimum of 24 credit hours at Chemeketa. These must include the following:		
Foundational Requirements		
Writing (Minimum of eight credits)	8 credits minimum	**WR**121(IL) and either 122(IL) or 227(IL).
Math (Minimum of one course in college level math for which **MTH**095 is a prerequisite)	1 course minimum	**MTH**105 or above.
Oral Communication (Minimum of one course)	1 course minimum	**COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL).
Physical Education or Health (One or more courses totaling at least three credits)	3 credits minimum	Any **PE**185 course (1 credit each); any **HE** or **HPE** course (3 credits each).
Discipline Studies		
Arts and Letters (Three courses chosen from at least two disciplines.) All foreign languages are considered one discipline. The course taken to meet the Oral Communications/ Rhetoric requirement above may not be used to meet this requirement.	3 courses minimum	**ART**101(CL), 115, 116, 117, 120, 121, 131, 201, 204, 205, 206, 207(CL), 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 265, 270, 276, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL). **ENG**100, 104, 105, 106, 107(CL), 108(CL), 109(CL), 201, 202, 204(CL), 205(CL), 206(CL), 216, 220(CL), 245, 250, 253(CL), 254(CL), 260, 261, 269(CL). **FA**255, 256, 257. **FR**201, 202, 203. **HUM**106, 120(CL), 220(CL), 225(CL). **JNL**224, 225, 227, 228. **JPN**201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 205(CL), 206(CL). **REL**160(CL), 201, 202, 203(CL). **RUS**201, 202, 203. **SPN**201, 202, 203, 214, 215, 216, 250, 251. **WR**240, 241, 242, 243, 244, 250, 262.
Social Sciences (Four courses chosen from at least two disciplines.)	4 courses minimum	**ATH**101(CL), 102(CL), 103(CL). **CLA**201, 202, 203. **EC**200, 201, 202. **ED**216, 229. **GEG**105, 106(CL), 107(CL), 140, 190, 201, 202, 206, 207. **HST**104, 105, 106, 157, 201(CL), 202(CL), 203(CL), 228, 237, 257(CL), 258(CL), 262(CL), 269(CL). **PS**201, 202, 203, 205, 250. **PSY**101, 201, 202(CL), 213, 218(CL), 234(CL), 237, 239, 280(CL). **SOC**204(CL), 205(CL), 206(CL), 210(CL), 213(CL), 221, 223(CL), 224(CL), 232(CL). **WS**101(CL), 102(CL)..

Sciences/Math/Computer Science Four courses from at least two disciplines including at least three laboratory courses in biological and/or physical science.)	4 courses minimum	**Choose three courses from:** **BI**101, 102, 103, 112, 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, 108, 141, 142. **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, 205, 260, 271, 290. **MTH**105 or above.
Electives (Complete additional courses to bring the total number of credits to 90.)		**The following courses may be included:** Complete additional courses to bring the total number of credits to 90. A maximum of 12 credit hours in career and technical education courses may be included with the exception of the following: **BT**104, 105. Courses must be 100 level or higher.12 credit hours in career and technical education courses. 12 credits of cooperative work experience. **The following courses will NOT be included:** **BT**104, 105.

Notes:

1. Earn a cumulative grade point average (GPA) of 2.00 or above.
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 52.
8. Courses with the (IL) indicator fulfill the Information Literacy requirement for the AAOT. A minimum of 1 course fulfills this requirement.
9. Courses with the (CL) indicator fulfill the Cultural Literacy requirement for the AAOT. A minimum of 1 course fulfills this requirement.

Associate of Arts/Oregon Transfer Degree in Elementary Education (AAOT-ED)

Requirements	Credits/ Courses	Courses which satisfy requirements
Complete a minimum of 90 credit hours with specific courses identified by Oregon universities to meet requirements for a bachelors in education with a teaching license.. ED courses must be completed with a grade of B or better. all other courses must be completed with a grade of C- or better. One course with an (IL) Information Literacy and a (CL) Cultural Literacy indicator must be completed These must include the following:		
Foundational Requirements		
Writing (A minimum of eight credits of college-transfer writing courses.)	Eight credits minimum	**WR**121(IL) and 122(IL).
Math (A minimum of three courses for which **MTH**095 is a prerequisite.)	Three courses minimum	**MTH211, 212, 213**
Oral Communication (One course in the fundamentals of speech or communication.)	One course minimum	**COMM111**
Physical Education or Health **(1 or more courses totaling at least 3 credits)**	3 credits minimum	**HPE295**
Discipline Studies		
Arts and Letters (Three courses chosen from two or more disciplines. All foreign languages are considered one discipline. ASL is considered a world language.)	Three courses minimum	**ART115 or 131** **ENG**104, 105 or 106, **And 1 course from the following:** **200-level world language recommended** **ART**101(CL), 116, 117, 120, 121, 201, 204, 205, 206, 207(CL), 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 261, 265, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100(CL), 105(CL), 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL). **ENG**100,107(CL), 108(CL), 109(CL), 201, 202, 204(CL), 205(CL), 206(CL), 216, 220(CL), 250, 253(CL), 254(CL), 260, 261, 269(CL). **FA**255, 256, 257. **FR**201, 202, 203. **HUM**106, 120(CL), 220(CL), 225(CL). **JNL**224 **JPN**120, 201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 205(CL), 206(CL). **REL**160(CL), 201, 202, 203(CL). **RUS**201, 202, 203. **SPN**201, 202, 203, 214, 215, 216, 250, 251. **TA**110(CL), 141, 142, 242. **WR**240, 241, 242, 243, 244, 250, 262.
Social Sciences (Four classes chosen each from ATH, HST, PS, and PSY courses.)	Four courses minimum	**ATH**103 or GEG 106 **HST**201, 202 or 203 **PS**201, or 202 **PSY**201 or 202
Science/Math/Computer Science	Three courses minimum	**BI**101, 102, 103, 211, 212, 213, 230, 231, 232, 233, or 234 And **GS**106 And 1 of the following **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. **PH**201, 202, 203, 207, 208, 209, 211, 212, 213.
Education Courses	Five courses minimum	**ED**216 **ED**229 **ED**258 **ED**101 or 240 **ED**265

Electives and/or University-Specific Prerequisites Complete additional courses to bring the total number of credits to 90. A maximum of 12 credit hours in career and technical education courses may be included with the exception of the following: **BT**104, 105. Courses must be 100 level or higher.		Recommended courses depend on choice of transfer institution. See an advisor. SOU: **ECE** courses, **ED**230 WOU: **ED**230, **LING**210 EOU: **ECE** courses, **ED**230 OSU: **ECE** courses UO: **CLA**201, 202, 20

Notes:

1. Earn a cumulative grade point average (GPA) of 2.5 or above.
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 Elementary ED degree recognized on an official college transcript will have meet 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 ASOT-Elementary ED degree.
6. GPA admission requirements for the OUS schools are not necessarily satisfied with an AAOT Elementary ED degree. Please contact your school of choice for specific requirements.
7. To learn more about general education courses and their outcomes, see page page 52.
8. Courses with the (IL) indicator fulfill the Information Literacy requirement for the AAOT Elementary ED. A minimum of 1 course fulfills this requirement.
9. Course with the (CL) indicator fulfill the Cultural Literacy requirement for the AAOT Elementary ED. A minimum of 1 course fulfills this requirement.
10. Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance.

Associate of Science/Oregon Transfer Degree in Business (ASOT-BUS)

Requirements	Credits/ Courses	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. One course with an (IL) Information Literacy and a (CL) Cultural Literacy indicator must be completed These must include the following:		
Foundational Requirements		
Writing (A minimum of eight credits of college-transfer writing courses.)	Eight credits minimum	**WR**121(IL) and either 122(IL) or 227(IL).
Math (A minimum of three courses for which **MTH**095 is a prerequisite, including one course in statistics.)	Three courses minimum	**MTH105 or above, MTH243, and one additional math course:** **MTH**244 or **MTH**241 for EOU, SOU **MTH**241 for OSU, WOU, UO
Oral Communication (One course in the fundamentals of speech or communication.)	One course minimum	**COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL).
Computer Applications (Proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of applicable courses.)	Three credits minimum	**CIS**101, **CIS**125A, **CIS**125E. **CA**208. **BA**131.
Discipline Studies		
Arts and Letters (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.)	Three courses minimum	**ART**101(CL), 115, 116, 117, 120, 121, 131, 201, 204, 205, 206, 207(CL), 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 261, 265, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL). **ENG**100, 104, 105, 106, 107(CL), 108(CL), 109(CL), 201, 202, 204(CL), 205(CL), 206(CL), 216, 220(CL), 250, 253(CL), 254(CL), 260, 261, 269(CL). **FA**255, 256, 257. **FR**201, 202, 203. **HUM**106, 120(CL), 220(CL), 225(CL). **JNL**224 **JPN**120, 201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 205(CL), 206(CL). **REL**160(CL), 201, 202, 203(CL). **RUS**201, 202, 203. **SPN**201, 202, 203, 214, 215, 216, 250, 251. **TA**110(CL), 141, 142, 242. **WR**240, 241, 242, 243, 244, 250, 262.
Social Sciences (Four courses chosen from two or more disciplines, with a minimum of 2 courses In "principles of economics" (to include microeconomics and macroeconomics) at the 200 level [**EC**201, **EC**202].)	Four courses minimum	**ATH**101(CL), 102(CL), 103(CL). **CLA**201, 202, 203. **EC**200, 201, 202. **ED**200, 229. **GEG**105, 106(CL), 107(CL), 140, 201, 202, 206, 207. **HST**104, 105, 106, 157, 201(CL), 202(CL), 203(CL), 228, 237, 257(CL), 258(CL), 262(CL), 269(CL). **PS**201, 202, 203, 205, 250. **PSY**101, 201, 202(CL), 213, 218(CL), 234(CL), 237, 239, 280(CL). **SOC**204(CL), 205(CL), 206(CL), 210(CL), 213(CL), 221, 223(CL), 224(CL), 232(CL). **WS**101(CL), 102(CL).
Sciences/Math/Computer Science (Four courses chosen from two or more disciplines, including at least 3 laboratory courses in biological or physical science.)	Four courses minimum	**Choose three courses from:** **BI**101, 102, 103, 112, 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, 108, 141, 142. **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, 205, 260, 271, 290. **MTH**105 or above

Business-Specific Requirements (Each course in this section must be completed with a grade of C or better.)	Three credits minimum Eight credits minimum Three credits minimum	**BA**101. **BA**211 and 213; or **BA**211, 212, and 213. **BA**226 or other advisor approved Business elective.
Electives and/or University-Specific Prerequisites Complete additional courses to bring the total number of credits to 90. A maximum of 12 credit hours in career and technical education courses may be included with the exception of the following: **BT**104, 105. Courses must be 100 level or higher.	8–14 credits	Depends on choice of transfer institution. See an advisor. EOU—**WR**227 OIT—**BA**206, 223, and **PSY**201 OSU—**BA**275 or **MTH**244 and **COMM**111 PSU—**BA**214 and **COMM**111 UO—**MTH**244

Notes:

1. Earn a cumulative grade point average (GPA) of 2.00 or above.
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 ASOT-Business degree recognized on an official college transcript will have meet 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 ASOT-Business degree.
6. GPA admission requirements for the OUS schools are not necessarily satisfied with an ASOT-Business degree. Please contact your school of choice for specific requirements.
7. To learn more about general education courses and their outcomes, see page 52.
8. Courses with the (IL) indicator fulfill the Information Literacy requirement for the ASOT-Business. A minimum of 1 course fulfills this requirement.
9. Course with the (CL) indicator fulfill the Cultural Literacy requirement for the ASOT-Business. A minimum of 1 course fulfills this requirement.
10. Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance.

Associate of Science/Oregon Transfer Degree in Computer Science (ASOT-CS)

Requirements	Credits/ Courses	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. One course with an (IL) Information Literacy and a (CL) Cultural Literacy indicator must be completed. These must include the following:		
Foundational Requirements		
Writing (Minimum of eight credits)	Eight credits minimum	**WR**121(IL) and either 122(IL) or 227(IL).
Math (Most universities will expect additional math courses. Consult with an advisor to confirm you are taking the appropriate math courses.)	Two courses minimum	**MTH**251 and 252
Oral Communication (Minimum of one course. **COMM**111 recommended by most schools. Consult with an advisor to confirm that you are taking the appropriate course.)	One course minimum	**COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL).
Physical Education or Health (One or more courses totaling at least three credits)	Three credits minimum	Any **PE**185 course (one credit each); any **HE** or **HPE** course (three credits each).
Discipline Studies		
Arts and Letters (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.)	Three courses minimum	**ART**101(CL), 115, 116, 117, 120, 121, 131, 201, 204, 205, 206, 207(CL), 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 265, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100(CL), 105(CL), 111, 112, 115(CL), 130, 212, 218, 219(CL), 227(CL), 237(CL), 260(CL). **ENG**100, 104, 105, 106, 107(CL), 108(CL), 109(CL), 201, 202, 204(CL), 205(CL), 206(CL), 216, 220(CL), 250, 253(CL), 254(CL), 260, 261, 269(CL). **FA**255, 256, 257. **FR**201, 202, 203. **HUM**106, 120(CL), 220(CL), 225(CL). **JNL**224 **JPN**201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 205(CL), 206(CL). **REL**160(CL), 201, 202, 203(CL). **RUS**201, 202, 203. **SPN**201, 202, 203, 214, 215, 216, 250, 251. **WR**240, 241, 242, 243, 244, 250, 262.
Social Sciences (Four courses chosen from two or more disciplines.)	Four courses minimum	**ATH**101(CL), 102(CL), 103(CL). **CLA**201, 202, 203. **EC**200, 201, 202. **ED**216, 229 **GEG**105, 106(CL), 107(CL), 140, 201, 202, 206, 207. **HST**104, 105, 106, 157, 201(CL), 202(CL), 203(CL), 228, 237, 257(CL), 258(CL), 262(CL), 269(CL). **PS**201, 202, 203, 205, 250. **PSY**101, 201, 202(CL), 213, 218(CL), 234(CL), 237, 239, 280(CL). **SOC**204(CL), 205(CL), 206(CL), 210(CL), 213(CL), 221, 223(CL), 224(CL), 232(CL). **WS**101(CL), 102(CL).
Sciences/Math/Computer Science (Four courses chosen from two or more disciplines, including at least three laboratory courses in biological or physical science.)	Four courses minimum	**Choose three courses from:** **BI**101, 102, 103, 112, 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, 108, 141, 142. **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, 205, 260, 271. **MTH**105 or above.

ASOT-CS continued next page

Computer Science-Specific Requirements (Most universities will expect additional computer science courses. Consult with an advisor to confirm you are taking the appropriate courses.)	Four courses minimum	**CS**160, 161, 162, 260, 290
Electives and/or University-Specific Prerequisites (Complete additional courses to bring the total number of credits to 90. A maximum of 12 credit hours in career and technical education courses may be included with the exception of the following: **BT**104, 105. Courses must be 100 level or higher.)		Depends on choice of transfer institution. See an advisor.

Notes:

1. Earn a cumulative grade point average (GPA) of 2.00 or above.
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 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.
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 ASOT-Computer Science degree.
6. GPA admission requirements for the OUS schools are not necessarily satisfied with an ASOT-Computer Science degree. Please contact your school of choice for specific requirements.
7. To learn more about general education courses and their outcomes, see page 52.
8. Courses with the (IL) indicator fulfill the Information Literacy requirement for the ASOT-Computer Science. A minimum of 1 course fulfills this requirement.
9. Courses with the (CL) indicator fulfill the Cultural Literacy requirement for the ASOT-Computer Science. A minimum of 1 course fulfills this requirement.
10. Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance

Associate of Applied Science Degree Requirements (AAS)

Requirements	Credit Hours	Courses which satisfy requirements
Career and Technical Education Requirements Complete the required courses and credits listed for each career and technical education program. See page 71 to 198 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.		
Related Instruction and Digital Literacy Requirements		
Communication/Writing (A minimum of three credits)	3/4	Choose from **WR**088, 115, 121, or higher writing course, or approved program substitute.
Computation/Mathematics (A minimum of three credits)	3/4	One course of **MTH**052 or higher numbered math course, or approved program substitute.
Human Relations/Psychology/Sociology (A minimum of three credits)	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	Take one of the following***: **BA**131; **CA**100; **CIS**101* (or higher); **CIS**120*; **CAM**160*; **DRF**165*, **NUR**209*..
General Education Electives (A minimum of three credits chosen from one of these three disciplines)	3/4	**Arts and Letters** American Sign Language, Art, Communication, English, Film Arts, Foreign Language, Humanities, Journalism, Linguistics, Music, Philosophy, Religious Studies, Theater, Writing **Science/Applied Science** Approved program-related instruction may satisfy this requirement, or courses in Biology, Chemistry, Computer Science, Education, 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
A minimum of three additional credits from any of these areas	3/4	**Arts and Letters** American Sign Language, Art, Communication, English, English as a Non-Native Language**, Film Arts, Foreign Language, Humanities, Journalism, Linguistics, Music, Philosophy, Religious Studies, Theater 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, Education, 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:

1. Complete a minimum of 24 credits at Chemeketa.
2. Earn a cumulative grade point average (GPA) of 2.00 or above.
3. We recommend that you see an advisor for guidance before you enroll.
4. Only courses numbered 050 or higher—unless otherwise indicated—apply toward the degree.
5. 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 45.

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 45 for more Information regarding the Digital Literacy requirement for the AAS degree.

Associate of Science Degree Requirements (AS)

Requirements	Credits	Courses which satisfy requirements
Complete a minimum of 90 credits. All courses must be passed with a grade C- or better. These must include the following:		
General Education Requirements		
Writing	Six credits minimum	**WR**121 and one additional writing course for which **WR**121 is a prerequisite.
Math	Four credits minimum	**MTH**111 or higher.
Oral Communication	Three credits minimum	**COMM**100, 105, 111, 112, 115, 130, 212, 218, 219, 227, 237, 260.
Physical Education or Health (One or more courses totaling at least three credits)	Three credits minimum	Any **PE**185 course (one credit each); any **HE or HPE** course (three credits each). A maximum of three credits of **PE**185 may be applied toward degree.
Arts and Letters (Minimum of nine credits chosen from two or more disciplines.) The course taken to meet the Oral Communications/Rhetoric requirement above may not be used to meet this requirement.	Nine credits minimum	**ART**101, 115, 116, 117, 120, 131, 201, 204, 205, 206, 207, 221, 222, 223, 224, 225, 234, 237, 238, 240, 258, 265, 281, 291. **ASL**211, 212, 213. **CHN**201, 202, 203 **COMM**100, 105, 111, 112, 115, 130, 212, 218, 219, 227, 237, 260. **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, 225. **JNL**224 **JPN**201, 202, 203. **LING**210. **MUS**111, 112, 113, 161. **PHL**201, 203, 204, 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, 250, 262.
Social Sciences (Minimum of nine credits chosen from two or more disciplines.)	Nine credits minimum	**ATH**101, 102, 103. **CLA**201, 202, 203. **EC**200, 201, 202. **ED**216, 229. **GEG**105, 106, 107, 140, 201, 202, 206, 207. **HST**104, 105, 106, 157, 201, 202, 203, 228, 237, 257, 258, 262, 269. **PS**201, 202, 203, 205, 250. **PSY**101, 201, 202, 213, 218, 234, 237, 239, 280. **SOC**204, 205, 206, 210, 213, 221, 223, 224, 232. **WS**101, 102.
Science (Courses must include a laboratory.)	12 credits minimum	**BI**101, 102, 103, 112, 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, 108, 141, 142. **PH**201, 202, 203, 207, 208, 209, 211, 212, 213.
Digital Literacy (As demonstrated by course completion or competency testing.)	Three credits minimum	**Choose three credits from:** **BA**131 **CA**100 **CIS**101, 102A, 120, 121, 125A, 125E, 125G, 133J, 133JS, 133SC, 133U, 133VB, 135AE, 140B, 140U, 145, 152,178I, 178W, 179, 186, 195, 233J, 234J, 244, 275, 278, 279, 283, 284, 288, 289, 295. **CS**160, 161, 162, 260, 271, 290. **NUR**209
Electives (Complete additional courses to bring the total number of credits to 90.)		All elective credits must be numbered 100 or above and be lower division collegiate courses.

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 Arts 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.

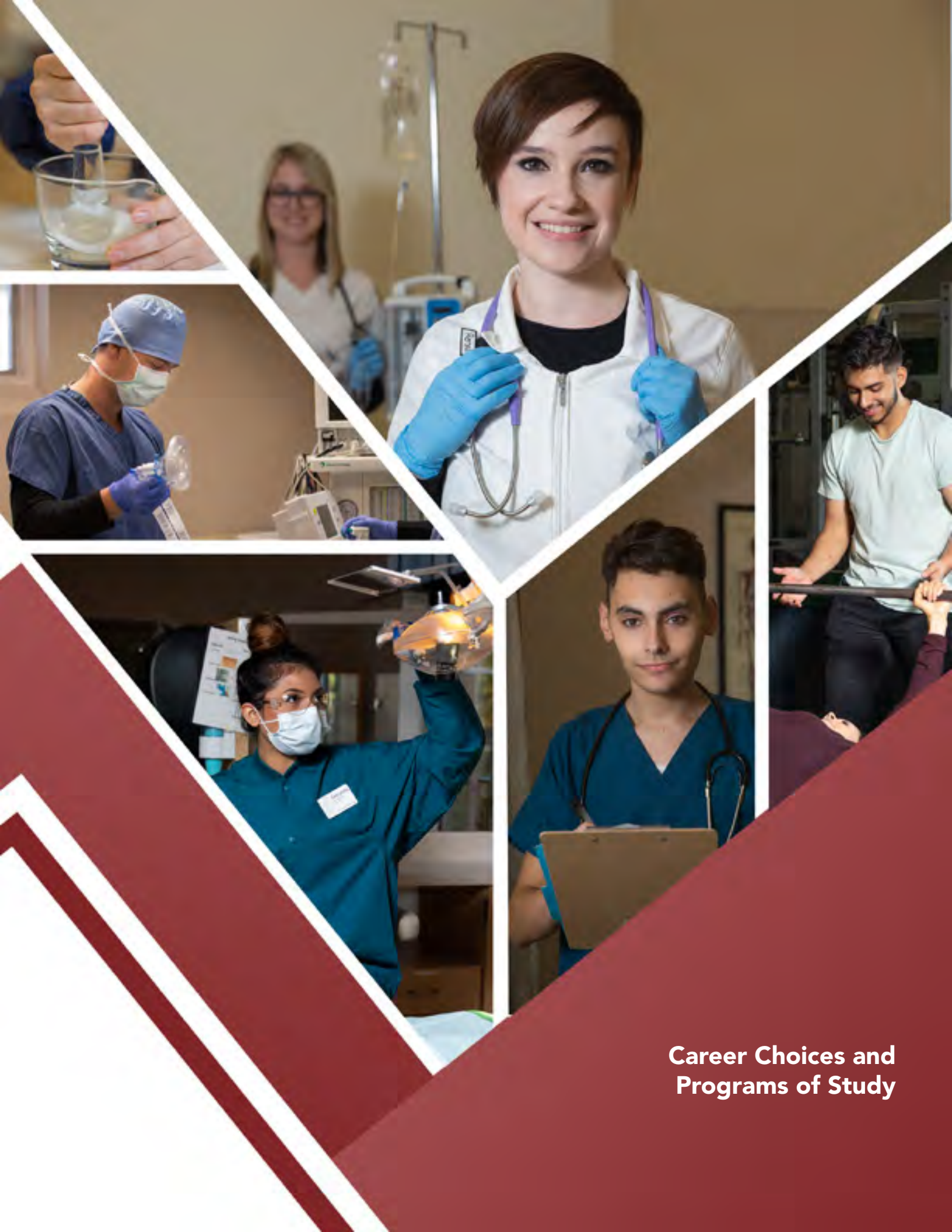
Associate of General Studies Degree Requirements (AGS)

Requirements	Credits	Courses which satisfy requirements
Complete a minimum of 90 credits. These must include the following:		
General Education Requirements		
Writing (A minimum of six credits with a grade of C- or better.)	6	**WR**121 and one additional course from **WR**122, 227, 240, 241, 242, 243, 244, 245, 262; or **BA**214.
Math (A minimum of four credits with a grade of C- or better.)	4	**MTH**053 or above.
Oral Communication (A minimum of three credits.)	3/4	**COMM**100 or above.
Digital Literacy	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. **BA**131 **CA**100 **CIS**101* (or higher) **CIS**120* **CAM**160* **DRF**165* **HTM**143* **NUR**209*
Physical Education or Health (A maximum of 12 credits of physical education may be applied toward the degree.)	3	Any **PE**185 course (one credit each), or any **HE** or **HPE** course (three credits each).
Distribution Requirements - Each course must be a minimum of three credits and numbered 100 or above		
Arts and Letters (Each course must be a minimum of three credits.)	9	Art, American Sign Language, Communication, English, Film Arts, French, Chinese, Humanities, Journalism, Japanese, Linguistics, Music, Philosophy, Religious Studies, Russian, Spanish, Theater, Writing.
Social Sciences (12 credits chosen from at least two disciplines. Each course must be a minimum of three credits.)	12	Anthropology, Chicano/Latino Studies, Economics, Education, Geography, History, Political Science, Psychology, Sociology, Social Science, Women's Studies.
Science (Eight credits of biological or physical science courses which include a laboratory.)	8	Biology, Chemistry, Geology, General Science, Physics.
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 203 for how courses are numbered. All collegiate-level courses must be numbered 100 or above.

Note

1. Earn a cumulative grade point average (GPA) of 2.00 or above..
2. Complete a minimum of 24 credits at Chemeketa.
3. A maximum of 12 credit hours of cooperative work experience may be applied toward the degree.

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



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 page 106 through 182 only those areas of study terminating in a certificate or degree are referred to as "programs."

Fastest Growing Occupations in the United States		
Data Scientists and Mathematical Science Occupations	See Associate of Arts Oregon Transfer/Mathematics Major	page 56
Forest Fire Inspectors and Prevention Specialists	See Fire Prevention Associate of Applied Science	page 180
Home Health and Personal Care Aids	See Nursing Associate of Applied Science	page 160
Information Security Analysts	See Computer Information Systems Associate of Applied Science	page 190
Mathematicians	See Associate of Arts Oregon Transfer/Mathematics Major	page 56
Medical and Health Service Managers	See Nursing Associate of Applied Science/Nursing Major	page 160
Nurse Practitioners	See Nursing Associate of Applied Science/Nursing Major + Post-Baccalaureate Education	page 160
Occupational Therapy Assistants	Contact Linn-Benton Community College	541.917.4999
Operations Research Analysts	See Associate of Arts Oregon Transfer/Management Science Major	page 56
Physical Therapist Assistant	Contact Mt. Hood Community College	503.491.7464
Physician Assistant	See Associate of Arts Oregon Transfer/Biology Major	page 56
Solar Photovoltaic Installers	See Renewable Energy Management Associate of Applied Science Degree Option	page 198
Speech-Language Pathologists	See Speech Language Pathology Associate of Applied Science	page 166
Statisticians	See Associate of Arts Oregon Transfer/Mathematics Major	page 56
Substance Abuse, Behavior Disorder, and Mental Health Counselors	See Human Services Associates of Applied Sience	page 154
Wind Turbine Service Technicians	See Renewable Energy Management Associate of Applied Science Degree Option	page 198
Source: U.S. Department of Labor Statistics Publish Date: April 8, 2021		
Speech-Language Pathologists	See Speech Language Pathology Associate of Applied Science	page 166
Statisticians	See Associate of Arts Oregon Transfer/Mathematics Major	page 56
Wind Turbine Service Technicians	See Renewable Energy Management Associate of Applied Science Degree Option	page 198
Source: U.S. Department of Labor Statistics Publish Date: April 27, 2020		

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
Construction Managers	Karen Edwards	503.399.3996	See Business Management Program, page 117
Dental Assistants **Dental Hygienist**	Jill Lomax Paula Hendrix	503.399.5084 503.399.4697	See Dental Assisting Program, page 150 See Dental Hygienist, page 152
Education Administrators, Preschool and Childcare Center/Program	Pam Ditterick	503.399.6076	See Early Childhood Education Program, page 138
Electrical and Electronics Engineering Technician	Chuck Sekafetz	503.399.6254	See Electronics Program, page 195
Electro-Mechanical Technicians	Chuck Sekafetz	503.399.6254	See Electronics Program, page 195
Graphic Designers	Peter Hoelter	503.399.6475	See Visual Communication Program, page 110
Industrial Engineering Technicians	Mike Myers	503.399.6066	See Welding Technology Program, page 100
Precision Instrument and Equipment Repairers	Chuck Sekafetz	503.399.6254	See Electronic Technologies Program, page 195
Preschool Teachers, Except Special Education	Pam Ditterick	503.399.6076	See Early Childhood Education Program. page 138
Private Detectives and Investigators	Megan Gonzalez	503,584,7359	See Criminal Justice Program, page 170
Transportation, Storage, and Distribution Managers	Karen Edwards	503.399.3996	See Business Management Program, page 117
Source: Oregon Employment Department Retrieved Date: April 22, 2021			

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	Lana Tuss, 503.399.6152	43	page 113
Arc Welding	Mike Myers, 503.399.6066	22	page 100
Automotive Entry-Level Technician	Brian McLearn, 503.399.6523	28	page 90
Basic Corrections	Megan Gonzalez, 503.584.7350	37	page 174
Basic Law Enforcement	Megan Gonzalez, 503.584.7350	38	page 175
Business Software	Barbara Johansen, 503.399.2894	18	page 129
Computer Programming	Mandy Reininger, 503.365.4822	28	page 192
Computer Numerically Controlled (CNC) Operator	Sheldon Schnider, 503.589.7875	40	page 96
Data Analytics for Accounting	Lana Tuss, 503.399.6152	39	page 114
Early Childhood Education: Infant/Toddler	Pam Ditterick, 503.399.6076	15	page 139
Early Childhood Education: Preschool	Pam Ditterick, 503.399.6076	14	page 139
Emergency Medical Technician	Kiva Lyell, 503.399.2660	12	page 178
Entrepreneurship and Small Business Management	Karen Edwards, 506.399.3996	36	page 119
Event Management	Eric Aebi, 503.589.7994	36	page 123
Food and Beverage Management	Eric Aebi, 503.589.7994	36	page 123
Lodging Management	Eric Aebi, 503.589.7994	36	page 124
MIG Welding	Mike Myers, 503.399.6066	14	page 101
Office Fundamentals	Barbara Johansen, 503.399.2894	38	page 131
Payroll	Lana Tuss, 503.399.6152	20	page 115
Sustainability in Management	Karen Edwards, 503.399.3996	12	page 118
Systems Administrator and Network Security	Mandy Reininger, 503.365.4822	38	page 192
Tax Preparation	Lana Tuss, 503.399.6152	16	page 115
Tourism and Travel Management	Eric Aebi, 503.589.7994	36	page 124
Vineyard Operations	Scott Dwyer, 503.589.7663	42	page 103
Virtual Office Assistant	Barbara Johansen, 503.399.2894	39	page 132
Web Developer	Mandy Reininger, 503.365.4822	31	page 193
Short-Term Training Awards (Non-credit) Training	Contact	Duration	
Basic Nurse Assistant	Paula Hendrix, 503.399.3907	11 weeks	
DEQ Maintenance Provider	CCBI, 503.399.5181	16 hours	
DEQ Onsite Wastewater Installer	CCBI, 503.399.5181	8 hours	
Flagger Trainer	CCBI, 503.399.5181	8 hours	
Non-Credit Training Certificates	Contact	Hours	
Apple macOS System Maintenance	CCBI, 503.399.5181	24	
Basic Warehouse Certificate	Marshall Roache, 503.399.2339	32	
Real Estate Broker	CCBI, 503.399.5181	38	
Truck Driving	Paul Davis, 503.584.7553	160	

Workforce Development

Chemeketa Agriculture Hub

AgriBusiness Management NonCredit Program

503.399.5089 or 503.589.7759

go.chemeketa.edu/agriculture

The AgriBusiness Management program focuses on the basic principles of agricultural recordkeeping and financial management. These noncredit 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

This course 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

In this course, you'll monitor and assess the financial position of your agricultural business based upon records and analysis obtained in AgriBusiness Management 1 and explore computerized accounting and income tax management.

XAGR9800J, K, L Agribusiness Management 3

This course focuses on reorganizing your agricultural business based on accumulated financial data and further develops estate, retirement, and labor management plans.

XAGR9800M, N, P Agribusiness Management 4

In this course, you'll apply recordkeeping skills and three years of analysis data to farm reorganization and financial management decisions. You'll use a year-end analysis in evaluating effectiveness of reorganization and management practices implemented during the first three years.

XAGR9800Q, R, S Agribusiness Management 5

This course will help you apply recordkeeping skills to individual businesses, using records in business dealings with off-campus agencies and individuals.

XAGR9800 T Agricultural Educational Tour

You'll take international and domestic tours to "someplace in the world." These tours showcase the world as our classroom for 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 the participants' understanding of technology, marketing research, and sustainability. For more information, email the program instructors at agribusiness@chemeketa.edu.

XAGR9801 T Agribusiness Management Workshop

Workshops will discuss 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, and grains
- Nursery and horticulture
- Vineyard and wineries
- Orchard crops
- Livestock and dairies
- Value added and community agriculture
- Vegetable producers
- Beekeepers

For more information, call 503.399.5089 or 503.589.7759.

Community Agriculture Classes

503.399.5139

Chemeketa offers noncredit classes to meet the continuing educational needs the agriculture industry,

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 and Industry (CCBI)

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 and meeting rooms that can seat up to 130 people, and a small Tech Hub with desktop computers. These rooms have wireless Internet and 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 attend regularly-scheduled workshops or employers can arrange for training to be delivered at CCBI or at their workplace.

Chemeketa Small Business Development Center (SBDC)

Suite 210 • 503.399.5088

oregonsbdc.org/centers/chemeketa-sbdc/

Located at CCBI, the Chemeketa Small Business Development Center (SBDC) provides services for every stage of your business, whether you are planning a new business, launching, expanding, renewing, or moving on, the SBDC provides education and advising services to all entrepreneurs. Areas of assistance include, but are not limited to, pre-venture feasibility, business plan development, strategic planning, financial analysis, personnel and organization issues, financing, and marketing. Advising is confidential and provided at no cost by a team of skilled professionals or business experts.

The SBDC also offers special programs:

- **The Small Business Management (SBM)** program combines classroom learning, networking and one-on-one coaching from a professional business adviser with the goal of supporting you and your business's success. Over a ten-month period, you will learn from both industry professionals and your successful small business peers through monthly classes on business management topics. You will learn how to take material from the classroom and apply it directly to your business and meet regularly with your business adviser to help you identify and prioritize outcomes and develop a plan to achieve them. For more information visit sbm.chemeketa.edu.
- **The Mastermind Group** provides peer-to-peer advisory members the opportunity to confidentially discuss strategic issues, challenges, and opportunities your business faces with trained facilitators. This group meets once a month for three hours with a dynamic team of established, noncompeting business owners acting as an external board of directors for each other.
- **The Entrepreneurship (ENT)** online courses offer an opportunity for business owners in all stages of business to earn college credit while taking courses that use their own business idea or existing business as their case study. Courses include evaluation of business skills and ability to successfully operate an entrepreneurial venture, develop a business plan, and manage finances. For more information, visit online.chemeketa.edu/
- **The EDGE Business Accelerator Program** is located on the third floor of the CCBI. Join a cohort of other business owners in a supportive, encouraging and learning environment. As part of this education program you'll receive business advising that is pertinent to your success, Class A office space, shredding services, and other amenities. There is an application process and a monthly fee. For more information, visit edge.chemeketa.edu.

For more information, visit sbdc.chemeketa.edu or call the SBDC at 503.399.5088.

Customized Training

503.399.5181

Find workforce solutions for your business and industry through customized consulting and training. Clients include industry sectors, businesses, organizations, and government agencies. Training is delivered at a convenient location, date, and time or virtually. Through statewide and regional networks, the Chemeketa Center for Business and Industry (CCBI) has access to a wide variety of trainers. Training is customized to meet the needs of employers.

Services include:

- **Employee Skill Development** A wide array of employee and organizational development training is available including, customer service, business writing, presentation training, leadership, supervision, safety, continuous

process improvement, and project management. Training is tailored to meet employer needs.

- **Noncredit Certifications** We can customize a non-credit certification that would meet your industry needs. Call and begin the process for program design with one of our coordinators today.
- **Assessments** We can help you with a needs assessment to determine your company or industry's training needs and design a customized training plan.

For more information, visit ccbi.chemeketa.edu or call 503.399.5181.

Work Based Learning

Cooperative Work Experience/ Internship

503.399.5028

cwe@chemeketa.edu

As a student, you may be qualified to participate in an 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 faculty 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 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 Bldg. 38 on the Salem Campus.

Job readiness classes are offered to all students. These classes include Résumé and Job Search Correspondence, Interviewing for Success, and Career Jump Start.

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

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.

You may earn a certificate of completion by successfully completing a minimum of 18 credits of ST100A-Q Occupational Skills Training and related prescribed courses (based upon the approved length of your training plan) with a grade of C or better. Up to 12 credits may be applied toward the Associate of Arts Oregon Transfer degree, and some credits may be applied toward other certificates or 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 or email ost@chemeketa.edu.

Pre-College Programs

Academic Development Programs

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

Basic Skills Development (BSD)

503.399.5224, Bldg. 22, Rm. 100

BSD classes are for English-speaking adults who need to build their skills in preparation for taking college classes, including those who already possess a high school diploma or General Educational Development (GED) certificate.

Classes are offered Monday through Thursday in the morning and evening in reading, writing, and math. Students enrolled in these classes will also have access to the program's computer lab and instructional specialists outside of class hours. After successful completion of the BSD program, you should be ready to transition into the College.

The enrollment process:

- Take the college ACCUPLACER exam and receive a referral to our program
- Attend an informational orientation with one of our advisors

Costs

- $95 tuition (due at time of registration)
- $40 annual parking pass

Financial Assistance

Supplemental Nutrition Assistance Program (SNAP) recipients, who are not receiving Temporary Assistance for Needy Families (TANF), can participate in Chemeketa's SNAP Training & Employment Program (STEP) to receive personal support and coaching to help them meet their educational and career goals.

- Chemeketa **Salem**, 503.399.6509 or 503.399.5119
- Chemeketa **Yamhill Valley**, 503.584.7543
- Chemeketa **Woodburn**, 503.316.3255
- Chemeketa **Polk,** 503.316.3242

Contact:

- Chemeketa **Salem**, 503.399.5224
- Chemeketa **Polk,** 503.399.5206
- Chemeketa **Woodburn**, 503.399.5213
- Chemeketa **Yamhill Valley**, 503.399.5219

Chemeketa Language and Culture Institute

503.365.4686, Fax: 503.365.4768

internationaladmissions@chemeketa.edu

The Language and Culture Institute is a part of the English for Speakers of Other Languages (ESOL) program designed 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 (EN)

503.399.5224

The English Now (EN) program offers limited English-speaking students the opportunity to learn English in noncredit, Continuing 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 are designed to help students become more confident with the language, more comfortable in social situations, and more connected to their community. You can transfer to English for Speakers of Other Languages (ESOL) or English Now Learner (ENL) classes upon completion of EN courses.

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.

English Language Learning

English for Speakers of Other Languages (ESOL)

503.399.5224

Bldg. 22, Rm. 100

The ESOL program offers English classes to people whose native language is not English. Classes are taught by experienced instructors in the morning and

evening Monday through Thursday. Classes range from beginner to advanced in reading, writing, listening, speaking, pronunciation, grammar, and technology. Students enrolled in these classes will also have access to the program's computer lab and instructional specialists outside of class hours.

Students who complete the program are eligible for scholarships when transitioning into the College.

The enrollment process:

- Attend an informational orientation
- Take a Comprehensive Adult Student Assessment Systems (CASAS) placement test

Costs:

- $20 testing fee (due at time of testing)
- $95 tuition (due at time of registration)
- Students may need to buy textbooks for some classes

Financial Assistance

Supplemental Nutrition Assistance Program (SNAP) recipients, who are not receiving Temporary Assistance for Needy Families (TANF), can participate in Chemeketa's SNAP Training & Employment Program (STEP) to receive personal support and coaching to help them meet their educational and career goals.

- Chemeketa **Salem**, 503.399.6509 or 503.399.5119
- Chemeketa **Yamhill Valley**, 503.584.7543
- Chemeketa **Woodburn**, 503.316.3255
- Chemeketa **Polk,** 503.316.3242

Contact:

- Chemeketa **Salem**, 503.399.5224
- Chemeketa **Polk,** 503.399.5206
- Chemeketa **Woodburn**, 503.399.5213
- Chemeketa **Yamhill Valley**, 503.399.5219

Inglés para hablantes de otras lenguas (ESOL)

503.399.5224, Edificio 22, Oficina 100

El programa de Inglés para hablantes de otras lenguas (ESOL) ofrece clases de a aquellos cuyo idioma nativo no es el inglés. Ofrecemos clases por la mañana y por la tarde de lunes a jueves, desde principiantes hasta clases avanzadas en lectura, escritura, comprensión auditiva, expresión oral, pronunciación y tecnología. Los estudiantes inscritos en estas clases también tendrán acceso al laboratorio de lenguajes y a los especialistas instructivos fuera de las horas de clase.

Estudiantes que completen el programa, son elegibles para una beca para la transición al colegio.

El proceso de inscripción incluye

- Asistir a una orientación informativa.
- Tomar una prueba de colocación CASAS
- Costos:
- Cargo de evaluación $20 (tiene que pagarse al momento del exámen)
- Cargo de inscripción $95 (al momento de la inscripción)

Asistencia Financiera

Asistencia financiera está disponible para aquellos que reciben los beneficios de SNAP pero no TANF. Por favor llame al número apropiado para conocer los requisitos de elegibilidad y obtener más información.

- **Salem**—Angelica 503.399.6509 or Ana 503.399.5119
- **Yamhill Valley**—503.584.7543
- **Woodburn**—Irma 503.316.3255
- **Polk Center (Dallas)**—Nancy 503.316.3242

Contacto

- **Salem**—503.399.5224
- **Polk (Dallas)**—503.399.5206
- **Woodburn**—503.399.5213
- **Yamhill Valley**—503.399.5219

General Educational Development (GED)

503.399.5224, Bldg. 22, Rm. 100

The GED program is for English-speaking adults with basic comprehension and literacy skills who want to take classes to prepare for the GED exam. Classes are offered in the morning and evening for all four GED subjects, language arts, math, science, and social studies, taught by experienced instructors.

Students preparing for the GED exam will also acquire learning strategies to help them succeed in a college setting. Classes are available Monday through Thursday for 11 weeks each term. Students enrolled in the program will have access to the computer lab and instructional specialists outside of their scheduled class time. Students who complete the program are eligible for scholarships when transitioning into the College.

The enrollment process includes:

- Attend an informational orientation
- Take a Comprehensive Adult Student Assessment Systems (CASAS) placement test

Costs:

- $20 testing fee (due at time of testing)
- $95 tuition (due at time of registration)
- $40 annual parking pass

Financial Assistance

Supplemental Nutrition Assistance Program (SNAP) recipients, who are not receiving Temporary Assistance for Needy Families (TANF), can participate in Chemeketa's SNAP Training & Employment Program (STEP) to receive personal support and coaching to help them meet their educational and career goals.

- Chemeketa **Salem**, 503.399.6509 or 503.399.5119
- Chemeketa **Yamhill Valley**, 503.584.7543
- Chemeketa **Woodburn**, 503.316.3255
- Chemeketa **Polk,** 503.316.3242

Contact:

- Chemeketa **Salem**, 503.399.5224
- Chemeketa **Polk,** 503.399.5206
- Chemeketa **Woodburn**, 503.399.5213
- Chemeketa **Yamhill Valley**, 503.399.5219

GED en Español (Desarrollo de Educación General en Español)

503.399.5224, Edificio 22, Oficina 100

Puedes obtener un certificado de equivalencia de escuela secundaria pasando pruebas de Desarrollo Educativo General (GED) en español. Hay cuatro pruebas que cubren las siguientes materias: Artes Del Lenguaje (escritura y lectura), Estudios Sociales, Ciencias y Matemáticas. El programa de GED en Español ofrecen clases por las tardes para repasar habilidades básicas en lectura, escritura y matemáticas, y para prepararte para pasar las cuatro Pruebas de GED. Los estudiantes que completen el programa son elegibles para becas cuando estén haciendo la transición a la universidad.

El programa de GED en español para adultos te ofrece

- Clases vespertinas
- Las clases cubren las cuatro materias para la prueba de GED
- Tutoría uno-a-uno
- Acceso 24/7 a herramientas de aprendizaje en línea
- Asesoramiento individualizado
- Pruebas gratuitas de práctica oficial

Costo

- $95 por trimestre (se paga al momento de Registración).
- $20 por los exámenes de evaluación (se paga al momento de presentar examen).
- Estacionamiento $40 al Año

Asistencia Financiera

Asistencia financiera está disponible para aquellos que reciben los beneficios de SNAP pero no TANF.

Por favor llame al número apropiado para conocer los requisitos de elegibilidad y obtener más información.

- Chemeketa **Salem**, 503.399.6509 or 503.399.5119
- Chemeketa **Yamhill Valley**, 503.584.7543
- Chemeketa **Woodburn**, 503.316.3255
- Chemeketa **Polk,** 503.316.3242

llame al número apropiado para más información

- Chemeketa **Salem**, 503.399.5224
- Chemeketa **Polk,** 503.399.5206
- Chemeketa **Woodburn**, 503.399.5213
- Chemeketa **Yamhill Valley**, 503.399.5219

High School Equivalency Program (HEP)

503.589.7725, Bldg. 22, Rm. 100

The High School Equivalency Program (HEP) helps migratory and seasonal farmworkers and their immediate family members, who are 16 years of age or older and not currently enrolled in school, to obtain a General Educational Development (GED) certificate and later gain employment or begin post-secondary education or training.

Eligibility

You are eligible for HEP if you meet one of the following criteria:

- You or your immediate family members have engaged in migrant or seasonal farm work for at least 75 days in the last 24 months
- You have participated or have been eligible to participate in the Workforce Investment Act 167 (WIA 167) program
- You were eligible to participate in the Title C Migrant Education program within the last 24 months

AND

- You are at least 16 years of age or over
- You are not currently enrolled in an elementary or secondary school
- You have not earned a secondary school diploma or its equivalency

HEP will provide you with the academic skills necessary to pass the GED exams (Reasoning Through Language Arts, Mathematical Reasoning, Social Studies, and Science) and other services, including:

- Academic advising
- Academic excursions
- Books and materials
- Classes in English and Spanish
- Meals
- Stipend
- Tutoring services
- Technology and computer class

You may also be eligible for the following assistance:

- Child care
- Transportation
- Vision and dental

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:

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 50 students every year with both financial assistance and comprehensive support services with a goal of preparing them to obtain a career and technical education degree or continue their education at a four-year college or university. Second-year students will have access to follow-up services. For more information, call 503.589.7778.

High School Equivalency Program (HEP)

The High School Equivalency Program (HEP) is a federally funded program that supports 70 migrant and seasonal farmworkers and/or immediate family members to obtain a high school equivalency 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 child care scholarships. For more information, call 503.589.7725.

College-Level Skill Preparation

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 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 Tutoring and Study Skills Center, on the Salem Campus, Bldg. 2, Rm. 212. Classes in reading and study skills are also offered at the Polk, Yamhill Valley, and Woodburn locations.

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 (HSC) is designed to provide a safe environment that promotes student respect, responsibility and success. HSC'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 HSC is the fresh start you are offered both socially and academically.

The HSC 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.

Winema 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.

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.

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 Learning Charter 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. For more information and eligibility requirements call 503.630.5001.

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 503.399.4800.

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

Woodburn Winema 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 the day.

Agriculture, Industrial Technology & Skilled Trades

Tracks in this pathway lead to degrees, certificates, and careers in horticulture, wine hospitality and winemaking, automotive and diesel technology, robotics, apprenticeship, welding, and machining.

Agriculture track
- Crop Health Certificate
- Horticulture AS Degree
- Horticulture AAS Degree
- Irrigation Technician Certificate (Pending State Approval)

Apprenticeship Track
- Earn a Certificate or AAS degree
- Construction Trades and Apprenticeship Readiness (Pending State Approval)
- Electrician
- Heating, Ventilation, Air Conditioning
- Plumber
- Sheet Metal

Automotive & Diesel Track
- Automotive Body Repair Certificate (Pending State Approval)
- Automotive Entry Level Technician Certificate
- Automotive Machining Certificate (Pending State Approval)
- Automotive Technology AAS Degree
- Diesel Technology AAS Degree

Machining Track
- CAM Fundamentals Certificate
- CAD/CAM AAS Degree
- Robotics Track
- Robotics AAS Degree

Welding Track
- Arc Welding Certificate
- MIG Welding Certificate
- Welding Certificate
- Welding Fabrication AAS Degree

Wine Studies Track
- Vineyard Operations Certificate
- Vineyard Management AAS Degree
- Wine Hospitality Operations Certificate (See Hospitality Track)
- Winemaking AAS Degree

Agriculture

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

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 First Year Programs 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.

Horticulture

go.chemeketa.edu/horticulture

Program Outcomes

Students completing the Crop Health Management Certificate of Completion and the Horticulture AAS and AS degrees should be able to:

- Perform skills and use equipment necessary to propagate, transplant, fertilize, irrigate, prune, and otherwise regulate growth of plants.
- Recognize, name, and understand management requirements for plants commonly grown in Oregon and their associated pests.
- Demonstrate knowledge of government regulations, workplace safety, water regulations, pesticide safety, and crop sanitation requirements.
- Evaluate production practices in terms of currently understood principles of sustainability.

Students completing the Irrigation Technician Certificate of Completion should be able to:

- Distinguish between the different types of irrigation equipment and their applications.
- Design basic irrigation systems.
- Install properly designed irrigation systems.
- Identify mechanical components of valves, center pivots and pumps.
- Analyze irrigation pumps and controls in relation to a complete irrigation system.
- Assess and design fish screens.
- Perform soil moisture measurements and water scheduling.
- Develop an understanding of water related cultural perspectives, views and opinions.
- Understand watershed processes and how they relate to the natural environment.
- Gain insight into water laws and policies in the PNW which affect the use and non-use of water.

Crop Health Management Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $349; class fees, $367; universal fees, $961; and differential fees, $155. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Crop Health Management certificate provides education and training in disease, pest, and weed management; monitoring and scouting; biological control; plant fertility; and water quality issues. Course work prepares students to take and obtain their pesticide applicator license. The certificate prepares students for direct entry into the workforce and allows them to continue into the Horticulture degree program.

For more information contact Program Chair Joleen Schilling at 503.399.5150 or joleen.schilling@chemeketa.edu.

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.

First Year		
HOR112	**Pesticides and Safety**	2
HOR125	**Biological Control Agents**	2
HOR215	**Developing an IPM Program**	2
HOR236	**Integrated Pest Management: Weeds**	3
HOR237	**Integrated Pest Management: Insects & Disease**	4
HOR238	**Plant Problem Diagnosis**	2
HOR265	**Integrated Pest Management: Scouting and Monitoring**	2
HOR275	**Innovative Strategies for Water Management in Nurseries**	2
HOR280F	**Cooperative Work Experience**	6
SOIL205	**Soil Science**	4
SOIL206	**Plant Nutrition**	2

Horticulture Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,086; class fees, $837; universal fees, $2,914; and differential fees, $370. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Horticulture program prepares students for occupations in greenhouse and nursery production, propagation, crop health technicians, landscape technicians, plant sales representatives, and public horticulturists. The program offers a two-year associate of applied science degree.

For more information about the program contact Program Chair Joleen Schilling at 503.399.5150 or joleen.schilling@chemeketa.edu.

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		
CIS101	**Computing Concepts (or higher)**	3
HOR111	**Introduction to Horticulture**	3
WR121	**Academic Composition+ (or higher)**	4
SOIL205	**Soil Science**	4
Term 2		
HOR211	**Plant Propagation**	4
MTH070	**Elementary Algebra+ (or higher)**	4
PSY104	**Workplace Psychology+ (or higher)**	4
SOIL206	**Plant Nutrition**	2
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
WR227	**Technical Writing**	4
	Horticulture Elective*	4
Term 4		
HOR203	**Fall Practicum**	2
HOR226	**Fall Plant Identification**	4
HOR237	**Integrated Pest Management:**	
	Insects and Diseases	4
	Horticulture elective*	4
Term 5		
HOR112	**Pesticides and Safety**	2
HOR204	**Winter Practicum**	2
HOR225	**Greenhouse Production and Management**	4
HOR227	**Winter Plant Identification**	4
	Horticulture elective*	4
Term 6		
HOR205	**Spring Practicum**	2
HOR221	**Nursery Production and Management**	3
HOR228	**Spring Plant Identification**	4
HOR236	**Integrated Pest Management: Weeds**	3
	Horticulture elective*	2
Term 7		
HOR280F	**Cooperative Work Experience**	6

+Meets related instruction requirement, see page 45.
For subject areas, see page 52.

***Horticulture electives (select 14 credit hours):**		
BI131	**Environmental Science 1**	4
BI132	**Environmental Science 2**	4
BI133	**Environmental Science 3**	4
CH121	**College Chemistry 1 (or higher)**	5
HOR110	**Bees and Other Pollinators**	2
HOR115	**Nursery and Greenhouse Equipment and Safety**	3
HOR116	**Introduction to Phytotechnology**	4
HOR201	**Growing Vegetables in the Willamette Valley**	4
HOR212	**Advanced Plant Propagation**	2
HOR238	**Plant Problem Diagnosis**	2
HOR240	**Sustainable Landscape Design**	4
HOR251	**Growing Fruit in the Willamette Valley**	3
HOR255	**Identification of Herbaceous Plants 1**	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
HOR286	**Organic Gardening Summer Practices**	2
SPN101	**First Year Spanish Term 1**	4
SPN102	**First Year Spanish Term 2**	4
SPN103	**First Year Spanish Term 3**	4

Horticulture Associate of Science Degree to Oregon State University

The Associate of Science (AS) – Horticulture with transfer to Oregon State University (OSU) is designed for students that intend to transfer to Oregon State University to pursue a four-year degree in horticulture. Students that complete the AS degree will be prepared to enroll in upper-division horticulture course work at OSU. Students intending to transfer to a four-year institution other than OSU should consider the Associate of Arts Oregon Transfer degree (AAOT). Students pursing the AS Horticulture degree at Chemeketa need to work with advisors at both Chemeketa and OSU.

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,125; class fees, $1,031; universal fees, $2,914; and differential fees, $1,470. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

For more information about the program contact Program Chair Joleen Schilling at 503.399.5150 or joleen.schilling@chemeketa.edu.

You may earn an associate of 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		
HOR111	**Introduction to Horticulture**	3
MTH111	**College Algebra (or higher)**	5
WR121	**Academic Composition+ (or higher)**	4
	Arts and Letters Course*	4
	Social Science Course**	4
Term 2		
CH121	**College Chemistry 1**	5
	or	
CH221	**General Chemistry 1**	5
WR227	**Technical Writing**	4
	Arts and Letters Course*	4
	Social Science Course**	4
Term 3		
CH122	**College Chemistry 2**	5
or		
CH222	**General Chemistry 2**	5
CIS101	**Computing Concepts**	3
HOR228	**Spring Plant Identification**	4
HPE295	**Health and Fitness for Life**	3
	Physical Education Course***	1
Term 4		
BI211	**Principles of Biology 1**	5
CH123	**College Chemistry 3**	5
	or	
CH223	**General Chemistry 3**	5
HOR226	**Fall Plant Identification**	4
SOIL205	**Soil Science**	4
Term 5		
BI212	**Principles of Biology 2**	5
	Cultural Diversity Course******	4
	Difference, Power and Discrimination Course*******	4
Term 6		
BI213	**Principles of Biology 3**	5
	Oral Communication Course********	4
HOR276	**Organic Gardening**	3
*Choose two of the following: ART204, ART205, ART206, ENG201, ENG202, ENG204, ENG205, ENG254, ENG256		
**Choose two of the following: ATH103, EC201, EC202, PS205, PSY201, PSY202, SOC204, SOC205		
****Choose any PE185 course		
****Choose one of the following: ART201, REL160		
*****Choose one of the following: HST201, HST202, HST203, SOC206		
******Choose one of the following: COMM111, COMM112, COMM218		

Irrigation Technician Certificate of Completion

(Pending State Approval)

In addition to tuition, estimated costs for students who complete the courses listed below are books, $349; class fees, $367; universal fees, $961; and differential fees, $155. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Irrigation Technician program will provide hands-on training and education in irrigation system design, operation, scheduling, and troubleshooting.

The Irrigation Certificate prepares students to enter the workforce as:

- Irrigation Designers
- Installation Foreman
- Service Technician
- Sales Personnel

After completing the Irrigation Certificate students will be prepared to pass the exam for either the Certified

Agricultural Irrigation Specialist (Irrigation Association) or the Specification for Irrigation System: Installation and Maintenance Certification Programs (EPA WaterSense).

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		
HOR111	**Introduction to Horticulture**	3
HOR130	**Irrigation Principles and Practices**	3
MTH081	**Technical Mathematics 1**	4
	or	
MTH111	**College Algebra**	5
SOIL205	**Soil Science**	4
Term 2		
ELT100	**Electronics Fundamentals for Non-majors**	4
HOR275	**Innovative Strategies for Water Management in Nurseries**	2
MT227A	**Pneumatics and Hydraulics Fundamentals**	3
MTH082	**Technical Mathematics 2**	4
	or	
MTH112	**Trigonometry**	5
Term 3		
HOR135	**Irrigation Controllers and Instrumentation**	4
HOR140	**Irrigation Pump Applications**	3
HOR145	**Irrigation Design and Components**	3
HOR150	**Irrigation Blueprint Reading and Sketching**	2
Term 4		
HOR280E	**Cooperative Work Experience**	5

Apprenticeship

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 employers and trade-related instruction. Apprentices work full-time and take courses online or face-to-face one or two evenings a week for two or four years, depending on the program.

The instruction at Chemeketa is for those already working in selected trades as apprentices, or for journey-level workers who wish to upgrade their skills or knowledge. First and second-year HVAC/R and sheet metal courses are open to the public. The programs require two or four years of OJT and related instruction to earn a journey card. Plumbers and electricians require state licensure at the conclusion of their training. HVAC/R technicians may test for their LE/B license.

Chemeketa's Apprenticeship Department offers 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. There is an Electrician Technologies Apprenticeship Certificate of Completion for Residential Electricians. The program provides statewide transfer opportunities. 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, with limited courses available to the general student population.

If you are interested in applying for an Oregon State Apprenticeship program, visit oregonapprenticeship.org or oregon.gov/boli/apprenticeship 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. IEC Oregon manages the electrician program and may be reached at iecoregon.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. The Residential Electrician Program is 4,000 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 transferring into the HVAC/R or sheet metal programs. Contact other programs directly about transferring.

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
WR115	**Introduction to Composition+ (or higher)**	4
	Human Relations Requirement*	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
Plus: Choose one area of specialization (HVAC/R, Sheet Metal or Plumbing)		
*Human Relations Requirement (Choose one of the following courses): PSY101,104, 201,202, 237, 239, 282, or SOC204, 205, 206, 210, 213.		

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
MTH095	**Intermediate Algebra+ (or higher)**	4
WR121	**Academic Composition+ (or higher)**	4
CPC200	**Credit for Professional Certification**	22
	Digital Literacy*	3
	General Education Elective**	8
	Human Relations***	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
Plus: Choose one area of specialization (HVAC/R, Sheet Metal or Plumbing)		
* Digital Literacy: Choose one of the following: BA131, CA100, CIS101, CIS120, or DRF165.		
**General Education Elective: Any course of at least three credits totaling a minimum of 8 credits 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, 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		
***Human Relations: Choose one of the following courses: PSY101, 104, 201, 202, 237, 239, 282, or SOC204, 205, 206, 210, 213.		

HVAC/R Specialization

First and second year courses are open to the public. The degrees and certificates require completion of a registered apprenticeship. In addition to tuition, estimated costs for students who complete the entire four-year HVAC/R Apprenticeship degree are $700 in program fees and $2,500 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 application 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
APR156A	**HVAC/R Apprenticeship Fundamentals1**	5
APR156B	**HVAC/R Apprenticeship Fundamentals 2**	5
APR156C	**HVAC/R Apprenticeship Fundamentals 3**	5
APR156D	**HVAC/R Apprenticeship Intermediate 1**	5
APR156E	**HVAC/R Apprenticeship Intermediate 2**	5
APR156F	**HVAC/R Apprenticeship Intermediate 3**	5
APR256G	**HVAC/R Apprenticeship Intermediate 4**	5
APR256H	**HVAC/R Apprenticeship Intermediate 5**	5
APR256I	**HVAC/R Apprenticeship Intermediate 6**	5
APR256J	**HVAC/R Apprenticeship Advanced 1**	5
APR256K	**HVAC/R Apprenticeship Advanced 2**	5
APR256L	**HVAC/R Apprenticeship Advanced 3**	5

Plumbing Specialization

Courses are limited to registered apprentices and are not open to the public. In addition to tuition, estimated costs for students who complete the entire four-year Apprenticeship Plumbing degree are $600 in program fees and $2,500 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 application 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

Courses are open to the public. The certificate and degree require completion of a registered apprenticeship. In addition to tuition, estimated costs for students who complete the entire four-year Sheet Metal Apprenticeship degree are $800 in program fees and $2,600 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 application minimum requirements:

- Minimum of 17 years of age (18 to start working as an apprentice).
- 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 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 69 credit hours (12 hours of general education credits listed above plus 57 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
APR266I	**Sheet Metal Apprenticeship Radial Line Development**	5
APR266J	**Sheet Metal Apprenticeship Duct Sizing**	5
APR266K	**Sheet Metal Apprenticeship Job Site Management**	5
APR266L	**CAD for Apprenticeship**	3

Electrician Apprenticeship Technologies AAS Degree and Certificate

Students must apply with IEC Oregon and be registered as an apprentice to take classes. In addition to tuition, estimated costs for students who complete the entire four-year degree are $100 in program fees and $800 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 or Residential 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 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 and Residential 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.

Limited Electrician Apprenticeship Technologies Certificate of Completion

Students may earn a Certificate of Completion by successfully completing the Electrician Apprenticeship Technologies general education requirement of 12 credit hours, plus additional 26 credits of Apprenticeship Related Training – Electrical.

Course	Title	Credit Hours
MTH095	**Intermediate Algebra+ (or higher)**	4
WR115	**Introduction to Composition+ (or higher)**	4
	Human Relations Requirement*	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
*Human Relations Requirement (Choose one of the following courses): PSY101,104, 201,202, 237, 239, 282, or SOC204, 205, 206, 210, 213.		

Required Courses for the Limited Electrician Apprenticeship Technologies Certificate of Completion

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

Electrician Apprenticeship Technologies Certificate of Completion

Students may earn a Certificate of Completion by successfully completing the Electrician Apprenticeship Technologies general education requirement of 12 credit hours, plus additional 52 credits of Apprenticeship Related Training—Electrical.

Course	Title	Credit Hours
MTH095	**Intermediate Algebra+ (or higher)**	4
WR115	**Introduction to Composition+ (or higher)**	4
	Human Relations Requirement*	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
*Human Relations Requirement (Choose one of the following courses): PSY101,104, 201,202, 237, 239, 282, or SOC204, 205, 206, 210, 213.		

Required courses for the Limited Electrician Apprenticeship Technologies Certificate of Completion and Electrician Apprenticeship Associate of Applied Science degree.

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

Electrician Apprenticeship Technologies Associate of Applied Science

Students may earn an Associates of Applied Science by successfully completing the Electrician Apprenticeship Technologies general education requirement of 23 credit hours, plus additional 52 credits of Apprenticeship Related Training—Electrical along with 8,000 hours of on-the-job training.

Course	Title	Credit Hours
MTH095+	**Intermediate Algebra+ (or higher)**	4
WR121	**Academic Composition+ (or higher)**	4
	Credit for Professional Certification	22
	Digital Literacy*	3
	General Education Elective**	8
	Human Relations***	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

* Digital Literacy: Choose one of the following: BA131, CA100, CIS101, CIS120, or DRF165.

**General Education Elective: Any course of at least three credits totaling a minimum of 8 credits 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, 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

***Human Relations: Choose one of the following courses: PSY101, 104, 201, 202, 237, 239, 282, or SOC204, 205, 206, 210, 213.

Automotive Technology

automotive.chemeketa.edu

Do you want to become an automotive service and repair technician? The Automotive Technology program emphasizes technical training and development of skills through the study of the various systems of the automobile. The certificates have been designed to be completed in one year or less and the degree in less than two years. The program offers instruction and training in entry-level skills, auto body repair, and auto machine shop, as well as courses in auto heating and air conditioning, welding, general education, 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 systems.
- Analyze, diagnose, and perform repairs related to electrical/electronic systems, suspension and steering, and heating and air conditioning systems.
- 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 systems.
- 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 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 Technology 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, 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 Technology degree and the Automotive 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 First Year Programs staff. Call 503.399.5120 to schedule an appointment. There are entry-level expectations for skill levels in reading, writing, and mathematics. Your advisor will help you develop an individualized program of study. 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 online, from Advising and First Year Programs, Admissions, the Applied Technologies office in Building 20, and the Automotive Technology program staff office in Building 4, Room 232. Enrollment in the Automotive Technology 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 First Year Programs at 503.399.5120 or the Automotive Technology Program Chair at 503.399.6523 for details if you are considering the Automotive Technology degree, or a certificate in Automotive Body Repair, Automotive Machining, or Automotive Entry Level Technician. 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

(Pending State Approval)

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $295; class fees, $407; universal fees, $1,519; differential fees, $225; and equipment and supplies, $2,300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate emphasizes the repair of automobile bodies and their systems. A significant portion of the training is done on the job as well as through specific lab coursework on campus.

You may earn a certificate of completion by successfully completing the required 42 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (6 credit hours):

Course	Title	Credit Hours
MTH052	**Introduction to Algebra/ Geometry+ (or higher)**	3
WR088	**Introduction to Technical Writing 1+**	3
	or	
WR121	**The College Essay+ (or higher)**	4

Automotive Body Repair core requirements (36 credit hours):

Course	Title	Credit Hours
AUM168	**Automotive Electrical Systems 1**	5
AUM184	**Automotive Materials and Resources**	2
AUM280E	**Cooperative Work Experience**	5
AUM280G	**Cooperative Work Experience**	7
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 45. For subject areas, see page 52.

Automotive Entry Level Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $225; class fees, $144; universal fees, $868; differential fees, $90; and equipment and supplies, $2300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.)

You may earn a certificate of completion by successfully completing the required 28 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (10 credit hours):

Course	Title	Credit Hours
MTH052	**Introduction 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

(Pending State Approval)

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $295; class fees, $385; universal fees, $1,798; differential fees, $240; and equipment and supplies, $2,300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 44 credit hours with a grade of "C" or better in AUM courses.

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
AUM280E	**Cooperative Work Experience**	5
AUM280F	**Cooperative Work Experience**	6
WLD177	**Welding Processes**	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		

Automotive Technology Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $416; class fees, $921; universal fees, $3,255; differential fees, $460; and equipment and supplies, $2,300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 105 credit hours with a grade of "C" or better in AUM courses.

Course	Title	Credit Hours
Term 1		
AUM151	**Basic Automotive Engines**	5
AUM157	**Automotive Brake Systems**	6
	or	
AUM159	**Automotive Chassis Systems**	5
AUM184	**Automotive Materials and Resources**	2
MTH052	**Introduction to Algebra/ Geometry+ (or higher)**	3
PH060	**Applied Physical Science (or higher)**	3
Term 2		
AUM152	**Automotive Machine Shop**	4
AUM158	**Automotive Steering and Suspension**	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
PSY101	**Psychology of Human Relations+ (or higher)**	4
WR088	**Introduction to Technical Writing 1+**	3
	or	
WR121	**Academic Composition+ (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, Research, and Multimodal Composition (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 45. For subject areas, see page 52.		

Diesel Technology

The diesel technician repairs and maintains diesel powered trucks and agricultural equipment and their support systems.

This program is designed to prepare students for entry-level positions in diesel service technology. Training is varied to give students a broad understanding and background in the different phases of the diesel service industry. Students may have additional cost for tools and books.

It is an industry-specific two-year associate degree program with required internship hours. It is designed to prepare individuals to become qualified diesel service technicians. Students learn how to work on many types of diesel equipment including agricultural, construction, forestry, semi-truck and earth moving equipment.

The Diesel Technology Program combines technical and academic education with real world experience through internships that are within the program. Students learn about engine fundamentals, machine hydraulics, fuel systems, electrical systems, transmissions, torque converters, undercarriage, final drives and more. During the internships, students have the opportunity to experience a future career firsthand through on-the-job training focused area of their choice.

Upon completion of the program, students will earn a Diesel Technology Associate of Applied Science Degree.

Program Outcomes

Students completing the Diesel Technology degree should be able to:

- Demonstrate and use industry safety standards.
- Demonstrate math skills using formulas to find force, pressure, area, and volume.
- Use diagnostic simulators to diagnose and troubleshoot system components.
- Demonstrate troubleshooting, maintenance and repair procedures for fuel systems and transmissions.
- Demonstrate troubleshooting, maintenance and repair procedures for brake systems and components.
- Demonstrate troubleshooting, maintenance and repair procedures for powertrain systems and hydraulics.
- Demonstrate troubleshooting, maintenance and repair procedures for electrical systems.
- Demonstrate troubleshooting, maintenance and repair procedures including: testing, disassembly, failure analysis, assembly and operation using industry standard tooling and equipment, to diagnose diesel electrical systems and components found on highway trucks, off highway vehicles and stationary applications including construction equipment, agriculture equipment, marine applications, truck equipment and power generation (DSL203).

Diesel Technology Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $750; class fees, $7,250; universal fee, $2,821; differential fee, $360. 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 courses:

Course	Title	Credit Hours
Term 1		
DSL101	**Diesel Technology 1**	12
MTH052	**Introduction to Algebra and Geometry+ (or higher)**	3
Term 2		
DSL102	**Diesel Technology 2**	12
WR088	**Introduction to Technical Writing 1+ (or higher)**	3
Term 3		
DSL103	**Diesel Technology 3**	12
PSY104	**Workplace Psychology (or higher)**	4
Term 4		
DSL201	**Diesel Technology 4**	12
CIS101	**Computer Concepts**	3
Term 5		
DSL202	**Diesel Technology 5**	12
	Diesel Technology elective*	3
Term 6		
DSL203	**Diesel Technology 6**	12
	Diesel Technology elective*	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Diesel Technology 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

Machining Technology

machining.chemeketa.edu

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 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.

Program Outcomes

Students completing the Computer-Aided Manufacturing (CAM) Fundamentals certificate or the Computer Numerically Controlled (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 to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing the 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.

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available online at machining.chemeketa.edu, from Advising and First Year Programs, Admissions, the Automotive Technology program office in Building 4, Room 232, and the Applied Technologies department office in Building 20, Room 203.

Enrollment in the Machining Technology program is limited, and there is an early deadline for applications. All applicants must attend the Machining Technology Orientation as a prerequisite for acceptance into the program. To enroll, you must have a high school diploma or GED certificate.

We recommend that you contact Chemeketa's Advising and First Year Programs at 503.399.5120 or the Machining Technology Program Chair at 503.589.7875 for details if you are considering the Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) degree, or the CAM Fundamentals or CNC Operator certificate.

If you have questions about the program requirements, please contact Program Chair Sheldon Schnider at 503.589.7875 or sheldon.schnider@chemeketa.edu, or the Applied Technologies office at appliedtech@chemeketa.edu.

Computer-Aided Manufacturing (CAM) Fundamentals Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $865; class fees, $292; universal fees, $1,364; differential fees, $165; and precision tools and supplies, $2,510. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 44 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
CAM130	**CNC Machine Setup/Operation**	4
CAM280B	**Cooperative Work Experience**	2
FE205B	**Resumes and Job Search Correspondence**	1
MTH052	**Intro to Algebra and Geometry (or higher)**	.3
Term 2		
CAM115	**Geometric Dimensioning/ Tolerancing**	2
CAM140	**Metallurgy for Manufacturing**	2
CAM160	**Intermediate CNC Mill Operation and Programming**	4
CAM280D	**Cooperative Work Experience**	4
WR088	**Introduction to Technical Writing 1 (or higher)**	3
Term 3		
CAM150	**Cutting Tools and Materials**	3
CAM190	**Intermediate CNC Lathe Operation and Programming**	4
CAM280D	**Cooperative Work Experience**	4
PSY104	**Workplace Psychology**	4

Computer Numerically Controlled (CNC) Operator Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,168; class fees, $308; universal fees, $1,240; differential fees, $155; and 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.

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.

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	**Introduction to Algebra and Geometry**	3
or		
MTH081	**Technical Mathematics 1**	4
or		
MTH111	**College Algebra (or higher)**	5
Term 2		
CAM115	**Geometric Dimensioning/ Tolerancing**	2
CAM140	**Metallurgy for Manufacturing**	2
CAM160	**Intermediate CNC Mill Operation and Programming**	4
MTH053	**Introduction to Trigonometry and Geometry**	3
Term 3		
CAM150	**Cutting Tools and Materials**	3
CAM190	**Intermediate CNC Lathe Operation and Programming**	4
CAM280D	**Cooperative Work Experience**	4
WR088	**Introduction to Technical Writing 1**	3

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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,647; class fees, $883; universal fees, $2,790; differential fees, $380; and precision tools and supplies, $2,510. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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		
CAM100	**Blueprint Reading and Sketching**	2
CAM105	**Precision Measurement**	2
CAM110	**Benchwork and Manual Fundamentals**	4
CAM130	**CNC Machine Setup/Operation**	4
MTH052	**Introduction to Algebra and Geometry+ (or higher)**	3
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 and Geometry (or higher)**	3
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+ (or higher)**	3
Term 4		
CAM210	**Advanced Mill Processes**	4
CAM230	**CAM Programming Mills**	3
CAM235	**Advanced CNC Mill Operation and Programming**	3
CAM270	**Machine Design**	3
PH121	**Applied Physics**	4
	or	
PH201	**General Physics (or higher)**	5
	or	
GS104	**General Science: Physics**	4
Term 5		
CAM220	**Advanced Lathe Processes**	4
CAM260	**CAM Programming Lathes**	3
CAM265	**Advanced CNC Lathe Operation and Programming**	3
CAM275	**Tool Design**	3
FE205B	**Resumes and Job Search Correspondence**	1
Term 6		
CAM225	**Advanced Manual Integrations**	4
CAM290	**Advanced CAD/CAM Integrations**	4
CAM295	**Introduction to Lean Manufacturing**	1
PSY104	**Workplace Psychology+**	4

+Meets related instruction requirement, see page 45.
For subject areas, see page 52.

Robotics

go.chemeketa.edu/robotics

See also Electronics 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 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 First Year Programs staff, 503.399.5120. There are entry-level expectations for skill levels in reading, writing, and mathematics. If you have questions about the requirements, call 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 First Year Programs, Admissions, on the Chemeketa public Website, at 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 First Year Programs 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.

If you have questions about the program requirements, please contact Program Chair Charles Sekafetz at 503.399.6254, chuck.sekefetz@chemeketa.edu, or the office of the Dean of Agricultural Sciences and Technology, 503.316.3279.

Robotics Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,472; class fees, $626; universal fees, $3,162; differential fees, $385; Intel-compatible computer, $800; and equipment and materials $300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an associate of applied science degree by successfully completing the required 102 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
CAM105	**Precision Measurement**	2
CAM110	**Benchwork and Manual Fundamentals**	4
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		
CAM115	**Geometric Dimensioning and Tolerances**	2
DRF130	**CAD1**	3
ELT151	**Digital Fundamentals**	4
MTH082	**Technical Mathematics 2**	4
	or	
MTH112	**Trigonometry**	5
WR121	**Academic Composition+**	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 45. For subject areas, see page 52.

Welding Technology

welding.chemeketa.edu

The Welding Technology program offers several options: two career pathway certificates, a three-term Welding certificate, and a 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; students practice and develop their welding skills in the laboratory and may take an examination for certification in plate welding. The Welding Fabrication degree program is for those who want to acquire the technical knowledge and skills required for workers in welding, fabrication, and related occupations.

Welding fabrication technicians are skilled in the use of oxyacetylene welding and cutting equipment, manual arc, tungsten inert gas (TIG), and metallic inert gas (MIG) processes and have a working knowledge of shop blueprints and welding symbols, jig fabrication, and assembly processes.

The certificate of completion and career pathway certificates have been designed to be completed in one year or less and the degree program in less than 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 career pathway certificate or the MIG Welding career pathway certificate should be able to:

- Set up and operate shielded metal arc welding (SMAW) equipment or 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 career pathway 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 Welding Fabrication degree should be able to:

- Perform basic set-ups and operations for manual and computer numerical 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.

If you have questions about the requirements, contact the Welding Technology Program Chair Mike Myers at 503.399.6066 or 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 welding.chemeketa.edu or at the Applied Technologies office in Building 20, Room 203 on the Salem Campus.

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 Program Chair Mike Myers at 503.399.6066 or mike.myers@chemeketa.edu for details if you are considering the Welding certificate or the Welding Fabrication degree.

Arc Welding Career Pathway Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $364; class fees, $603; universal fees, $682; differential fees, $110; equipment and supplies, $500; and certification test, $220 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 22 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**	5
Term 2		
WLD152	**Intermediate Arc Welding**	5
WLD157	**Introduction to Layout and Fabrication**	3
Term 3		
WLD153	**Advanced Arc Welding**	4

MIG Welding Career Pathway Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $122; class fees, $396; universal fees, $424, differential fees, $70; equipment and supplies, $550; and certification test, $220 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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.

Course	Title	Credit Hours
Term 1		
WLD156	**Blueprint Reading and Sketching**	5
Term 2		
WLD157	**Introduction to Layout and Fabrication**	3
WLD161	**Basic Gas Metal Arc Welding (MIG)**	3
Term 3		
WLD163	**Advanced Gas Metal Arc Welding (MIG)**	3

Welding Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $470; class fees, $1,315; universal fees, $1,643; differential fees, $215; equipment and supplies, $1140; and certification test, $440 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 53 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
MTH052	**Introduction to Algebra/ Geometry+ (or higher)**	3
WLD151	**Basic Arc Welding**	5
WLD156	**Blueprint Reading and Sketching**	5
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**	3
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**	4
WLD155	**Fabrication Procedures**	3
WLD163	**Advanced Gas Metal Arc Welding (MIG)**	3
WLD180	**Metallurgy for Welders**	2

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Welding Fabrication Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $663; class fees, $2,085; universal fees, $2,790; differential fees, $380; equipment and supplies, $1385; and certification test, $440 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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		
MTH052	**Introduction to Algebra/ Geometry+ (or higher)**	3
WLD151	**Basic Arc Welding**	5
WLD156	**Blueprint Reading and Sketching**	5
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**	3
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**	4
WLD155	**Fabrication Procedures**	3
WLD163	**Advanced Gas Metal Arc Welding (MIG)**	3
WLD180	**Metallurgy for Welders**	2
Term 4		
GS104	**General Science: Physics**	4
or		
PH121	**Applied Physics**	4
or		
PH201	**General Physics**	5
or		
PH211	**Physics for Engineers and Scientists**	5
MTH053	**Introduction to Trigonometry/ Geometry (or higher)**	3
WLD256	**Fabrication Practices 1**	4
WLD277	**Advanced Welding Processes**	2
Term 5		
CAM120	**Manual Milling Processes**	4
WLD257	**Fabrication Practices 2**	4
WLD270	**Advanced Oxyacetylene Processes**	2
WLD273	**Advanced TIG Welding**	2
Term 6		
CAM121	**Manual Lathe Processes**	4
FE205B	**Resumes and Job Search Correspondence**	1
WLD258	**Weld Shop Problems**	7

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Wine Hospitality Operations Certificate

(see Hospitality Track page 127)

This should be a hyperlink to the certificate info in the hospitality track

Wine Studies

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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's Wine Studies Program is located at Chemeketa Eola and provides students with a unique hands-on education facilitated by the on-site vineyard, laboratory classroom, commercial winery, and tasting room.

For additional information about the Wine Studies program, contact the Megan Jensen at 503.584.7254

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.

Vineyard Operations Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $718; class fees, $541; universal fee, $1,302; differential fee, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

Coursework for the Vineyard Operations certificate includes instruction and hands-on training in the Wine Studies program's on-site vineyard planted with cool climate grapes. Students will gain 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 Megan Jensen at 503.584.7254.

You may earn a certificate of completion by successfully completing the required 36 credit hours with a grade of "C" or better in all courses:

General Education Requirements

Course	Title	Credit Hours
MTH095	**Intermediate Algebra+ (or higher)**	4

Program Core Requirements

Course	Title	Credit Hours
HOR112	**Pesticides and Safety**	2
VMW101	**General Viticulture**	3
VMW114	**Winter Vineyard Practices**	4
VMW115	**Spring Vineyard Practices**	4
VMW116	**Summer Vineyard Practices**	4
VMW117	**Fall Vineyard Practices**	4
VMW260	**Vineyard Nutrition and Irrigation Management**	3
VMW261	**Vine Physiology**	4
VMW262	**Vineyard Pest Management**	4

Vineyard Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,296; class fees, $1,330; universal fee, $2,573; differential fee, $305. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 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 Megan Jensen 503.584.7254.

You may earn an associate of applied science degree by successfully completing required 90 credit hours with a grade of "C" or better in all courses.

General Education Requirements

Course	Title	Credit Hours
CIS101	**Computing Concepts (or higher)**	3
	or	
CA100	**Beginning Computing**	3
COMM111	**Fundamentals of Public Speaking (or higher)**	4
MTH095	**Intermediate Algebra+ (or higher)**	4
PSY101	**Psychology of Human Relations+ (or higher)**	4
WR121	**Academic Composition+ (or higher)**	4
WR227	**Technical Writing**	4

Program Core Requirements

Course	Title	Credit Hours
HOR112	**Pesticides and Safety**	2
SOIL205	**Soil Science**	4
SPN101	**First Year Spanish, Term 1 (or higher)**	4
VMW101	**General Viticulture**	3
VMW114	**Winter Vineyard Practices**	4
VMW115	**Spring Vineyard Practices**	4
VMW116	**Summer Vineyard Practices**	4
VMW117	**Fall Vineyard Practices**	4
VMW122	**Introduction to Winemaking**	3
VMW131	**Wine Appreciation**	3
VMW260	**Vineyard Nutrition and Irrigation Management**	3
VMW261	**Vine Physiology**	4
VMW262	**Vineyard Pest Management**	4
VMW263	**Organic and Biodynamic Viticulture**	4
VMW280B	**Wine Studies Internship****	2
VMW280D	**Wine Studies Internship****	4
VMW290	**Wine Studies Capstone**	4
	Vineyard Management electives*	7

**Total Must be at least 7 credits

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Vineyard Management electives (select 7 credit hours):

CA220	**QuickBooks-Computerized Bookkeeping**	3
CH123	**College Chemistry 3 (or higher)**	5
CIS125A	**Access - Database**	3
CIS125E	**Excel-Workbooks**	4
HOR211	**Plant Propagation**	4
VMW103	**Vineyard Tractor and UTV Operation**	3
VMW132	**Wines of the World**	3
VMW134	**Wines of the Pacific Northwest**	3
VMW170	**Selling and Marketing Wine**	3
VMW198A-D	**Independent Studies**	1-4
VMW222	**Science of Winemaking**	4
VMW232	**Sensory Evaluation of Wine Varietals**	3
VMW244	**Wine Production**	6
VMW245	**Wine Clarification and Stabilization**	4
VMW246	**Wine Aging, Filtration, and Bottling**	4
VMW254	**Winery Process Planning and Design**	3
VMW280B-F	**Cooperative Work Experience**	2-6
WLD151	**Basic Arc Welding**	5

Winemaking Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,183; class fees, $2,204; universal fee, $2,805; differential fee, $345. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 1,000+ vineyards and 725 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 a wine related internship where they have the opportunity to work at a worksite to gain specific skills and strengthen their professional network.

For more information about this program, contact Megan Jensen at 503.584.7254.

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.

General Education Requirements

Course	Title	Credit Hours
CH110	**Foundations of General, Organic, and Biochemistry**	5
	or	
CH121	**College Chemistry 1**	5
	and	
CH122	**College Chemistry 2**	5
	and	
CH123	**College Chemistry 3**	5
CIS101	**Computing Concepts (or higher)**	3
	or	
CA100	**Beginning Computing**	3
COMM111	**Fundamentals of Public Speaking (or higher)**	4
MTH095	**Intermediate Algebra+ (or higher)**	4
PSY101	**Psychology of Human Relations+ (or higher)**	4
WR121	**Academic Composition+ (or higher)**	4

Program Core Requirements

Course	Title	Credit Hours
VMW101	**General Viticulture**	3
VMW122	**Introduction to Winemaking**	3
VWM131	**Wine Appreciation**	3
VMW134	**Wines of the Pacific Northwest**	3
VMW170	**Selling and Marketing Wine**	3
VMW222	**Science of Winemaking**	4
VMW224	**Chemical Analysis of Must and Wine**	4
VMW225	**Wine and Food Microbiology**	4
VMW232	**Sensory Evaluation of Wine Varietals**	3
	or	
VMW132	**Wines of the World**	3
VMW233	**Sensory Evaluation of Wine Components**	3
VMW244	**Wine Production**	6
VMW245	**Wine Clarification and Stabilization**	4
VMW246	**Aging, Filtration and Bottling**	4
VMW254	**Winery Process Planning and Design**	3
VMW280I	**Wine Studies Internship**	9
VMW290	**Wine Studies Capstone**	4
	Winemaking Elective*	3

+Meets related instruction requirement, see page 45.
For subject areas, see page 52.

*Winemaking electives (select 3 credit hours):

BA101	**Introduction to Business (or higher)**	4
BA223	**Principles of Marketing**	4
BI101	**General Biology: Ecology and Diversity (or higher)**	4
CA220	**QuickBooks-Computerized Bookkeeping**	3
CH117	**Chemistry in the Kitchen**	4
CH121	**College Chemistry 1 (or higher)**	5
CH122	**College Chemistry 2 (or higher)**	5
CH123	**College Chemistry 3 (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
VMW260	**Vineyard Nutrition and Irrigation Management**	3
VMW261	**Vine Physiology**	4
VMW280B-F	**Cooperative Work Experience**	2-6

Arts, Humanities & Communication

Tracks in this pathway lead to degrees and careers in humanities, art, journalism, music, theater, philosophy, literature, languages, graphic design, and digital arts.

Art Track
AAOT–Art

Communication Track
AAOT–Communication

English Track
AAOT–English Literature

Language Track
AAOT–American Sign Language (ASL)
AAOT–Chinese
AAOT–French
AAOT–Japanese
AAOT–Russian
AAOT–Spanish

Music Track
AAOT–Music

Philosophy/Religious Studies Track
AAOT–Philosophy & Religious Studies

Visual Communications Track
Graphic Design AAS Degree*
Multimedia Arts AAS Degree*
*Prepares for employment or transfer

Art

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 52.

See also Visual Communications Program
chemeketa.edu/vc

Chemeketa's art curriculum offers a comprehensive range of foundational courses in design, drawing, ceramics, painting, and sculpture. We teach hands-on, medium-specific techniques, while emphasizing strong design skills, practical methods of developing ideas, teamwork, and craftsmanship. Chemeketa's art history courses explore formal and historical approaches to the visual arts, and 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 page 55 and page 56 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 the Art and Design major. 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. Consult our transfer pathways for students who plan to major in art at WOU, OSU, and PSU. Contact the Visual and Performing Arts Program Chair at 503.399.6093 or consult with Chemeketa's dedicated art adviser in Advising and First Year Programs at 503.365.4737 if you plan to transfer as an art major. Questions regarding Chemeketa's art offerings may be directed to the Liberal Arts office at 503.399.5184.

Communication

For discipline outcomes, see General Education Outcomes—Speech/Oral Communication or Writing on page 52.

Good communication skills are one of the best indicators of success in the workplace, in interpersonal relationships, and in public life. Concepts in communications classes help people navigate conflict, connect with people across cultural divides, inform and persuade others, and collaborate effectively in groups and teams. It is possible to major in communication in many colleges and universities or combine a minor in communication with a major in another field.

Communication skills are sought-after areas in many fields, including: law, education, marketing and public relations, management and leadership, politics, nonprofit sector, law enforcement and emergency services, healthcare, business, tech sector and media and journalism.

Chemeketa's communication curriculum offers a range of foundational courses in communication. 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 page 56, page 60, and page 62 for a complete listing.

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Communication are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Other Oregon colleges that offer Communication Bachelor's degrees include George Fox University, Linfield College, Willamette University, Lewis & Clark College, Warner Pacific University, and Oregon Tech.

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 First Year Programs staff. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in the academic area.

English

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 52.

With its focus on critical thinking, effective communication, and appreciation for the diversity of human experience, study in English can prepare students for nearly any other course of study. 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 (AAOT) degree and the Associate of Science/Oregon Transfer (ASOT) degrees in Business and Computer Science. See page 56, page 60, and page 62 for a complete listing.

All of Oregon's universities offer Bachelor of Arts and/or Bachelor of Science degrees in English, including state universities such as Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. In addition, degrees in English are widely offered around the country and around the world.

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 First Year Programs 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.

Language

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 52.

Chemeketa offers a number of world language courses. Some of these courses can be used to fulfill the Arts and Letters 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 page 56, page 60, and page 62 for a complete listing.

Chemeketa offers instruction in first-year (introductory) and second-year (intermediate) American Sign Language, Chinese, 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 World 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 First Year Programs staff or a Chemeketa World 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 changes in an academic area.

Music

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 52.

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Chemeketa's music curriculum offers a comprehensive range of foundational courses in both performance and general music. Our music performance classes include choir, band, and orchestra, as well as individual applied lessons in piano, voice, and most of the traditional string, wind, and percussion instruments, as well as conducting and composition. Courses in Music Theory, Aural Skills, Music Appreciation, and Music Fundamentals provide a basis for the 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 page 55 and page 56 of this catalog for a complete listing. By completing a prescribed set of music courses, students will also be prepared to transfer as a music major to any of the Oregon state colleges. 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. 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.

We strongly recommend developing a term-by-term plan of study. Contact the Music Program Chair or consult with Chemeketa's Advising and First Year Programs staff if you plan to transfer as a music major. Questions regarding Chemeketa's music offerings may be directed to the Liberal Arts office at 503.399.5184 or the Music Program Chair at 503.365.4616.

Philosophy and Religious Studies

For discipline outcomes, see General Education Outcomes—Arts and Letters on page 52.

Chemeketa offers a number of Philosophy and Religious Studies courses. Some of these courses can be used to fulfill the Arts and Letters requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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, and University of Oregon. Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Religious Studies are Oregon State University and University of Oregon 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 First Year Programs staff; also, 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 56.

Visual Communications

chemeketa.vc

The Visual Communications program offers two associate of applied science degrees: Graphic Design and Multimedia Arts. These degrees give students a platform from which to launch their creative career. While both degrees are part of the same overall program, each one has their own focus with only some shared courses and electives.

Graphic Design Degree

Students seeking the Graphic Design AAS develop skills in graphic design, web design, page layout, typography, and digital media, as well as the teamwork, creative problem solving, and life-long learning skills essential to a successful creative career. Graphic Design students have course work in software tools, color theory, icon & logo design, illustration, and front-end Web design (HTML & CSS). During their second year, students have the opportunity to take classes in which they create design work for real clients (VC272A Design Studio), and in their final term take the capstone portfolio and business classes and participate in the portfolio 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. Students produce a print and/or digital portfolio of work, including a personal brand, résumé, and website in preparation for entering the job market.

Multimedia Arts Degree

Students opting for an AAS degree in Multimedia Arts have a unique path of study that is mostly separate from the Graphic Design degree. This path includes different entrance portfolio requirements and an academic focus on photography, filmmaking, and motion graphics/animation. Beginning the degree track with a cohort of other students in the fall, all Multimedia Arts students take introductory software classes (joined by Graphic Design students) before diverging into time-based media and photography during their first year. The second year of study includes additional study of motion graphics, photography, filmmaking, and portfolio-building courses that culminate in a demo reel and exhibition that ranges in form and media depending on the student's choice of focus. The purchase of a multi-terabyte hard drive and digital camera that provides manual controls and capable of high definition video is required of all students by the second term of their first year.

Common Features

Visual Communications is a limited enrollment program, and students regardless of the degree they are seeking must apply in spring for entry the following fall term. All degrees take 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. Both VC degrees are focused on preparing students for employment after graduation and not for transfer to a four-year institution. However, students interested in completing a bachelor's degree do have some transfer options and should meet with the program chair before beginning the program if interested in transferring.

During their studies, VC students have a number of opportunities to work on live jobs, collaborate with other students within the other degree tracks, and experience a range of cutting-edge media equipment, facilities, and techniques. Visual Communications students meet with faculty for regular advising meetings to assist in successfully completing the degree.

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 website at chemeketa.vc/howtoapply. You will also find a digital application containing detailed information about the application process on the program website.

The Visual Communications program accepts digital applications for fall entry from late-April through the end of June (visit the website for exact dates). Students may apply for the program while completing the prerequisite courses listed. If you have questions about program requirements, contact the Visual Communications program chair at 503.399.6475.

Program Outcomes

Students completing the Graphic Design Associate of Applied Science degree should be able to:

- Research and present design solutions to graphic design projects.

- Successfully communicate and collaborate with others in the creation and production of original ideas in graphic design.
- Use current and evolving industry standard methods and processes in the production and crafting of graphic design.
- Critically analyze the role of graphic design and its impact within historical, cultural, and ethical contexts.
- 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 career in graphic design, or transfer to a four-year college for additional study.

Students completing the Multimedia Arts Associate of Applied Science degree should be able to:

- Research and present design solutions to multimedia arts projects.
- Successfully communicate and collaborate with others in the creation and production of original ideas in multimedia arts.
- Use current and evolving industry standard methods and processes in the production and crafting of work of multimedia, including photography, filmmaking, and motion graphics.
- Critically analyze the role of multimedia arts and its impact within historical, cultural, and ethical contexts.
- Participate in a client-artist 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 career in multimedia arts, or transfer to a four-year college for additional study.

Graphic Design Associate of Applied Science Degree

In addition to tuition, estimated costs for the students who complete the entire Graphic Design program average $650 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, universal, and differential fees for Graphic Design total $13,750 for required courses. 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 2.00 and successfully completing the required 98 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 1**	4
Term 2		
ART207	**Graphic Design Literacy**	4
ART224	**Type Design 1**	4
VC115	**Introduction to Digital Graphics 2**	4
WR121	**Academic Composition+**	4
Term 3		
ART118	**Digital Design and Color**	4
ART225	**Type Design 2**	4
VC224	**Layout 1: Page Design**	4
VC246	**File Prep**	4
Term 4		
ART221	**Graphic Design 1: Icons and Symbols**	4
MTH060	**Introductory Algebra+ (or higher)**	4
VC225	**Layout 2: Intermediate Page Design**	4
VC237	**Web Design 1**	4
VC272A	**Design Studio**	2
Term 5		
ART222	**Graphic Design 2: Logo Design**	4
ART239	**Introduction to Digital Illustration**	4
	or	
ART265	**Photography 1**	4
	or	
VC238	**Web Design 2**	4
VC226	**Layout 3: Publication Design**	4
VC235	**Interface Design**	4
Term 6		
ART223	**Graphic Design 3: Package Design**	4
PSY104	**Workplace Psychology+**	4
VC283	**Business of Graphic Arts**	4
VC284	**Portfolio**	4

+Meets related instruction requirement, see page 45.
For subject areas, see page 52.

Multimedia Arts Associate of Applied Science Degree

In addition to tuition, estimated costs for the students who complete the entire Multimedia Arts degree average $460 per term. Costs include photographic supplies, portable storage drives, books, printing, presentation supplies, sketchbooks, and digital media. Class, universal, and differential fees for the Multimedia Arts degree total $13,250 for required courses. 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 2.00 and successfully completing the required 96 credits.

Course	Title	Credit Hours
Term 1		
ART115	**Basic Design: Black and White**	4
ART265	**Photography 1**	4
ART203	**New Media Art**	4
VC114	**Introduction to Digital Graphics 1**	4
Term 2		
ART120	**Digital Media Time Design**	4
ART131	**Introduction to Drawing**	4
ART202	**History of Photography**	4
	or	
FA255	**Understand Movies: Film Styles**	4
	or	
FA256	**Understand Movies: Great Film Directors**	4
	or	
FA257	**Understand Movies: Themes & Genres**	4
ART237	**Photo Illustration**	4
Term 3		
ART118	**Digital Design and Color**	4
ART266	**Photography 2**	4
FLM230	**Audio Production and Sound Design**	4
WR121	**Academic Composition**	4
Term 4		
ART268	**Documentary Photography**	4
FLM265	**Documentary Filmmaking**	4
VC243	**Animation and Motion Graphics 1**	4
VC272D	**Multimedia Arts Studio**	2
Term 5		
ART267	**Portrait Photography**	4
FLM266	**Narrative Filmmaking**	4
VC244	**Animation and Motion Graphics 2**	4
PSY104	**Workplace Psychology+**	4
	Multimedia Arts Elective*	2
Term 6		
ART249	**Emerging Multimedia Arts and Technology**	4
FLM268	**Independent Filmmaking**	4
MTH060	**Introductory Algebra+ (or higher)**	4
VC286	**Multimedia Arts Portfolio**	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
***Multimedia Arts electives (select one course):**		
ART234	**Figure Drawing**	4
ART261	**Darkroom and Film Photography**	4
VC130	**Photoshop 1**	2
VC139	**Illustrator 1**	2
WR262	**Screenwriting: Feature Films**	4

Business & Hospitality

Tracks in this pathway lead to degrees, certificates, and careers in accounting, business management, business technology and office administration, hospitality, and tourism.

Accounting Track
- Accounting Certificate
- Data Analytics for Accounting Certificate
- Payroll Certificate
- Tax Preparation Certificate
- Accounting AAS Degree

Business Administration and Management Track
- ASOT-Business
- Sustainability in Management Certificate
- Entrepreneurship & Small Business Management Certificate
- Management AAS Degree
- Procurement Management Certificate
- Procurement & Supply Chain Management AAS Degree

Hospitality Track
- Event Management Certificate
- Food & Beverage Management Certificate
- Lodging Management Certificate
- Tourism & Travel Management Certificate
- Hospitality & Tourism Management Certificate
- Hospitality & Tourism Management AAS Degree
- Wine Operations Certificate

Office Administration and Technology Track
- Business Software Certificate
- Business Technology Certificate
- Legal Administrative Professional Certificate
- Micro Business Operations Certificate

Office Fundamentals Certificate
- Virtual Office Administrative Assistant Certificate
- Accounting Administrative Assistant AAS Degree
- Administrative Office Professional AAS Degree
- Legal Administrative Professional AAS Degree
- Medical Administrative Assistant AAS Degree
- Virtual Office Administrative Assistant AAS Degree

Accounting

go.chemeketa.edu/accounting

See also Office Administration and Business Management

Are you interested in becoming a bookkeeper, accountant, payroll specialist, data analyst, or tax preparer? The Accounting certificate and degree, and the Data Analytics in Accounting, Payroll, and Tax Preparation certificates offer you the training to qualify for entry-level positions requiring accounting and analytics in business, industry, and government agencies.

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 Data Analytics for Accounting certificate should be able to:

- Analyze data and prepare tools as they relate to the accounting cycle and business operations.
- Use data analytics software to accurately prepare financial reports and communicate the results.
- Demonstrate a basic understanding of analytics for decision-making in business.
- Effectively use graphical tools to communicate insights about data.

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 Accounting 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.

If you have questions about the requirements, call 503.399.5048.

You may be interested in our Cooperative Work Experience program that 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

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,350; class fees, $50; and universal fee, $1,333. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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
BA115	**Introduction to Accounting**	4
CIS101	**Computing Concepts or higher**	3
WR121	**Academic Composition**	4
	or	
BT210	**Professional Communication Skills**	4
Term 2		
BA101	**Introduction to Business**	4
BA211	**Financial Accounting**	4
BA225	**Excel for Accounting**	4
	or	
CIS125E	**Excel-Workbooks**	4
Term 3		
BA177	**Payroll**	4
BA213	**Managerial Accounting**	4
BA226	**Business Law 1**	4
BA228	**Computerized Accounting 1**	4

Data Analytics for Accounting Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,400; class fees, $50; and universal fee, $1,209. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Data Analytics for Accounting Certificate prepares students to analyze accounting data using basic accounting knowledge and analytics techniques. Upon completion, students will be able to analyze accounting data and communicate the results to benefit and improve business operations. In addition, this certificate provides students with the necessary foundation for preparing for the Tableau Desktop Specialist Certification.

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.

Term 1		
BA115	**Introduction to Accounting**	4
CIS120	**Digital Literacy**	4
Term 2		
BA211	**Financial Accounting**	4
BA225	**Excel for Accounting**	4
	or	
CIS125E	**Excel**	4
CIS121	**Programming Concepts**	4
Term 3		
BA213	**Managerial Accounting**	4
BA228	**Computerized Accounting 1**	4
	or	
BA279	**Computerized Accounting 2**	4
CIS125A	**Access - Database**	3
Term 4		
BA290	**Accounting Information Systems**	4
BA291	**Data Analytics for Accounting**	4

Payroll Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $680; class fees, $25; and universal fee, $620. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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**	4
Term 2		
BA177	**Payroll**	4
BA228	**Computerized Accounting 1**	4
Term 3		
BA276	**Advanced Payroll**	4
Term 4		
BA224	**Human Resource Management**	4

Tax Preparation Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $580; class fees, $25; and universal fee, $496. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 sit for the State of Oregon Licensed Tax Preparer test.

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**	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, $2,950; class fees, $111; universal fee, $2,790; and 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 90 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA104	**Business Applications Using Mathematics+**	4
BA115	**Introduction to Accounting**	4
CIS101	**Computing Concepts or higher**	3
WR121	**Academic Composition**	4
	or	
BT210	**Professional Communication Skills**	4
Term 2		
BA101	**Introduction to Business**	4
BA211	**Financial Accounting**	4
BA214	**Business Communications+**	3
	or	
WR122	**Argument, Research, and Multimodal Composition +**	4
	or	
WR227	**Technical Writing+**	4
BA225	**Excel for Accounting**	4
	or	
CIS125E	**Excel-Workbooks**	4
Term 3		
BA177	**Payroll**	4
BA213	**Managerial Accounting**	4
BA226	**Business Law 1**	4
BA228	**Computerized Accounting 1**	4
Term 4		
MTH095	**Intermediate Algebra+ (or higher)**	4
	Accounting elective*	8
	Psychology/Sociology elective+* **	4
Term 5		
BA256	**Income Tax 1**	4
COMM111	**Fundamentals of Public Speaking (or higher: COMM130 recommended)**	4
FE205B	**Resumes and Job Search Correspondence**	1
	Business/Economics elective**	4
Term 6		
BA257	**Income Tax 2**	4
BA280C	**Cooperative Work Experience**	3
	or	
	Business/Computer Information Systems/ Economics elective**	3
	Accounting elective*	4
	or	
BA206	**Business Management Principles**	4
	or	
BA222	**Financial Management**	4
	or	
MTH111	**College Algebra (or higher)**	5
BA282	**Applied Accounting Capstone**	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Accounting elective: Choose from BA215, BA218, BA225, BA237, BA240, BA276, BA279, BA290, or BA291.

**Business/Computer Information Systems/Economics elective: Choose BA courses at the 200 level or above, CIS121, CIS125A, or EC200 or above.

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

Business Administration

For discipline outcomes, see General Education Outcomes beginning on page 52.

See also Accounting, and Business Management. (Includes Accounting, Finance, International Business, Marketing, Management, Procurement 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 60 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 First Year Programs 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

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 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, Kristi Newton at 503.399.6238 or kristi.newton@chemeketa.edu or Teresa Prange at 503.365.4729 or teresa.prange@chemeketa.edu.

Program Outcomes

Students completing the Sustainability in Management certificate should be able to:

- Understand the relationship between business and society.
- Identify issues through a managerial approach, using three main themes: business ethics, sustainability and stakeholder management.
- Understand the concept of sustainability through environmental, economic, and social norms.
- Know and understand business ethics and ethics management.
- Identify both internal and external stakeholders impacting organizational activities.

Students completing the Entrepreneurship and Small Business Management certificate 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.
- Use effective communication strategies including writing, listening, speaking, negotiating, and persuading skills.
- Use technology to produce research and Interpret financial, marketing, or business reports.
- Demonstrate working knowledge of relevant small business financial topics including finding sources, capital structure, cash flow, and financial planning.

Students completing the Management 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 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 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.

Sustainability in Management Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $200; class fees, $150; and universal fee, $560. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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.

BA285	**Organizational Behavior**	4
BA288	**Principles of Responsible Management**	4
SOC223	**Sociology of the Environment and Sustainability**	4

Procurement Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $700; class fees, $200; universal fee, $980; and equipment and supplies, $200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 28 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA231	**Fundamentals of Transportation and Logistics Management**	4
BA234	**Fundamentals of Supply Chain Management**	4
BA235	**Procurement for State and Local Governments**	4
BA236	**Contract Management**	4
BA286	**Negotiations**	4
BA287	**Principles of Project Management**	4
CIS125E	**Excel-Workbooks**	4

Procurement Management Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,000; class fees, $200; universal fee, $1,610; and equipment and supplies, $200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn a certificate of completion by successfully completing the required 46 credit hours with a grade of "C" or better in all 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	**Procurement for State and Local Government**	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 45. For subject areas, see page 52.		
*Placement determined by testing. Lower division collegiate classes may be substituted.		

Entrepreneurship and Small Business Management

In addition to tuition, estimated costs for students who complete the required courses listed below are books and software, $1,000; and universal fee, $1,260. Please contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Entrepreneurship and Small Business Management certificate prepares students for self-employment, provides career opportunities in managing a small business or participating in family-owned businesses, and gives students the skills, knowledge, and resources to begin their own business. The program helps develop students' abilities to evaluate small business Ideas, understand marketing resources, apply best practices in the area of human resource management, and manage the finances of a small or new business.

You may earn a certificate of completion by completing 36 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business	4
	Electives*	8
Term 2		
BA206	Business Management Principles	4
BA216	Small Business Financial Management	4
BA250	Small Business and Entrepreneurship	4
Term 3		
BA223	Principles of Marketing	4
BA224	Human Resource Management	4
	Electives*	4
*Electives: Choose any BA course included in the Management Associate of Science degree.		

Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,000; class fees, $200; universal fee, $3,150; and 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.

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.

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
BA101	**Introduction to Business**	4
BA202	**Personal Effectiveness in Business**	3
BA204	**Diversity in the Workplace**	3
BA206	**Business Management Principles**	4
BA211	**Financial Accounting 1**	4
BA214	**Business Communications**	3
	or	
WR227	**Technical Writing**	4
BA222	**Financial Management**	4
BA223	**Principles of Marketing**	4
BA224	**Human Resource Management**	4
BA226	**Business Law 1**	4
BA277	**Business Ethics**	3
BA285	**Organizational Behavior**	4
CIS101	**Computing Concepts**	3
	or	
CIS120	**Digital Literacy**	4
	or	
BA131	**Business Computing**	4
	or	
CA100	**Beginning Computing**	3
CIS125E	**Excel Workbooks**	4
COMM111	**Fundamentals of Public Speaking (or higher)**	4
EC200	**Introduction to Economics (or higher)**	4
MTH095	**Intermediate Algebra (or higher)+**	4
PSY101	**Psychology of Human Relations+**	4
	or	
PSY201	**Psychology: Mind and Body (or higher)+**	4
	or	
SOC204	**The Sociological Perspective (or higher)+**	4
WR121	**Academic Composition+**	4
	Arts and Letters elective*	4
	Business elective**	12
	Computer Science elective***	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

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

**Business electives: Choose BA or EC courses numbered 200 or BA104.

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

Procurement and Supply Chain Management Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books and software, $2,000; class fees, $200; universal fee, $3,255; and 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.

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.

You may earn an associate of applied science degree by successfully completing the required 93 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA101	**Introduction to Business**	4
BA202	**Personal Effectiveness in Business**	3
BA211	**Financial Accounting 1**	4
BA212	**Financial Accounting 2**	4
BA213	**Managerial Accounting**	4
BA214	**Business Communications+***	3
BA226	**Business Law I**	4
BA231	**Fundamentals of Transportation and Logistics Management**	4
BA234	**Fundamentals of Supply Chain Management**	4
BA235	**Procurement for State and Local Government**	4
BA236	**Contract Management**	4
BA275	**Quantitative Business Methods**	4
BA277	**Business Ethics**	3
BA286	**Negotiations**	4
BA287	**Principles of Project Management**	4
CIS125E	**Excel-Workbooks**	4
COMM111	**Fundamentals of Public Speaking (or higher)**	4
EC200	**Introduction to Economics (or higher)**	4
MTH095	**Intermediate Algebra+ (or higher)**	4
PSY101	**Psychology of Human Relations+**	4
	or	
PSY201	**Psychology: Mind and Body+ (or higher)**	4
	or	
SOC204	**The Sociological Perspective+ (or higher)**	4
WR227	**Technical Writing**	4
	Arts and Letters elective	4
	Business elective**	8

+Meets related instruction requirement.

*Placement in Math and Writing courses determined by testing.

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

Hospitality and Tourism Management

go.chemeketa.edu/hospitality

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 Bed and Breakfasts (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.

For info on this program contact Eric Aebi, Program Chair at 503.589.7994, or eric.aebi@chemeketa.edu.

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.

Students completing the Lodging Management 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 Tourism and Travel 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 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.
- Demonstrate the ability to anticipate market trends within industry-specific distribution processes and technology platforms.

Students completing the Hospitality and Tourism Management 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.

If you have questions about the requirements, contact Advising and First Year Programs at 503.399.5120 or Hospitality and Tourism Management program staff at 503.472.9482, or email kathryn.ellis@chemeketa.edu.

Event Management Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $521; and universal fee, $1,116. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $556; and universal fee, $1,116. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $497; universal fee, $1,116. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Lodging Management certificate prepares students for direct employment in lodging supervision in the following businesses: hotels, motels, resorts, inns, and Bed and Breakfasts (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.

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
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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $497; universal fee, $1,116. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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
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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $608; universal fee, $1,488. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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	**Academic Composition+ (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 45. For subject areas, see page 52.

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, $896; universal fee, $2,852. 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	**Academic Composition+ (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 45.
For subject areas, see page 52.

Wine Hospitality Operations

The program is designed to prepare students for supervisory positions in winery tasting rooms. Tasting rooms have emerged as a critical sales channel for local wineries seeking to maximize revenues by creating loyal clientele. Candidates for this certificate may have relevant experience in viticulture, winemaking or food and beverage management, and are seeking additional skills to fill the gap in their experience. This independent course of study was created by combining courses from both the Hospitality and Tourism Management (HTM) program and the Wine Studies (VMW) program.

Due to the diverse backgrounds of potential candidates, the program will have two flexible components allowing students to tailor their credential to their skill gaps. First, a cooperative work experience component of 6 credits will allow a student to select a worksite and to craft an internship specific to their learning objective. Second, the remainder of the credential can be complied from an extensive approved electives list that includes courses from both programs.

Students will learn about the history of wine, viticulture and wine-making techniques, local and international varietals, sensory evaluation of wine components and varietals, wine selling and marketing strategies, food and beverage operations management, special event planning, crafting memorable guest experiences, and wine appreciation.

For more information about this program, contact Eric Aebi 503.589.7994, eric.aebi@chemeketa.edu.

Program Outcomes

Students completing the Wine Hospitality Operations certificate should be able to:

- Demonstrate important skills for successful wine selling and marketing.
- Discuss the modern wine industry's emergence from its historical antecedents.
- Identify food and wine combinations to maximize sensory experience.
- Explain the management processes in the hospitality industry under which profitability and return on investment are maximized.

Wine Hospitality Operations Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below (depending on elective choices) are books, up to $750; class fees, up to $1,500; universal fee, $1,116. 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 CWE travel.

You may earn a certificate of completion by successfully completing the required 36 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
VMW280F	**Wine Studies Internship**	6
	Wine Hospitality Operations Electives*	30

*Wine Hospitality Operations electives (select 30 credit hours):

Course	Title	Credit Hours
HTM105	**Restaurant Operations**	4
HTM107	**Hospitality Cost Control**	4
HTM125	**Special Events Planning**	4
HTM131	**Customer Services**	3
HTM138	**Foods and Beverages: Gastronomy**	4
HTM224	**Catering and Banquets**	5
VMW101	**General Viticulture**	3
VMW121	**Introduction to Winemaking**	3
VMW131	**Wine Appreciation**	3
VMW132	**Wines of the World**	3
VMW134	**Wines of the Pacific NW**	3
VMW170	**Selling and Marketing Wine**	3
VMW232	**Sensory Evaluation of Wine Varietals**	3
VMW233	**Sensory Evaluation of Wine Components**	3

Office Administration and Technology Program

go.chemeketa.edu/officeadministration

Chemeketa offers certificates and degrees in Office Administration and Technology for those who wish to pursue a career in a business office environment. All of the Office Administration and Technology courses are offered online at least once per school year. Most certificates and degrees can be completed online.

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 skills in order to qualify for entry-level office work. The Virtual Office Assistant certificate (program approval only) 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 five degrees: Administrative Office Professional, Accounting Administrative Assistant, Medical Administrative Assistant, Virtual Office Assistant and Legal Administrative Professional. 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 Micro Business Operations certificate should be able to:

- Apply knowledge of the purposes and functions of marketing including establishing and retaining a customer base.
- Integrate computer computation, communication, and critical thinking skills, including financial record keeping and analysis, to successfully manage a micro business.
- Utilize the operational skills for the student's specific micro business.
- Work independently in a micro business environment.

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 Legal Administrative Professional certificate should be able to:

- Compose, proofread, and accurately produce legal and other business documents using appropriate software and equipment within specified timelines.
- Determine the relationships among law, ethics, and legal office professionals.
- Follow professional business and legal procedures and standards.
- Integrate computer, computation, communication, and critical thinking skills to accomplish legal office tasks and solve problems.
- Store, retrieve, distribute, and manage information to support legal office and management personnel.
- Work both independently and as part of a team.

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 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.

Students completing the Legal Administrative Professional degree should be able to:

- Compose, proofread, and accurately produce legal and other business documents using appropriate software and equipment within specified timelines.
- Determine the relationships among law, ethics, and legal office professionals.
- Follow professional business and legal procedures and standards.
- Integrate computer, computation, communication, and critical thinking skills to accomplish legal office tasks and solve problems.
- Store, retrieve, distribute, and manage information to support legal office and management personnel.
- 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.

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

If you have questions about the requirements, contact the Office Administration and Technology Program Chair at barbara.johansen@chemeketa.edu or call the department office at 503.399.5048.

Business Software Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $659; class fees, $81; universal fee, $558; and equipment and supplies, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate is designed for those who wish to update their computer software skills. All of the required courses are offered online at least once per year.

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
CA118C	**Access Basics**	2
CA118F1	**PowerPoint Basics**	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	**Office Desktop Publishing 1**	4
CA121	**Keyboarding and Document Production**	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

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,553; class fees, $151; universal fee, $1,860; and equipment and supplies, $200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate prepares you to work as a general office clerk, receptionist, file clerk, secretary, records retention specialist, office specialist, bookkeeping assistant, and/or accounting clerk. All of the required courses are offered online at least once per year.

You may earn a certificate of completion by successfully completing the required 60 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)**	4
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 Communication Skills+**	4
BT230	**Organization Performance and Customer Service+**	3
BT280B	**Cooperative Work Experience**	2
CA100	**Beginning Computing**	3
	or	
BA131	**Business Computing**	4
CA117	**Microsoft Publisher**	3
CA118B	**Excel Basics**	3
CA118C	**Access Basics**	2
CA121	**Keyboarding and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	3
CA201D	**Microsoft Word Processing 1**	3
CA202D	**Microsoft Word Processing 2**	3
CA213	**Integrating Office Procedures**	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Legal Administrative Professional Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,132; class fees, $168; universal fee, $1,116; and equipment and supplies, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate prepares you for administrative support roles in law firms and government. You will acquire an understanding of concepts and terminology associated with the legal system, criminal law and juvenile justice,

torts, consumer law, family law, individual rights/liberties, and contemporary issues. This certificate is designed for individuals with prior administrative assistant experience who are seeking the necessary coursework and practical experience to work as legal administrative assistant. Certificate admittance is granted only through program faculty approval.

You may earn a certificate of completion by successfully completing the required 36 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA251	**Office Management**	3
BT280C	**Cooperative Work Experience**	6
PS250	**Introduction to Law 1**	4
PS251	**Introduction to Law 2**	4
	Legal Administrative Professional Electives*	19
*Choose any BT or CA course or BA115, BA131, BA214, BA204, or BA224.		

Micro Business Operations Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $879; class fees, $173; universal fee, $744; and equipment and supplies, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate will prepare individuals with the basics of operating a micro business and will focus on micro businesses that are owned and operated by one or two individuals. Core skills include managing finances, building a business plan, and marketing. Due to the variety of potential micro business opportunities, the remaining coursework is customizable to meet individual needs. Examples of micro businesses include day care providers, photographers, food cart operators, event planners, cosmetologists, contract workers, cottage industry workers, and home-based online businesses. You may earn a certificate of completion by successfully completing the required 24 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
BA115	**Introduction to Accounting**	4
BA223	**Principles of Marketing**	4
	or	
BA209	**Introduction to Social Media Marketing**	4
BA250	**Small Business and Entrepreneurship**	4
CA220	**QuickBooks-Computerized Bookkeeping**	3
	Micro Business Operations Certificate Electives*	9
***Micro Business Operations Certificate Electives:**		
BA131	**Business Computing**	4
BT230	**Organization Performance and Customer Service**	3
CA117	**Microsoft Publisher**	3
CA118B	**Excel Basics**	3
CA118C	**Access Basics**	2
CA201D	**Microsoft Word Processing 1**	3
CA202D	**Microsoft Word Processing 2**	3

Office Fundamentals Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,132; class fees, $168; universal fee, $1,178; and equipment and supplies, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

This certificate allows you to concentrate on developing the basic skills required of a receptionist, file clerk, and/or an employee in other related positions. All of the required courses are offered online at least once per year.

You may earn a certificate of completion by successfully completing the required 38 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
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
BT280B	**Cooperative Work Experience**	2
CA100	**Beginning Computing**	3
	or	
BA131	**Business Computing**	4
CA117	**Microsoft Publisher**	3
CA118B	**Excel Basics**	3
CA121	**Keyboarding and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	3
CA201D	**Microsoft Word Processing 1**	3

Virtual Office Assistant Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $850; class fees, $188; universal fee, $1,147; and equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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. All of the required courses are offered online at least once per year. Certificate admittance is granted only through program faculty approval.

For more information, contact Office Administration and Technology Program Chair at barbara.johansen@chemeketa.edu or call the department office at 503.399.5048.

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
BA115	**Introduction to Accounting**	4
BA209	**Introduction to Social Media Marketing**	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
	or	
CA118F1	**PowerPoint Basics**	1
CA220	**QuickBooks-Computerized Bookkeeping**	3
	Virtual Office Assistant Elective*	3
***Virtual Office Assistant Certificate 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	**Adv. Keyboarding and Document Production**	3
CA202D	**Microsoft Word Processing 2**	3
CA213	**Integrating Office Procedures**	3

Accounting Administrative Assistant Associate of Applied Science Degree Option

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,722; class fees, $364; universal fee, $2,914; and equipment and supplies, $400. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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. All of these required courses are offered online at least once per year.

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	
CA118C	**Access Basics**	2
BT128	**Records Management**	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
CA121	**Keyboarding and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	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 1**	4
CA208	**Workplace Presentations Using PowerPoint**	3
CA220	**QuickBooks-Computerized Bookkeeping**	3
	General Education Elective	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Administrative Office Professional Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,255; class fees, $364; universal fee, $2,852; and equipment and supplies, $400. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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; business writing; efficient use of a variety of software packages; and public relations. All of these required courses are offered online at least once per year.

As a statewide cooperative effort among several Oregon community colleges, this degree is transferable to other participating schools. Consult with an Office Administration and Technology faculty advisor on course transferability.

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
CA118C	**Access Basics**	2
CA121	**Keyboarding and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	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 45. For subject areas, see page 52.

Legal Administrative Professional Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,255; class fees, $364; universal fee, $2,852; and equipment and supplies, $400. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Legal Administrative Professional degree prepares you for a variety of administrative support roles in law firms and government. Students will acquire an understanding of concepts and terminology associated with the legal system, criminal law and juvenile justice, torts, consumer law, family law, individual rights/liberties, and contemporary issues. 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.

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

Course	Title	Credit Hours
BA104	**Business Applications Using Mathematics+**	4
	or	
MTH070	**Elementary Algebra+ (or higher)**	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
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 and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	3
CA201D	**Microsoft Word Processing 1**	3
CA202D	**Microsoft Word Processing 2**	3

Legal Administrative Professional second-year core requirements (45 credit hours):

Course	Title	Credit Hours
BA101	**Introduction to Business**	4
BA115	**Introduction to Accounting**	4
BA214	**Business Communications+**	3
BA251	**Office Management**	3
BT123	**Minute-Taking, Level 1**	2
BT271	**Administrative Capstone Projects**	4
BT280C	**Cooperative Work Experience**	6
CA118C	**Access Basics**	2
CA208	**Workplace Presentations Using PowerPoint**	3
CA213	**Integrating Office Procedures**	3
CA220	**QuickBooks-Computerized Bookkeeping**	3
PS250	**Introduction to Law 1**	4
PS251	**Introduction to Law 2**	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Medical Administrative Assistant Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,504; class fees, $364; universal fee, $3,131; and equipment and supplies, $400. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Medical Administrative Assistant degree prepares you to work in medical offices where you may make appointments, manage records, meet patients, type correspondence, transcribe patient records, maintain financial records, and complete insurance forms. Most of these required courses are offered online at least once per year. Due to the confidential nature of medical office records, a background check may be required of students for this degree.

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.

Medical Administrative Assistant first-year core requirements (51 credit hours):

Course	Title	Credit Hours
BI121	Introduction to Anatomy and Physiology 1	4
BI122	Introduction to Anatomy and Physiology 2	4
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
CA118C	Access Basics	2
CA121	Keyboarding and Document Production	3
CA122	Adv. Keyboarding and Document Production	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 (50 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	Office Desktop Publishing 1	4
CA208	Workplace Presentations Using PowerPoint	3
HM101	Medical Law and Ethics	3
HM114	CPT Coding and Reimbursement	4
HM115	ICD-10-CM Coding/Diagnosis	4
HM123	Essentials of Pathophysiology	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Virtual Office Assistant Associate of Applied Science Degree Option

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,260; class fees, $364; universal fee, $2,883; and equipment and supplies, $400. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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. All of these required courses are offered online at least once per year.

You may earn an associate of applied science degree by successfully completing the required 93 credit hours with a grade of "C" or better in all courses.

Virtual Office Assistant first-year core requirements (47 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	
CA102	**Practical Computing**	2
	or	
BA131	**Business Computing**	4
CA118B	**Excel Basics**	3
CA118C	**Access Basics**	2
CA118F1	**PowerPoint Basics**	1
	or	
CA208	**Workplace Presentations Using PowerPoint**	3
CA121	**Keyboarding and Document Production**	3
CA122	**Adv. Keyboarding and Document Production**	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 Marketing**	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
	General Education Elective	3

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Education & Social Sciences

Tracks in this pathway lead to degrees, certificates, and careers in education, early childhood education, psychology, economics, anthropology, geography, history, political science, and sociology.

Early Childhood Education Track
- Early Childhood Education Certificate
- Infant/Toddler Certificate
- Preschool Certificate
- Early Childhood Education AAS Degree

Education Track
- AAOT—Elementary/Middle School Education
- AAOT—Secondary (High School) Education

Social Sciences Track
- AAOT—Anthropology
- AAOT—Economics
- AAOT—Geography
- AAOT—History
- AAOT—Political Science
- AAOT—Psychology
- AAOT—Sociology

Early Childhood Education

ece.chemeketa.edu

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

Students may select individual courses to meet their needs, or 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 Studies (HDF) courses. In order to enroll in certain courses, students will be required to enroll in the Oregon Child Care Registry, which includes a background check. A valid first aid card is required for graduation in both the one-year and two-year programs.

The on-site laboratory school provides students with hands on experiences working with children. This is where students apply theory from their course work into a classroom setting. Students work side by side with teaching staff and instructors in the lab and receive ongoing coaching about their work. While in the lab, students learn how to develop curriculum, design classroom environments, and assess the development of children. Throughout the program students set goals and reflect on their practice as they work towards developing into professional teachers.

Students who are interested in transferring to a university to earn a bachelor's degree may elect to substitute ECE/HDF courses with general education courses listed below. Program faculty will provide advising to help students better understand their options.

Program Outcomes

Students completing the Early Childhood Education 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 healthy 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 Early Childhood Education 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.

If you have questions about the program requirements, email the Early Childhood Education Program Chair, Pam Ditterick at pam.ditterick@chemeketa.edu or 503.399.6076.

Early Childhood Education Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $774; class fees, $35; universal fee, $1,610; equipment and supplies, $36; immunization fees, $10; basic first-aid card, $35; food handler card, $10; criminal records check, $40; and conference registration, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a certificate of completion by successfully completing the required 46 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
HDF225	**Prenatal, Infant, and Toddler Development**	3
HDF249	**Introduction to Working with Infants and Toddlers**	3
WR121	**Academic Composition+ (or higher)**	4
Term 2		
ECE151	**Observing and Guiding Behavior**	3
ECE152	**Creative Activities**	3
ECE162	**Early Childhood Educator Orientation**	3
HDF247	**Preschool Child Development**	3
MTH060	**Introductory Algebra+ (or higher)**	4
Term 3		
ECE153	**Music and Movement for Young Children**	3
ECE154	**Children's Literature and Literacy**	3
ECE161	**Infant/Toddler Practicum**	3
ECE163	**Preschool Practicum**	4
HDF248	**Learning Experiences for Young Children**	4
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
*Requires recommendations from two Early Childhood faculty.		

Infant/Toddler Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $539; class fees, $35; universal fee, $665; immunization fees, $10; basic first-aid card, $35; food handler card, $10; criminal records check, $40. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 childcare 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.

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. Proof of first aid/CPR and food handler cards will be required upon completion of the certificate.

Course	Title	Credit Hours
Term 1		
ECE150	**Introduction and Observation**	3
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
HDF140	**Home Visiting in ECE**	1

Preschool Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books $489; class fees, $35; universal fee, $630; immunization fees, $10; basic first-aid card, $35; food handler card, $10; criminal records check, $40. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 childcare 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.

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. Proof of first aid/CPR and food handler cards will be required upon completion of the certificate.

Course	Title	Credit Hours
Term 1		
ECE150	**Introduction and Observation**	3
Term 2		
ECE151	**Observing and Guiding Behavior**	3
ECE152	**Creative Activities**	3
HDF222	**Family Relationships**	3
HDF247	**Preschool Child Development**	3
Term 3		
ECE162	**Early Childhood Educator Orientation**	3

Early Childhood Education Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1936; class fees, $55; universal fee, $3,185 based on courses selected; equipment and supplies, $72; immunization fees, $10; basic first-aid card, $35; food handler card, $10; criminal records check, $40; and conference registration, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 First Year Programs or an Early Childhood Education faculty advisor. In addition, 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.

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 ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE150	**Introduction and Observation**	3
HDF225	**Prenatal, Infant, and Toddler Development**	3
HDF249	**Introduction to Working with Infants and Toddlers**	3
WR121	**Academic Composition+ (or higher)**	4
Term 2		
ECE151	**Observing and Guiding Behavior**	3
ECE152	**Creative Activities**	3
ECE162	**Early Childhood Educator Orientation**	3
HDF247	**Preschool Child Development**	3
MTH060	**Introductory Algebra+ (or higher)**	4
Term 3		
CIS101	**Computing Concepts**	3
	or	
CA100	**Beginning Computing**	3
ECE153	**Music and Movement for Young Children**	3
ECE154	**Children's Literature and Literacy**	3
ECE161	**Infant/Toddler Practicum**	3
HDF248	**Learning Experiences for Young Children**	4
Term 4		
ECE163	**Preschool Practicum*** **	4
ECE251	**Young Children Environments**	3
HDF222	**Family Relationships+**	3
	ECE elective** **	1
	Arts and Letters elective*	4
	or	
	Science/Applied Science elective*	4
	or	
	COMM111 Fundamentals of Public Speaking	4
Term 5		
ECE155	**Child Nutrition, Health, and Safety**	3
	or	
NFM225	**Nutrition**	4
ECE261	**Student Teaching 1*** **	6
HDF257	**Home, School, and Community**	3
HDF258	**Teaching in an Anti-Bias Classroom**	3
	ECE elective** **	1
Term 6		
ECE262	**Student Teaching 2*** **	4
	or	
ECE280D	**Cooperative Work Experience**	4
HDF229	**Middle Childhood Development**	3
HDF286	**Professional Issues and Leadership ECE**	3
	ECE elective** **	1
	Arts and Letters elective*	4
	or	
	Science/Applied Science elective*	4
	or	
	Fundamentals of Public Speaking	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Selection may not be repeated.

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

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

****Take one of the following: ECE142, ECE144, ECE145, ECE146, ECE147, HDF140, or HDF141 members.

Education

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Start your education degree at Chemeketa! Chemeketa offers a two-year Major Transfer Map Associate of Arts Oregon Transfer (AAOT) degree with specific required education classes that prepare students for university transfer or for employment as an instructional assistant in local school districts.

The two-year Major Transfer Map is designed specifically for students who want to become teachers, although there are different paths for elementary/middle school and middle/high school (requirements for these two levels is different). The curriculum consists of a 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 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 First Year Programs at 503.399.5120 as soon as possible to ensure proper coursework.

Transferring into education programs requires a 2.50 GPR or higher.

Bilingual students are encouraged to consider the "Bilingual Student Teacher Leader" program, which includes additional financial supports. 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 52. .

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. It Is recommended that students take 200-level language classes. Education majors who are native speakers may take the Spanish of Native Speakers class and test for the Oregon Seal of Biliteracy.

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**	4
	or	
ART131	**Introduction to Drawing 1**	4
ENG104	**Introduction to Fiction**	4
	or	
ENG105	**Introduction to Dramatic Literature, or**	4
	or	
ENG106	**Introduction to Poetry**	4
LING210	**Introduction to Linguistics (WOU only)**	4

Communication:

COMM111	**Fundamentals of Public Speaking**	4

Education:

ED216	**Foundations of Education**	3
ED229	**Learning and Development**	3
ED240	**Education Practicum and Seminar**	3
ED258*	**Culturally Responsive Pedagogy**	3
ED265	**Inclusion: Special Needs Students**	3

Health:

HPE295	**Health and Fitness for Life**	3
	or	
	Three one-credit Physical Education Courses	3

Math:

Highschool teachers

MTH105	**Math in Society**	4
	or	
MTH111	**College Algebra**	5

Elementary teachers

MTH211	**Foundations of Elementary Mathematics**	4
MTH212	**Foundations of Elementary Mathematics**	4
MTH213	**Foundations of Elementary Mathematics**	4

Science: Students must take 3 lab science classes

BI101	**General Biology: Ecology and Diversity**	4
GS106	**General Science: Earth Science**	4
GS104	**General Science: Physics**	4
	or	
GS105	**General Science: Chemistry**	4
	or	
GS107	**Astronomy**	4
	or	
	GEO or other lab science courses	

Social Science—Maximum of 16 Credits:

GEG106	**Cultural Geography**	4
HST201	**United States: to 1840**	4
	or	
HST202	**United States: 1840 to 1900**	4
	or	
HST203	**United States: 1900 to Present**	4
PS201	**American Government**	4
PSY201	**Psychology: Mind and Body (preferred)**	4
	or	
PSY218	**Educational Psychology**	4

Writing:

WR121	**Academic Composition**	4
WR122	**Argument, Research, and Multimodal Composition**	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 52.

Students planning to teach high school normally work towards a bachelor's degree in a specific discipline area, such as History or Math. At Chemeketa, students will start with an AAOT that follows a guided pathway in the discipline area (usually at least 6 classes in the discipline area), and additionally take ED 200, ED 240, ED 258, and ED 233 (instead of ED 229). Students should also check with the transfer institution to make sure their course taking aligns with the transfer path.

Social Sciences

The Social Sciences Guided Pathways explore academic areas in social and behavioral sciences. This overarching area includes the discipline specific pathways in Anthropology, Economics, History, Political Science, Psychology and Sociology. Coursework develops students' ability to engage in critical thinking and understanding of social behavior. These discipline areas lead to a number of different career pathways in government, academic research, social services, clinical psychology, health care, justice, business, and non-profit organizations.

Anthropology

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers a number of anthropology courses. Some of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Economics

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers three economics courses. All of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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, Eastern Oregon University 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 First Year Programs 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.

Geography

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers a number of geography courses. Most of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

History

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers a number of history courses. All of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Political Science

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

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 Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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-Law

The minimum requirement for admission to law school is a bachelor's degree from an accredited college or university. Law schools value a broad educational background, such as is provided by majors in the social sciences or humanities, rather than narrow specialization. Although law schools do not require a specific major, students who plan to seek admission to law school should pursue undergraduate studies that develop strong analytical skills, critical thinking skills, logical reasoning skills, and written and oral communication skills. Chemeketa offers a variety of courses and co-curricular activities that prepare students for law school, including a competitive mock trial program.

Contact the Program Chair of Political Science for more information about preparation for law school.

Psychology

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers a number of psychology courses. The majority of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Sociology

For discipline outcomes, see General Education Outcomes—Social Science on page 52.

Chemeketa offers a number of sociology courses. All of these courses can be used to fulfill the Social Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Health Professions & Wellness

Tracks in this pathway lead to degrees, certificates, and careers in nursing, dental assisting, dental hygiene, anesthesia technician, health information management, pharmacy technician, health-related occupations, community health education, exercise science, addiction studies, and social services.

Anesthesia Technology Track
- Anesthesia Tech AAS Degree

Dental Track
- Dental Assisting Certificate
- Dental Hygiene*
- Pre-Dental Hygiene
- Pre-Dentistry
- *Prepare students to transfer to Oregon Tech

Health & Human Performance Track
- AAOT - Health & Human Performance

Human Services Track
- Addiction Counselor Certificate
- Addiction Studies AAS Degree
- Social Services AAS Degree

Medical Assisting Track
- Medical Assisting Certificate

Nursing Track
- Practical Nursing Certificate
- Nursing AAS Degree
- Pre-Nursing

Pharmacy Track
- Pharmacy Technician Certificate
- Pharmacy Management AAS Degree
- Pre-Pharmacy

Speech-Language Pathology Assistant (SLPA) Track
- SLPA Certificate
- SLPA AAS Degree

Anesthesia Technology

The Anesthesia Technology program provides the student with entry level training leading to an Associate of Applied Science degree. Curriculum is based on the American Society of Anesthesia Technologist and Technicians (ASATT) standards and guidelines as well as the Commission on Accreditation of Allied Health Education Programs (CAAHEP) standards. Course work includes the following: Anatomy and Physiology, Microbiology, Medical Terminology, Pharmacology, EKG Analysis, Anesthesia Equipment Principles and Applications, and general medical knowledge. Included in the program are intensive clinical experiences in local area hospitals.

Entry Requirements:
- Minimum age, 18 years.
- Appropriate placement into WR121, and MTH095 or MTH098 through Accuplacer.
- Fluent in English language, including verbal and written.
- Complete and pass background test and UA drug screening.
- Produce vaccination schedule that meets OHA requirements.
- Meet the technical standards for the program.

Program Outcomes

Students completing the Anesthesia Technology degree should be able to:
- Assume the role of a competent, caring Anesthesia Technologist in a variety of healthcare settings under the direct supervision of the licensed healthcare provider.
- Demonstrate the principles of basic and advanced airway management in all phases of the perioperative episodes of care.
- Demonstrate critical thinking skill: prioritizing, analyzing, anticipating, resolving problems, and acting instinctively and decisively in the anesthesia health care environment.
- Demonstrate accountability of practice with adherence to ethical and legal standards of the Anesthesia Technologist profession.
- Communicate effectively in the perioperative health care environment with all members of the healthcare team.
- Demonstrate rationale and competency with regard to anesthesia related equipment.
- Demonstrate the ability to maintain and service anesthesia equipment including cleaning, sterilizing, assembling, calibrating, testing, troubleshooting, and recording of inspections and maintenance.

Anesthesia Technology Associates of Applied Sciences Degree

Estimated costs for students who complete the required courses listed below are Tuition, $10,355: books, $1,000; clinical fees, $1,500; lab fees, $2,500; Differential fee $340 and universal fee, $3,379. 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's degree by successfully completing the required 108 credit hours with a grade of "C" or better in all courses.

Program Prerequisites:

Course	Title	Credit Hours
BI231	**Human Anatomy and Physiology 1**	4
BI232	**Human Anatomy and Physiology 2**	4
BI233	**Human Anatomy and Physiology 3**	4
BI234	**Microbiology**	4
CH110	**Foundations of General, Organic, and Biochemistry**	5
HM120	**Medical Terminology 1**	3
HM121	**Medical Terminology 2**	4
MTH095	**Intermediate Algebra (or higher)**	4
PSY201	**Psychology: Mind and Body**	4
WR121	**Academic Composition**	4
Program Core Courses		
Term 1		
ANES101	**Introduction to Anesthesia Technology**	4
ANES103	**Anesthesia Technology Lab 1**	3
ANES112	**Operating Room Equipment**	2
PHM243	**Pharmacology 1 for the Anesthesia Technologist**	3
Term 2		
ANES104	**Anesthesia Technology Lab 2**	4
PHM244	**Pharmacology 1 for the Anesthesia Technologist**	4
Term 3		
ANES102	**Anesthesia Equipment: Principles and Applications**	4
ANES105	**Anesthesia Technology Lab 3**	4
ANES130	**ACLS/PALS with EKG Analysis**	4
Term 4		
ANES203	**Anesthesia Technology Lab 4**	4
ANES210	**Anesthesia Technology Clinical Practicum 1**	8
Term 5		
ANES204	**Anesthesia Technology Lab 5**	4
ANES211	**Anesthesia Technology Clinical Practicum 2**	8
Term 6		
ANES212	**Anesthesia Technology Clinical Practicum 3**	9
ANES215	**Anesthesia Technology Certification Exam Prep**	3

Dental Assisting

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 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 Dental Assisting 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.
- 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.

If you have questions about the requirements, contact the Health Sciences Department at 503.399.5058 or email healthsciences@chemeketa.edu.

Program Prerequisites

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 First Year Programs 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
	or	
BI122	**Intro to Human Anatomy and Physiology 2**	4
	or	
BI232	**Human Anatomy and Physiology 2**	4
CIS101	**Computing Concepts**	3
COMM111	**Fundamentals of Public Speaking (or higher)**	4
MTH060	**Introductory Algebra+ (or higher)**	4
PSY101	**Psychology of Human Relations (or higher)**	4
WR121	**Academic 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.

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 (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, $850; lab fees, $1,500; universal fee, differential fee, $225; $1,395; uniform and shoes, $400; exam fees, $600; immunizations, $150; criminal background check and drug testing, $115; CPR certification, $80; professional membership fee, $55 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 67 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
DEN150	**Dental Sciences**	3
DEN151	**Introductory Concepts in Dental Assisting**	3
DEN153	**Dental Materials 1**	3
DEN156	**Dental Anatomy**	4
DEN165	**Dental Office Emergency Management**	2
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
Term 3		
DEN171	**Dental Assisting Practicum 2**	9
DEN172	**Expanded Functions**	3
DEN174	**Dental Radiology 2**	2

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Dental Hygiene

(Pre-OIT Admission Requirements)

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

Oregon Institute of Technology (OIT), in partnership with Chemeketa, offers a Bachelor of Science degree in Dental Hygiene on the Chemeketa Salem campus.

The Dental Hygiene program requires one year of prerequisite coursework (as listed below) prior to entry into the OIT Dental Hygiene program. Admission to the program is competitive and only a limited number of applicants are accepted each year.

It is important to check with OIT for admission requirements and deadlines, and to obtain admission materials early, as requirements change. The application and other program information is available at oit.edu/academics/degrees/dental-hygiene.

Course	Title	Credit Hours
BI231	**Human Anatomy and Physiology 1**	4
BI232	**Human Anatomy and Physiology 2**	4
BI233	**Human Anatomy and Physiology 3**	4
BI234	**Microbiology**	4
CH110	**Foundations of General, Organic, and Biochemistry**	5
	or	
CH104	**Chemistry for Allied Health**	5
	and	
CH105	**Chemistry for Allied Health**	5
	and	
CH106	**Chemistry for Allied Health**	5
COMM111	**Fundamentals of Public Speaking**	4
DHE100	**Introduction to Dental Hygiene***	2
HM120	**Medical Terminology 1**	3
	Humanities elective**	3
MTH243	**Probability and Statistics 1**	4
	or	
MTH111	**College Algebra (or higher)**	5
NFM225	**Nutrition**	4
	Psychology elective	3
SOC204	**The Sociological Perspective**	4
WR121	**Academic Composition**	4
WR122	**Argument, Research, and Multimodal Composition**	4
	or	
WR227	**Technical Writing**	4

*Subject to change and the official curriculum for Oregon Tech should be viewed at www.oit.edu.

**Humanities electives: ART, HUM, LIT, MUS, PHL, or 2nd year language.

Health and Human Performance

For discipline outcomes, see General Education Outcomes beginning on page 52. .

Chemeketa offers several courses in Health Education and Physical Education. Students can take one or more courses to fulfill the requirements of the Associate of Arts Oregon Transfer (AAOT) degree, the Associate of Science Oregon Transfer (ASOT) degrees in Business and in Computer Science, or for personal enrichment. See page 56, page 60, and page 62 for a complete listing.

Students wishing to explore careers in Health or Physical Education are encouraged to complete a two-year track in Health and Human Performance. This entails completing an AAOT degree from Chemeketa with an emphasis on Health and Human Performance, and to continue their studies at a public or private four-year institution. The Health and Human Performance discipline has transfer agreements with some of the schools in Community Healthy Education, Exercise Science, Health Studies, Public Health, and Applied Health and Fitness. Other possible areas of interest include Athletic Training, Coaching, Fitness Management, Nutrition, Pre-Therapy, Sports Management, and Teaching.

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Community Health Education, Exercise Science, Health Studies, Public Health, and/or Applied Health and Fitness are Eastern Oregon University, Linfield University, Oregon State University, Portland State University, Southern Oregon University, and Western Oregon University. EOU's degree is in Physical Education and Health. Linfield offers degree options in Exercise Science and Public Health, with teaching and non-teaching options. OSU offers degree options in Health Management and Policy, Health Promotion, and Health Behavior. PSU offers Health Studies and Applied Health and Fitness. SOU offers a Health and Physical Education degree. WOU offers a degree in Community Health Education and Exercise Science, with teaching and non-teaching degrees options.

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 First Year Programs staff and the 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.

Human Services

go.chemeketa.edu/humanservices

The Human Services Program (HSP) 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 fieldwork at two different sites, each of which is at least two terms long. Students should select one of three degrees: Addiction Studies, Direct Support Professional or Social Services.

Post baccalaureate students are eligible to complete the Addiction Counselor Certification Preparation (ACCP) program and earn a one-year certificate. Students interested in this program must attend an orientation or meet personally with Christina Steiger (christina.steiger@chemeketa.edu) advisor to the program, prior to beginning coursework.

The HSP has special admission requirements and enrollment limits, and there is a deadline for applications. Criminal history limitations may apply to students in the practicum experience.

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, 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 oneself, clients, the employing organization, and the human services profession.
- Utilize 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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,700; class fee, $21 per practicum course differential fee, $5 per credit; universal fee, $31 per credit; CADC candidate registry, $75; and equipment and supplies, $300; 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.

This 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.

You may earn a certificate of completion by successfully completing the required 60 credit hours with a grade of "C" or better in all Human Services courses and a minimum of 15 credits of practicum. Check the course descriptions in the back of this catalog for details.

Course	Title	Credit Hours
Term 1		
HS101	**Addiction Pharmacology and Physiology**	4
HS103	**Ethics for Human Services**	3
HS155	**Fundamentals of Interviewing**	3
Term 2		
HS140	**Addressing Client Violence**	1
HS211	**Wellness Counseling**	4
HS214	**Advanced Interviewing and Counseling Skills**	3
HS219	**Client Records, Case Management, and Care Coordination**	3
Term 3		
HS156	**Counseling Theories**	3
HS158	**Trauma Informed Care**	3
HS216	**Assessment and TX Planning**	3
HS218A	**Group Processes A**	1

HS284A-HS288A	**Practicum: Human Services-Addiction Studies**	4–8
Term 4		
HS201	**Addiction and the Family System**	3
HS217	**Group Counseling Skills**	3
HS218B	**Group Processes B**	1
HS284A-HS288A	**Practicum: Human Services-Addiction Studies**	4–8
Term 5		
HS209	**Co-occurring Disorders**	3
HS213	**Multicultural Issues**	3
HS218C	**Group Processes C**	1
HS284A-HS288A	**Practicum: Human Service-Addiction Studies**	4–8

Addiction Studies Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,510; class fees, $21 per practicum course; differential fee, $5 per credit; universal fee, $31 per credit; CADC candidate registry, 75; and equipment and supplies, $325; 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.

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.

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.

An associate of applied science degree is awarded upon successful completion of the required 100 credit hours with a grade of "C" or better in 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		
HS101	**Addiction Pharmacology and Physiology**	4
HS150	**Personal Effectiveness in Human Services**	3
HS152	**Stress Management**	1
HS158	**Trauma Informed Care**	3
WR121	**Academic Composition**	4
Term 2		
CIS101	**Computing Concepts**	3
or		
CA100	**Beginning Computing**	3
HS103	**Ethics for Human Services**	3
HS155	**Fundamentals of Interviewing**	3
HS170	**Introduction to Practicum**	4
PSY201	**Introduction to Psychology: Mind and Body+**	4
Term 3		
HS140	**Addressing Client Violence**	1
HS211	**Wellness Counseling**	4
HS214	**Advanced Interviewing and Counseling Skills**	3
HS219	**Client Records, Case Management, and Care Coordination**	3
HS260	**Group Dynamics**	3
HS284A-HS288A	**Practicum: Human Services-Addiction Studies***	5
Term 4		
HS156	**Counseling Theories**	3
HS216	**Assessment and TX Planning**	3
HS218A	**Group Processes A**	1
HS284A-HS288A	**Practicum: Human Services-Addiction Studies***	7
PSY239	**Abnormal Psychology**	4
Term 5		
HS201	**Addiction and the Family System**	3
HS217	**Group Counseling Skills**	3
HS218B	**Group Processes B**	1
HS284A-HS288A	**Practicum: Human Services-Addiction Studies***	7
MTH060	**Introductory Algebra (or higher)**	4
Term 6		
HS209	**Co-occurring Disorders**	3
HS213	**Multicultural Issues**	3
HS218C	**Group Processes C**	1
HS284A-HS288A	**Practicum: Human Services-Addiction Studies***	6

*Practicum must equal a total of 25 credits of supervised filed work at two different sites, each of which is at least two terms long.

Direct Support Professional Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,510; class fees, $21 per practicum course; differential fee, $5 per credit; universal fee, $31 per practicum course; differential fee, $5 per credit; and equipment and supplies, $325; 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.

The Direct Support Professional degree prepares graduates to work in support and leadership positions in public and private agencies serving people with cognitive disabilities. These agencies work within communities to provide direct support and advocacy to their clients. The curriculum includes courses in human development, leadership, and case management.

An Associate of Applied Science Degree is awarded upon successful completion of 96 credits. Twenty-five credits of practicum are required.

Course	Title	Credit Hours
Term 1		
HS101	**Addiction Pharmacology and Physiology**	4
HS150	**Personal Effectiveness in Human Services**	3
HS152	**Stress Management**	1
HS158	**Trauma Informed Care**	3
WR121	**Academic Composition**	4
Term 2		
CIS101	**Computing Concepts**	3
	or	
CA100	**Beginning Computing**	3
HS103	**Ethics for Human Services**	3
HS155	**Fundamentals of Interviewing**	3
HS170	**Introduction to Practicum**	4
PSY201	**Introduction to Psychology: Mind and Body**	4
Term 3		
HS140	**Addressing Client Violence**	1
HS211	**Wellness Counseling**	4
HS260	**Group Dynamics**	3
HS265	**Casework Interviewing**	3
HS284D-HS288D	**Practicum: H.S. Direct Support Professional***	4-8
Term 4		
HS266	**Comprehensive Case Management**	3
HS284D-HS288D	**Practicum: H.S. Direct Support Professional***	4-8
PSY237	**Life Span Development**	4
Term 5		
HS225	**Therapeutic Recreation**	3
HS284D-HS288D	**Practicum: H.S. Direct Support Professional***	4-8
MTH060	**Introduction to Algebra (or higher)**	4
PSY239	**Abnormal Psychology**	4
Term 6		
HS213	**Multicultural Issues**	3
HS223	**Aging: Theory and Practice**	3
HS250	**Leadership in Behavioral Health**	4
HS284D-HS288D	**Practicum: H.S. Direct Support Professional***	4-8
*Must complete 25 credits of HS284D-HS288D		

Social Services Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,910; class fees, $21 per practicum course; differential fee, $5 per credit; universal fee, $31 per practicum course; differential fee, $5 per credit; and equipment and supplies, $325; 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.

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.

An associate of applied science degree is awarded upon successful completion of the required 95 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		
HS101	**Addiction Pharmacology and Physiology**	4
HS150	**Personal Effectiveness in Human Services**	3
HS152	**Stress Management**	1
HS158	**Trauma Informed Care**	3
WR121	**Academic Composition**	4
Term 2		
CIS101	**Computing Concepts (or higher)**	3
	or	
CA100	**Beginning Computing**	3
HS103	**Ethics for Human Services**	3
HS155	**Fundamentals of Interviewing**	3
HS170	**Introduction to Practicum**	4
PSY201	**Introduction to Psychology: Mind and Body+**	4
Term 3		
HS140	**Addressing Client Violence**	1
HS211	**Wellness Counseling**	4
HS260	**Group Dynamics**	3
HS265	**Casework Interviewing**	3
HS284S-HS288S	**Practicum: Human/Social Services**	5
Term 4		
HS156	**Counseling Theories**	3
HS218A	**Group Processes A**	1
HS266	**Case Management**	3
HS284S-HS288S	**Practicum: Human and Social Services**	6
PSY237	**Life Span Development**	4
Term 5		
HS218B	**Group Processes B**	1
HS284S-HS288S	**Practicum: Human and Social Services***	6
MTH60	**Introductory Algebra+ (or higher)**	4
PSY239	**Abnormal Psychology**	4
Term 6		
HS213	**Multicultural Issues**	3
HS218C	**Group Processes C**	1
HS223	**Aging: Theory and Practice**	3
HS284S-HS288S	**Practicum: Human and Social Services***	8

*Practicum must equal a total of 25 credits of supervised filed work at two different sites, each of which is at least two terms long.

+Meets related instruction requirements.

Medical Assisting

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 Medical Assisting 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.
- Receive BLS Provider CPR Certification.

This is a three-term program with special admission requirements and enrollment limits. Prior to program entry, students must 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, 503.472.9482.

Medical Assisting Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are; class fees/ supplies/NCCT review and exam, criminal background check/drug testing, $1,350; universal fee, $984; 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

Nursing Education

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 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 First Year Programs 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.

This program has specific entry requirements as outlined in the nursing application packet available on Chemeketa's web site, chemeketa.edu. Most nursing bound students complete the majority of general education and science courses required for the nursing program prior to applying 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

Estimated costs for students who complete the Level I program courses listed below are Tuition, $2,755; books, $850; Differential fee, $145 universal fee, $899; clinical/lab fee, $3,207; equipment and supplies, $705; criminal background check and drug testing fee, $113; CPR certification, $40; immunizations and TB screening, estimate $150; licensure testing fee including Pearson fee, $370. These costs do not include all the General Education course fees. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

Program Outcomes

Students completing the Practical Nursing certificate should be able to:

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

You may earn a certificate by successfully completing the required 60 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).

Program Prerequisites:

Course	Title	Credit Hours
BI231	**Human Anatomy and Physiology 1***	4
BI232	**Human Anatomy and Physiology 2**	4
BI233	**Human Anatomy and Physiology 3**	4
PSY201	**Psychology: Mind and Body+†**	4
PSY237	**Life Span Development**	4
WR121	**Academic Composition+‡**	4
	General Education elective	4
	Additional elective**	3

Core Practical 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
*CH110, CH 104 & 105, or CH121 & 122 is a prerequisite for BI231.		
**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, 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 45. For subject areas, see page 52.		

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

Completed	Course No.	Credit Hours
Pre-Summer Term 2010	PSY201	3
	and	
Pre-Summer Term 2010	PSY202	3

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

Completed	Course No.	Credit Hours
Pre-Summer Term 2010	WR121	3
	and	
Pre-Summer Term 2010	WR122, or WR123, or WR227	3

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

Nursing Associate of Applied Science Degree

Estimated costs for students in Level II courses listed below are Tuition $2,755;; Differential fee, $145; universal fee, $899; clinical/lab fee, $3,330; criminal background check and drug testing fee, $90; equipment and supplies, $744; CPR certification, $40; TB screening, $50; licensure testing fee including Pearson fee, $370. These fees do not include all the General Education course fees. 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 degree by successfully completing the required 93 credit hours. You must earn grades of "C" or better in all required courses in order to progress through the terms. 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.

Program Outcomes

Students completing the Nursing degree should be able to:

- Patient Centered Care: Incorporates novice level management skills while providing patient centered care.
- Quality and Safety: Develop nursing care that minimizes risk or harm to patients, self, and others; and uses data to monitor outcomes of patient centered care.
- Clinical Decision Making: Formulate clinical judgements in providing nursing care based on current evidence, clinical expertise, and patient preferences, needs, and values.

- Professionalism: 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.
- Informatics and technology: Formulate nursing care using current technology and patient information to maximize safety, and optimize health.
- Teamwork and collaboration: Communicate effectively and collaboratively in a self-directed manner with patients, families, and members of the healthcare team.

Nursing Program Prerequisites:

Course	Title	Credit Hours
BI231	**Human Anatomy and Physiology 1***	4
BI232	**Human Anatomy and Physiology 2**	4
BI233	**Human Anatomy and Physiology 3**	4
MTH095	**Intermediate Algebra (or higher)**	4
PSY201	**Psychology: Mind and Body+†**	4
PSY237	**Life Span Development**	4
WR121	**Academic Composition+‡**	4
	General Education elective	4
	Additional elective* **	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
Term 4		
NUR206	Complex Health Problems	11
Term 5		
NUR208	Care in Urgent and Community Settings	10
Term 6		
NUR209	Entry into Practice	8
*CH110, CH 104 & 105, or CH121 & 122 is a prerequisite for BI231.		
***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, 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 45. For subject areas, see page 52.		

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

Completed	Course No.	Credit Hours
Pre-Summer Term 2010	PSY201	3
	and	
Pre-Summer Term 2010	PSY202	3

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

Completed	Course No.	Credit Hours
Pre-Summer Term 2010	WR121	3
	and	
Pre-Summer Term 2010	WR122, or WR123, or WR227	3

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

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.

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 First Year Programs 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, Warner Pacific University, Northwest Christian University, and George Fox 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.

Pharmacy Technology

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 Pharmacy Technician 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 Pharmacy Management 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 First Year Programs 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 First Year Programs, 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

Estimated costs for students who complete the courses listed below are Tuition, $5,320; books, $360; universal fee, $1,736; differential fee, $220; equipment and supplies, $50; Lab fees, $279; one-year non-renewable license (includes criminal background check and fingerprinting), $142; drug testing, $50; CPR certification, $80; immunizations, $150; Certified Pharmacy Technician 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 56 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	**Introduction to Pharmacy Technology**	1
PHM115	**Pharmacy Operations/ Management**	3
PHM120	**Pharmacy Operations/Laboratory**	3
PHM230	**Pharmaceutical Drug Classifications**	3
PHM231	**Pharmacology 1**	5
Term 2		
PHM110	**Pharmacy Calculations**	3
PHM210	**Over-the-Counter (OTC) Products**	2
PHM215	**Sterile Compounding/Cytoxic Medications**	3
PHM220	**Multicultural Patient Healthcare**	2
PHM232	**Pharmacology 2**	5
WR115	**Introduction to Composition+ (or higher)**	4
Term 3		
PHM130	**Pharmacy Information: Law and Ethics**	3
PHM150	**Pharmacy Tech Practicum**	7
PHM151	**Pharmacy Tech Seminar 1**	1
PHM233	**Pharmacology 3**	3
PSY104	**Workplace Psychology+ (or higher)**	4
+Meets related instruction requirement		

Pharmacy Management Associate of Applied Science Degree

Estimated costs for students who complete second year courses listed below are Tuition, $4,655; books, $1,570; class fees, $200; universal fee, $1,519; differential fee $30. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an associate of applied science degree by successfully completing required 104 credit hours of the two-year Pharmacy Management program (48 credits during the second year in addition to the 56-credit Pharmacy Technician certificate) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 4		
BA234	**Fundamentals of Supply Chain Management**	4
MTH095	**Intermediate Algebra (or higher)**	4
WR121	**Academic Composition (or higher)**	4
Term 5		
BA206	**Business Management Principles**	4
COMM218	**Interpersonal Communication**	4
EC201	**Introduction to Microeconomics (or higher)**	4
HPE295	**Health and Fitness for Life**	3
PHM216	**Advanced Sterile Compound/ Cytotoxic Meds**	3
Term 6		
BA226	**Business Law 1**	4
CIS125E	**Excel-Workbooks**	4
PHM160	**Hospital/Ambulatory Pharmacy Practicum**	2
PHM161	**Pharmacy Tech Seminar 2**	1
PSY201	**Psychology: Mind and Body+ (or higher)**	4
	Arts and Letters elective*	3
+Meets related instruction requirement.		
*Choose courses numbered 200 or above.		

Speech-Language Pathology Assistant

speechpathology.chemeketa.edu

Program courses delivered entirely online with practicum arranged locally for students.

The Speech-Language Pathology Assistant (SLPA) program is a comprehensive certificate and AAS 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 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.

Students from other states have successfully completed Chemeketa's SLPA program. Interested students are encouraged to contact their state licensing board for speech-language pathology to ensure that this program will meet their state licensing 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 oregon.gov/bspa/Pages/index.aspx to review the educational and practicum requirements necessary to be certified as a speech-language pathology assistant. Students from other states are encouraged to contact their respective Board of Examiners for Speech Pathology and Audiology to explore licensing requirements in the state for SLPAs. Please contact the department with any questions regarding your state requirements. The program faculty may be aware of agreements in place for specific state boards. Students have attended the Chemeketa SLPA program from a variety of states in the United States.

Program Outcomes

Students completing the SLPA 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 First Year Programs. 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 are typically admitted as a cohort beginning Fall term after being admitted to the program. Coursework for the program is divided over 5 terms; Fall 1, Winter 1, Spring 1, Fall 2 (practicum+ coursework), Winter 2 (practicum+ coursework).

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. Practicum sites may require students to complete fingerprinting and additional site requested processes at their own expense.

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 are strongly encouraged to meet with the designated advisor for the SLPA program within

Chemeketa's Advising and First Year Programs to formulate an individualized program of study.

If you have any questions about the requirements, please refer to the program website (speechpathology.chemeketa.edu) to contact SLPA program staff.

Speech-Language Pathology Assistant Certificate of Completion

In addition to tuition ($126 per credit), estimated costs for students who complete the courses listed below are books, $1,950;. 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
SLP284	**Language Therapy**	3
SLP285	**Anatomy and Physiology of Speech and Language**	3
SLP286	**Speech Intervention with Children, Adolescents, and Adults**	3
SLP287	**Clinical Documentation and Materials Management for the SLPA**	3
SLP288	**Communication Disorders in Low Incidence Populations**	3
SLP289	**SLPA Practicum 1**	3
SLP290	**SLPA Practicum 2**	3
SLP291	**Ethical and Legal Considerations in Speech-Language Pathology**	3
SLP292	**Augmentative and Alternative Communication**	3
SLP293	**Adult Communication Disorders**	3
SLP294	**Language, Culture and Society: Cross-Cultural Communication**	3
WR121	**Academic Composition+ (or higher)**	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Speech-Language Pathology Assistant Associate of Applied Science Degree

In addition to tuition ($126 per credit), estimated costs for students who complete the courses listed below are books, $2,800;. 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 91 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 (34 credit hours):		
CIS101	**Computing Concepts (or higher)**	3
COMM100	**Introduction to Communication (or higher)**	4
	Arts and Letters electives	8
	Physical Education or Health electives	3
	Science/Applied Science electives	8
	Social Science electives	8

Emergency Services & Public Safety

Tracks in this pathway lead to degrees, certificates, and careers in emergency care, fire protection, building inspection, criminal justice, and public safety.

Building Inspection Track
- Building Inspector Certificate
- Building Inspection AAS Degree

Criminal Justice, Corrections & Law Enforcement Track
- Criminal Justice AAS Degree*
- Juvenile Justice AAS Degree
- Basic Corrections Certificate
- Corrections AAS Degree
- Basic Law Enforcement Certificate
- Law Enforcement AAS Degree

*Prepares for employment or transfer

Emergency Medical Technician (EMT) Track
- EMT Certificate
- Paramedicine AAS Degree

Fire Protection Track
- Fire Prevention AAS Degree
- Fire Service Supervision & Management Certificate
- Fire Suppression AAS Degree

Building Inspection Technology

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 Polk Center at 503.623.5567.

Program Outcomes

Students completing the Building Inspector certificate should be able to:

- Understand the roles and responsibilities of key building department employees and the interaction of the department with state and local governments and the construction industry.
- Understand the processes of conducting inspections on residential and commercial projects.
- Inspect buildings at various stages of construction, referencing current building codes to write correction notices and reports.
- Pass International Code Council certification tests associated with the Building Inspector Certificate.

Students completing the Building Inspection Technology degree should be able to:

- Understand the roles and responsibilities of key building department employees and the interaction of the department with state and local governments and the construction industry.
- Understand the processes of issuing permits, conducting inspections, and completing plan reviews.
- Inspect buildings at various stages of construction, referencing current building codes to write correction notices and reports.
- Review building plans and blueprints for compliance with the letter and intent of current codes.

- Pass International Code Council certification tests associated with the courses in the Building Inspection Technology program.
- Communicate technical information and requirements to a variety of stakeholders using written and oral presentation skills.

Building Inspector Certificate of Completion

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,248; class fees, $870; universal fee, $1,271; and equipment and supplies, $180. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Building Inspector certificate provides students with knowledge and skills in commercial and residential building codes that are necessary for entry-level inspector positions. Application of code knowledge in the inspection process is stressed throughout the four terms of the certificate program. The certificate is designed for students working in the industry or those with a diverse construction background looking to move into an entry-level inspector position.

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		
BLD141	**International Residential Code 1**	3
BLD151	**Building Codes 1**	3
BLD158	**Construction Materials and Blueprints**	2
Term 2		
BLD142	**International Residential Code 2**	3
BLD152	**Building Codes 2**	3
BLD165	**Residential Inspection**	3
BLD181	**Mechanical Codes 1**	3
Term 3		
BLD153	**Building Codes 3**	3
BLD166	**Commercial Inspection**	3
BLD182	**Mechanical Codes 2**	3
Term 4		
BLD280F	**Cooperative Work Experience (summer term)**	6
BLD280F	**Cooperative Work Experience (summer term)**	6

Building Inspection Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2,269; class fees, $1,920; universal fee, $3,100; and 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 100 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BLD141	**International Residential Code 1**	3
BLD151	**Building Codes 1**	3
BLD158	**Construction Materials and Blueprints**	2
CIS101	**Computing Concepts**	3
	or	
BA131	**Business Computing**	4
MTH052	**Introduction to Algebra/ Geometry+ (or higher)**	3
Term 2		
BLD142	**International Residential Code 2**	3
BLD152	**Building Codes 2**	3
BLD165	**Residential Inspection**	3
BLD181	**Mechanical Codes 1**	3
FE205B	**Resumes and Job Search Correspondence**	1
MTH053	**Introduction to Trigonometry/ Geometry (or higher)**	3
Term 3		
BLD153	**Building Codes 3**	3
BLD166	**Commercial Inspection**	3
BLD170	**ADA Accessibility Code**	3
BLD182	**Mechanical Codes 2**	3
BLD193A	**Building Inspection Lab**	2
Term 4		
BLD280F	**Cooperative Work Experience (summer term)**	6
BLD280F	**Cooperative Work Experience (summer term)**	6
Term 5		
BLD260	**Fire Protection for Buildings**	4
BLD268	**Foundations, Excavation, and Grading**	3
BLD269	**Engineering for Code Professionals 1**	4
PSY104	**Workplace Psychology**	4
Term 6		
BLD155	**Building Department Administration 1+**	4
BLD267	**Plan Review 1**	3
BLD270	**Engineering for Code Professionals 2**	4
WR088	**Introduction to Technical Writing 1+**	3
	or	
WR121	**Academic Composition+ (or higher)**	4
Term 7		
BLD255	**Building Department Administration 2**	4
BLD266	**Plan Review 2**	3
BLD273	**International Fire Codes**	3
BLD290	**Capstone**	2
WR089	**Introduction to Technical Writing 2**	3
	or	
WR227	**Technical Writing**	4

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

Criminal Justice

For discipline outcomes, see General Education Outcomes beginning on page 52.

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

Individual agencies may require employees to earn a bachelor's degree before entering or advancing in this field. Chemeketa's Law Enforcement and Corrections programs are career-specific academic programs 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. Before you enroll at Chemeketa, consult with Chemeketa's Advising and First Year Programs staff and an advisor at the institution to which you plan to transfer.

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 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. 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 Oregon Youth Authority (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, 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.

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. 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 and Basic Corrections. The certificates of completion are educational "stepping stones" and fit wholly into the Law Enforcement and Corrections Associate of Applied Science degrees (respectively), allowing you to work in your field while earning your degree.

Students in the Criminal Justice and Juvenile Justice degree 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 related to your program. For more information, look under Cooperative Work Experience in the catalog index or contact Megan Gonzalez at 503.584.7350 or megan.gonzalez@chemeketa.edu.

Individuals with law enforcement, corrections, criminal justice, or juvenile justice professional training, certification, or experience should contact Megan Gonzalez at 503.584.7350 or megan.gonzalez@chemeketa.edu to see if they are eligible for Credit for Professional Certification college credits. Additionally, individual courses such as Criminology, Investigations and Juvenile Law are available for those seeking opportunities for professional development.

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 Justice degree should be able to:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- 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:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- 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:

- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- 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.

If you have questions about the requirements, contact Megan Gonzalez at 503.584.7350 or megan.gonzalez@chemeketa.edu.

Criminal Justice Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,200; class fees, $213; and universal fee, $2,304. 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 96 credit hours with a grade of "C" or better in all courses. These include the 60 credit hours listed under general education requirements, 36 credit hours of Criminal Justice core requirements.

General Education requirements (60 credit hours):

Course	Title	Credit Hours
CIS101	**Computing Concepts (or higher)**	3
	or	
BA131	**Business Computing**	4
	or	
CA100	**Beginning Computing**	3
COMM218	**Interpersonal Communication**	4
	or	
	Communications elective	4
MTH060	**Introductory Algebra+ (or higher)**	4
	Physical Education elective^	3
	or	
HPE295	**Health and Fitness for Life**	3
WR121	**Academic Composition+**	4
CJ212	**Police Report Writing**	3
	or	
WR227	**Technical Writing**	4
	General Education electives	15
	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
CJ125	**Public Safety Communications and Documentation**	3
CJ130	**Introduction to Corrections Process**	3
CJ206	**Crime and Delinquency**	3
CJ210	**Criminal Investigations 1: Crimes vs. Persons**	3
CJ226	**Introduction to Constitutional Law**	3
CJ280C	**Cooperative Work Experience**	3
	Criminal Justice electives* **	12
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
*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.		
^Physical Education electives: Choose any PE185 courses and/or CJ104A, B, or C.		

Juvenile Justice Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,200; class fees, $273; universal fee, $2,256. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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.

General Education Requirements (49 credits)

Course	Title	Credit Hours
CIS101	**Computing Concepts (or higher)**	3
	or	
BA131	**Business Computing**	4
	or	
CA100	**Beginning Computing**	3
COMM111	**Fundamentals of Public Speaking (or higher)**	4
MTH060	**Introductory Algebra+ (or higher)**	4
	Physical Education electives**	3
	or	
HE250	**Personal Health**	3
	or	
HPE295	**Health and Fitness for Life**	3
PSY201	**Intro to Psychology: Mind and Body+**	4
PSY202	**Intro to Psychology: Mind and Society**	4
PSY237	**Life Span Development**	4
PSY239	**Abnormal Psychology**	4
SOC206	**Social Problems**	4
WR121	**Academic Composition+**	4
CJ212	**Police Report Writing**	3
	or	
WR227	**Technical Writing**	4
	Arts and Letters elective	8

Juvenile Justice Core Requirements (45 credits)

CJ101	**Criminology**	3
CJ102	**Survey of the Juvenile Justice System**	3
	or	
BA202	**Personal Effectiveness in Business**	3
CJ125	**Public Safety Communications and Documentation**	3
CJ132	**Introduction to Parole and Probation**	3
	or	
CJ232	**Introduction to Corrections Casework**	3
CJ153	**Ethical Dilemmas/Decision Making**	3
CJ203	**Crisis Intervention**	3
CJ206	**Crime and Delinquency**	3
	or	
SOC221	**Juvenile Delinquency**	4
CJ230	**Introduction to Juvenile Corrections**	3
CJ235	**Youth, Drugs, and Corrections**	3
CJ240	**Intake, Assessment, and Interviewing**	3
CJ241	**Group Skills for Correctional Clients**	3
CJ280C	**Cooperative Work Experience**	3
	Criminal Justice elective*	9
+Meets related instruction requirement, see page 45. For subject areas, see page 52.		
*Choose any CJ courses not already required in the program.		
**Physical Education electives: Choose any PE185 courses and/or CJ104A, B, or C.		

Basic Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,000; class fees, $125; and universal fee, $888. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Basic Corrections certificate prepares students for entry-level positions in correctional facilities as security aids, correctional officers and corrections work supervisors.

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	**Intro to Psychology: Mind and Body (or higher)**	4
WR121	**Academic Composition**	4

Basic Corrections core requirements (25 credit hours):

Course	Title	Credit Hours
CJ101	**Criminology**	3
CJ130	**Introduction to Corrections Process**	3
CJ132	**Introduction to Parole and Probation**	3
CJ134	**Search/Contraband/Restraints**	2
CJ147	**Criminal Personality and Errors in Thinking**	2
CJ203	**Crisis Intervention Seminar**	3
CJ232	**Introduction to Corrections Casework**	3
CJ253	**Introduction to Penology**	3
	Corrections elective*	3
* Corrections elective: Choose any CJ course not required within the program		

Corrections Associate of Applied Science Degree Option

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,200; class fees, $840; equipment and supplies, $800; and universal fee, $2,280. 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.

General Education requirements (21 credit hours):

Course	Title	Credit Hours
CIS101	**Computing Concepts (or higher)**	3
	or	
BA131	**Business Computing**	4
	or	
CA100	**Beginning Computing**	3
COMM115	**Intercultural Communication (or higher)**	4
MTH060	**Introductory Algebra+ (or higher)**	4
PSY201	**Intro to Psychology: Mind and Body+ (or higher)**	4
WR121	**Academic Composition+**	4
	Physical Education electives*	2
	or	
HPE295	**Health and Fitness for Life**	3

Corrections core requirements (74 credit hours):

Course	Title	Credit Hours
CJ100	**Survey of the Criminal Justice System**	3
	or	
CJ130	**Introduction to Corrections Process**	3
CJ101	**Criminology**	3
CJ125	**Public Safety Communications and Documentation**	3
CJ134	**Search/Contraband/Restraints**	2
CJ146	**Officer Survival Mindset**	3
CJ153	**Ethical Dilemmas/Decision Making**	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
CJ222	**Profiling Serial Killers**	3
CJ224	**Missing and Abducted Children**	2
CJ255	**Oral Boards and Multi-Assessment**	2
CJ270	**Crime Victim Advocacy**	2
CJ272	**Recognizing Child Molesters**	3
CJ273	**Drugs and Pacific NW Street Gangs**	3
CJ281	**Corrections Officer Related Experience 1**	3
CJ282	**Corrections Officer Related Experience 2**	3
CJ283	**Corrections Officer Related Experience 3**	3
	Corrections electives**	18

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Physical Education electives: Choose any PE185 courses, and/or CJ104A, B, or C.

**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, $1,000; class fees, $115; universal fee, $912. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Basic Law Enforcement Certificate of Completion prepares students for entry-level occupations such as policy reserve officer, campus security and crime lab

assistant. This program includes instruction and hands-on training in the basic knowledge and skills required successful employment.

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	**Emergency Service Tactical Athlete**	1
or		
CJ104A	**CJ Personal Defense-Beginning**	1
or		
CJ104B	**CJ Personal Defense-Intermediate**	1
PSY201	**Intro to Psychology: Mind and Body+ (or higher)**	4
WR121	**Academic Composition**	4

Basic Law Enforcement core requirements (21 credit hours):

Course	Title	Credit Hours
CJ100	**Survey of the Criminal Justice System**	3
CJ101	**Criminology**	3
CJ110	**Introduction to Law Enforcement**	3
CJ112	**Field Operations and Patrol Procedures**	3
CJ203	**Crisis Intervention Seminar**	3
CJ210	**Criminal Investigations 1: Crimes vs. Persons**	3
CJ226	**Introduction to Constitutional Law**	3

Law Enforcement Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,200; class fees, $1,270; universal fee, $2,280; 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.

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

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.

General Education requirements (21 credit hours):

Course	Title	Credit Hours
CIS101	**Computing Concepts (or higher)**	3
	or	
BA131	**Business Computing**	4
	or	
CA100	**Beginning Computing**	3
COMM115	**Intercultural Communication (or higher)**	4
MTH060	**Introductory Algebra+ (or higher)**	4
PSY201	**Intro to Psychology: Mind and Body+**	4
WR121	**Academic Composition+**	4
	Physical Education electives*	2
	or	
HPE295	**Health and Fitness for Life**	3

Law Enforcement core requirements (74 credit hours):

Course	Title	Credit Hours
CJ100	**Survey of the Criminal Justice System**	3
	or	
CJ110	**Law Enforcement**	3
CJ101	**Criminology**	3
CJ112	**Field Operations and Patrol Procedures**	3
CJ125	**Public Safety Communications and Documentation**	3
CJ134	**Search/Contraband/Restraints**	2
CJ146	**Officer Survival Mindset**	3
CJ153	**Ethical Dilemmas/Decision Making**	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	**Introduction to Constitutional Law**	3
CJ255	**Oral Boards and Multi-Assessment**	2
CJ261	**Law Enforcement Related Experience 1**	3
CJ262	**Law Enforcement Related Experience 2**	3
CJ263	**Law Enforcement Related Experience 3**	3
CJ264	**Law Enforcement Related Experience 4**	3
CJ265	**Law Enforcement Related Experience 5**	3
CJ266	**Law Enforcement Related Experience 6**	3
CJ270	**Crime Victim Advocacy**	2
CJ272	**Recognizing Child Molesters**	3
	Law Enforcement electives**	9

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Physical Education electives: Choose any PE185 courses and/or CJ104A, B, or C.

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

Emergency Medical Technology

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 Higher Education Coordinating Commission 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, caahep.org; and CoAEMSP, 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088, 214.703.8445, fax 214.703.8992, coaemsp.org.

Students successfully completing the paramedic course work will receive an AAS degree in Paramedicine or a certificate of completion in Emergency Medical Technician. 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.

The Emergency Medical Technician Certificate is a career pathway certificate. All courses are contained in the Paramedicine AAS Degree and students may have the opportunity to continue to become qualified to be a paramedic.

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 250 hours of hospital clinical experience and 350–600 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 Emergency Medical Technician certificate should be able to:

- Access patients and apply treatment protocols in emergency medical situations.
- Use oral and written communication skills to communicate effectively in anxiety producing situations with patients, families, and members of the health care team.
- Perform all basic 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.

Students completing the Paramedicine 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.
- •erform all basic and advanced life support skills in a safe and timely manner.
- Provide on-scene leadership in emergency medical care situations.
- Apply professional values and ethical behaviors individually and as a member of a team in providing emergency care.

Emergency Medical Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $75; lab and universal fees, $987; vaccination cost, $1,100; testing and licensing fees, $275; uniform/PPE equipment $300; co-requisite class fees, $145. 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

First Year		
EMT151	**EMT, Part 1**	6
	and	
EMT152	**EMT, Part 2**	6
or		
EMT153	**One Term Emergency Medical Technician**	12

Paramedicine Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $800; lab fees, $1,200; universal fee, $ 3,636; vaccination cost, $1,100; testing and licensing fees, $700; uniform/ PPE equipment $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 103 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BI231	**Human Anatomy and Physiology 1**	4
EMT175	**Introduction to Emergency Medical Service**	3
	or	
ES172	**Introduction to Emergency Services**	4
HM120	**Medical Terminology 1**	3
WR121	**Academic Composition+ (or higher)**	4
Term 2		
BI232	**Human Anatomy and Physiology 2**	4
EMT153	**One Term Emergency Medical Technician**	12
	or	
EMT151	**EMT, Part 1**	6
	and	
EMT152	**EMT, Part 2**	6
ES115	**Crisis Intervention**	3
MTH070	**Elementary Algebra+ (or higher)**	4
Term 3		
BI233	**Human Anatomy and Physiology 3**	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 elective or 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 45.
For subject areas, see page 52.

Fire Protection Technology

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.

Fire Prevention Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,450; class fees, $534; universal fee, $3,007; Differential Fee; $352 and equipment and supplies, $25. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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. For information, call 503.399.6240.

Course	Title	Credit Hours
Term 1		
ES172	**Introduction to Emergency Services**	4
	or	
FRP150	**Introduction to Fire Protection**	3
FRP157	**Hazardous Materials Operations**	3
FRP260	**Fundamentals of Fire Prevention**	3
FRP266	**Building Construction for Fire Suppression**	3
MTH070	**Elementary Algebra+ (or higher)**	4
Term 2		
COMM115	**Intercultural Communication (or higher)**	4
FRP159	**Fire Behavior and Combustion**	3
FRP172	**International Fire Codes**	3
WR121	**Academic Composition+ (or higher)**	4
Term 3		
BLD267	**Non-Structural Plan Review**	3
CIS101	**Computing Concepts (or higher)**	3
	or	
CA100	**Beginning Computing**	3
FRP156	**Principles of Fire and Emergency Services**	3
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
FRP280C	**Cooperative Work Experience**	3
FRP286	**Advanced Detection and Protection Systems**	3
or		
BLD260	**Fire Protection for Buildings**	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 45. For subject areas, see page 52.

*Fire Prevention electives (select 3 credits):

CJ210	**Introduction to Criminal Investigations 1: Crimes vs. Persons**	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	**Firefighters Law**	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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,350; class fees, $80; universal fee, $1,736; Differential Fee; $170; and equipment and supplies, $120. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The Fire Service Supervision and Management certificate 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.

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
FRP166	Firefighter's Law	1
	or	
FRP173	Law for Emergency Services	3
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 45. For subject areas, see page 52.		
*Communications electives:		
BA214	Business Communications	3
WR088	Introduction to Technical Writing 1 (or higher)	3
WR115	Introduction to Composition (or higher)	4
WR121	Academic Composition (or higher)	4
WR227	Technical Writing	4
**Human Relations electives:		
PSY101	Psychology of Human Relations (or higher)	4
SOC204	The Sociological Perspective (or higher)	4
***Science electives:		
CH110	Foundations of General, Organic, and Biochemistry (or higher)	5
	and	
PH111	Physical Science for Fire Science and Emergency Services (or higher)	5
or		
	Any combination of one Chemistry and one Physics course of at least four (4) credit hours each, which include a lab component.	

Fire Suppression Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,950; lab fees, $2,124; universal fee, $3,100; Differential Fee; $440 and equipment and supplies, $1,522. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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 503.399.6240.

This program has special admission requirements and enrollment limits. Applications are accepted every nine months. For additional information, call 503.399.6240. The program operates year-round, including summer term.

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		
EMT151	**EMT, Part 1**	6
	or	
EMT153	**One Term EMT**	12
ES172	**Introduction to Emergency Services**	4
	or	
FRP150	**Introduction to Fire Protection**	3
FRP151	**Fire Incident Related Experience 1**	3
FRP157	**Hazardous Materials Operations**	3
WR121	**Academic Composition+ (or higher)**	4
Term 2		
EMT152	**EMT, Part 2**	6
FRP152	**Fire Incident Related Experience 2**	3
FRP159	**Fire Behavior and Combustion**	3
FRP266	**Building Construction for Fire Suppression**	3
MTH070	**Elementary Algebra+ (or higher)**	4
Term 3		
CIS101	**Computing Concepts (or higher)**	3
or		
CA100	**Beginning Computing**	3
FRP153	**Fire Incident Related Experience 3**	3
FRP154	**Water Supply Operations**	3
FRP158	**Fire Pump Construction and Operation**	3
FRP169	**Fire Department Leadership**	3
Term 4		
COMM115	**Intercultural Communication (or higher)**	4
FRP156	**Principles of Fire & Emergency Services**	3
FRP170	**Fire Fighting Tactics/Strategy**	3
FRP260	**Fundamentals of Fire Prevention**	3
FRP261	**Fire Incident Related Experience 4**	3
Term 5		
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 45. For subject areas, see page 52.

Science, Technology, Engineering, & Math (STEM)

Tracks in this pathway lead to degrees, certificates, and careers in engineering, drafting, computer science, computer information technologies, electronics, mathematics, biology, chemistry, geology, and physics.

Computer Aided Drafting (CAD) Track
- Architectural Drafting Certificate
- CAD Certificate
- CAD AAS Degree

Computer Information Systems Track
- Cybersecurity AAS Degree*
- Computer Systems & IT AAS Degree*
- Computer Programming Certificate
- Systems Admin & Network Security Certificate
- Web Developer Certificate
- *Prepares for employment or transfer

Computer Science Track
- Prepares to transfer to a university for a bachelor's degree.
- ASOT - CS
- AAOT - CS

Electronics Track
- Electronics Certificate
- Electronic Engineering Technician AAS Degree*
- Industrial Electronics AAS Degree
- Renewable Energy Management AAS Degree
- *Prepares for employment or transfer

Engineering Track
- Prepares to transfer to a university for a bachelor's degree.
- AAOT - Engineering

Mathematics Track
- Prepares to transfer to a university for a bachelor's degree.
- AAOT - Math
- Pre-Medicine Track
- See Science Track – Biology and speak with an advisor.

Science Track
- Prepares to transfer to a university for a bachelor's degree.
- AAOT or AS – Biology
- AAOT or AS – Chemistry
- AAOT or AS – Geology
- AAOT or AS – Physics

Drafting Technology—CAD

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 and assemblies. 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 that 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. See a Drafting advisor for more Information.

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.

- Produce sets of mechanical drawings including detail and assembly drawings of related parts.

Architectural Drafting Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $588; class fees, $441; universal fees, $1,457; differential fees, $180; and equipment and supplies, $225. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

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	**Academic Composition+ (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 45. For subject areas, see page 52.

Computer-Assisted Drafting (CAD) Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $398; class fees, $308; universal fees, $1,240; differential fees, $145; and equipment and supplies, $225. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

All credits apply toward the associate of applied science degree in CAD Drafting Technology.

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

Course	Title	Credit Hours
Term 1		
DRF112	**Sketching**	1
DRF130	**CAD 1**	3
DRF140	**3-D Modeling with Inventor**	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	**Geographic Information Systems 1**	2
WR088	**Introduction to Technical Writing 1**	3
	or	
WR121	**Academic Composition**	4
Term 3		
DRF095C	**Special Projects in Drafting and Design**	3
DRF132	**CAD 3**	3
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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,260; class fees, $832; universal fees, $3,038; differential fees, $415; and equipment and supplies, $450. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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.

You may earn an associate of applied science degree by successfully completing the required 98 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
DRF112	**Sketching**	1
DRF130	**CAD 1**	3
DRF140	**3-D Modeling with Inventor**	3
DRF230	**Introduction to MicroStation PC**	3
MTH081	**Technical Mathematics 1+**	4
	or	
MTH111	**College Algebra+ (or higher)**	5
Term 2		
DRF110	**Applied Engineering Computations**	2
DRF131	**CAD 2**	3
DRF220	**Geographic Information Systems 1**	2
DRF231	**Advanced MicroStation**	3
MTH082	**Technical Mathematics 2**	4
	or	
MTH112	**Trigonometry (or higher)**	5
WR088	**Introduction to Technical Writing 1+**	3
	or	
WR121	**Academic Composition+ (or higher)**	4
Term 3		
DRF132	**CAD 3**	3
DRF150	**Architectural Drafting 1**	3
DRF160	**Spreadsheet and Database Applications**	3
DRF165	**CAD System Administration**	3
DRF241	**Structural Drafting**	3
Term 4		
CVL143	**Introduction to Civil Survey**	3
DRF155	**Mapping and Platting**	3
DRF210	**Parametric Design with SolidWorks**	3
	or	
EGR248	**Graphics and 3-D Modeling**	3
DRF271	**Commercial Drafting with Revit 1**	4
PH121	**Applied Physics**	4

Term 5		
CVL144	**Intermediate Civil Survey**	3
CVL232	**Applied Statics and Strengths**	4
DRF240	**Architectural Drafting 2**	3
DRF245	**Civil Drafting and Design**	4
DRF272	**Commercial Drafting with Revit 2**	4
Term 6		
DRF211	**Parametric Design with Solid Works 2**	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 45.
For subject areas, see page 52.

Computer Information Systems

cis.chemeketa.edu

The Computer Information Systems program offers two associate of applied science degrees: one in Cybersecurity and another in Computer Systems and Information Technology that allow students to design a customized curriculum consisting of a broad foundation of general technology courses and one or more technical specialties. These specialized degrees prepare students for a wide variety of employment opportunities in the computer information systems 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 Cybersecurity degree provides theory and technical training in this steadily growing industry. The Computer Systems and Information Technology degree, in combination with one or more specialized areas of study, prepares students for a wide variety of technical career opportunities. The Computer Information Systems Certificate prepares the student for work in the design and implementation of business systems solutions, software and systems troubleshooting, technical support and end user training. Manage workgroup resources including file shares, print shares, and physical connections. Install, configure and support industry required applications to the enterprise environment. Use integrated software packages to analyze and support business problems related to the IT infrastructure.

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 degrees 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 Cybersecurity degree:

- Train students in a variety of modern internet and business-oriented computer skills.
- Develop software and hardware problem-solving skills using programming logic and hands-on lab situations.
- Configure and troubleshoot access to resources, hardware devices and drivers, storage use and network connections.
- Analyze Internet security issues and apply them to network design problems.
- Design a disaster recovery plan for a real-world scenario.
- Design an appropriate risk analysis for a given business in a particular environment.

In addition to the degree outcomes, students completing the Computer Information Systems certificate:

- Acquire new information and adapt to changes in the computer technology filed.
- Apply a logical and systematic approach to solve problems.
- Use written, oral and visual interpersonal skills to communicate with individuals or small groups.
- Configure and troubleshoot access to resources, hardware devices and drivers, storage use and network connections.

In addition to the degree outcomes, students completing the Computer Programming certificate:

- 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:

- 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:

- 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.

Cybersecurity Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $2800; class fees, $303; universal fees $2,914; equipment and supplies, $400; differential fees, $470. 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. You must complete all CS/CIS core required courses with a grade of "C" or better.

Course	Title	Credit Hours
Term 1		
CIS120	**Digital Literacy**	4
CIS121	**Introduction to Programming**	4
CIS178W	**Fundamentals of Web Design**	4
WR121	**Academic Composition+ (or higher)**	4
Term 2		
CIS102A	**Cyber Security and Safety**	4
CIS140B	**Computer Operating Systems**	3
CIS145	**Computer Hardware**	4
CIS133SC	**Scripting Languages**	4
Term 3		
CIS140U	**Unix/Linux**	3
CIS179	**Client-Server Networks**	4
MTH111	**College Algebra (or higher)**	5
PSY104	**Psychology in the Workplace+ (or higher)**	4
Term 4		
CIS125E	**Excel-Workbooks**	4
CS161	**Computer Science 1**	4
CIS279	**Server Management 1**	4
CIS275	**Database Management**	4
Term 5		
CIS278	**Data Communication**	4
CIS186	**Computer Forensics**	4
CIS288	**Server Management 2**	4
CIS284	**Ethical Hacking**	4
Term 6		
CIS152	**Routing and Switching**	4
CIS280	**Cooperative Work Experience**	3
	or	
	CIS elective	4
CIS283	**Security+**	4
CS271	**Computer Architecture**	4

+Meets related instruction requirement, see page 45.
For subject areas, see page 52.

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, $2500; class fees, $303; universal fee $3,007; equipment and supplies, $400; differential fee, $485. 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
	or	
CIS125E	**Excel Workbooks**	4
CIS133SC	**Scripting Languages**	4
CIS140B	**Computer Operating Systems**	3
CIS140U	**UNIX/Linux**	3
CIS145	**Computer Hardware**	4
	or	
CIS178W	**Fundamentals of Web Design**	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
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
CIS133U	**C++ Language**	4
CIS133VB	**Visual Basic - Programming**	4
CIS135AE	**Advanced Microsoft Excel**	4
CIS152	**Routing and Switching**	4
CIS178I	**Internet and World-Wide Web**	3
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
CIS283	**Security+**	4
CIS284	**Ethical Hacking**	4
CIS295	**Web Applications Development**	4
CJ101	**Criminology**	3
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 45. For subject areas, see page 52.

Computer Information Systems Certificate of Completion

The Computer Information Systems Certificate prepares the student for work in the design and implementation of business systems solutions, software and systems troubleshooting, technical support and end user training. Manage workgroup resources including file shares, print shares, and physical connections. Install, configure and support industry required applications

to the enterprise environment. Use integrated software packages to analyze and support business problems related to the IT infrastructure.

In addition to tuition, estimated costs for students who complete the Computer Information Systems certificate courses listed below are books, $500; class fees, $195; universal fee, $1,302; equipment and supplies: $100, differential fees, $210. 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
Term 1		
CIS120	**Digital Literacy**	4
CIS120A	**Computer Information Services Pathway**	1
CIS121	**Introduction to Programming**	4
CIS178W	**Fundamentals of Web Design**	4
Term 2		
CIS102A	**Cyber Security and Safety**	4
CIS125E	**Excel Workbooks**	4
CIS133SC	**Scripting Languages**	4
CIS140B	**Computer Operating Systems**	3
Term 3		
CIS125A	**Access - Database**	3
CIS140U	**Unix/Linux**	3
CIS145	**Computer Hardware**	4
CIS179	**Client-Server Networks**	4

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, $750; class fees, $125; universal fee, $868; equipment and supplies: $150, differential fees, $140.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 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, $126; universal fee, $1,178; equipment and supplies, $150 differential fees; $190. 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 38 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**	3
CIS140U	**Unix/Linux**	3
CIS179	**Client-Server Networks**	4
CIS186	**Computer Forensics**	4
CIS278	**Data Communications**	4
CIS279	**Server Management 1**	4
CIS288	**Server Management 2**	4
CIS283	**Security+**	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

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 Science

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

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 program chair, Andrew Scholer (503.589.7649 or andrew.scholer@chemeketa.edu) or Chemeketa's Advising and First Year Programs 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.

Electronics Technologies

electronics.chemeketa.edu

See also Robotics Track

Career opportunities in the electronics field are diverse, exciting, and rewarding. Chemeketa's electronics department offers one certificate and three associate of applied science degrees to meet the present and future challenges of the electronics industry: a certificate in Electronics, and associate of applied science degrees in Electronic Engineering Technician, Industrial Electronics, 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 Program Chair Charles Sekafetz at 503.399.6254.

For additional information or tours of the electronics laboratory, visit electronics.chemeketa.edu, or contact Program Chair Charles Sekafetz at 503.399.6254.

Program Outcomes

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.

Students completing the Electronic Engineering Technician 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.

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.

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.

If you have questions about the requirements, contact Program Chair Charles Sekafetz at 503.399.6254.

Electronics Certificate of Completion

In addition to tuition, estimated costs for students who complete the courses listed below are books, $1,696; class fees, $220; universal fees $1,333; differential fees, $140; equipment and supplies, $75; 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.

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.

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
MTH081	**Technical Mathematics 1**	4
	or	
MTH111	**College Algebra+**	5
WR088	**Introduction to Technical Writing 1**	3
	or	
WR121	**Academic Composition+**	4
Term 2		
ELT132	**Electronic Concepts 2**	4
ELT141	**Transistor Fundamentals**	4
ELT151	**Digital Fundamentals**	4
MTH082	**Technical Mathematics 2**	4
	or	
MTH112	**Trigonometry**	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
WR089	**Introduction to Technical Writing 2**	3
	or	
WR227	**Technical Writing**	4

Electronic Engineering Technician Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,410; class fees, $561; universal fees, $3,193; differential fees, $390; Intel-compatible computer, $800; and equipment and supplies, $510. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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).

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	Academic Composition+	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 45. For subject areas, see page 52.

*Electronics electives (select 6 credits):

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

CH121	**College Chemistry 1**	5
ELT222	**Programming Concepts 2**	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
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
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

In addition to tuition, estimated costs for students who complete the courses listed below are books, $3,303; class fees, $561; universal fees, $3,193; differential fees, $410; Intel-compatible computer, $800; and equipment and supplies, $600. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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).

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	**Academic Composition+**	4
Term 2		
ELT132	**Electronic Concepts 2**	4
ELT141	**Transistor Fundamentals**	4
ELT151	**Digital Fundamentals**	4
MTH082	**Technical Mathematics 2**	4
	or	
MTH112	**Trigonometry (or higher)**	5
Term 3		
ELT133	**Electronic Concepts 3**	4
ELT142	**Semiconductor Optoelectronic Devices**	3
ELT143	**Pulse Circuit Fundamentals**	3
ELT161	**Linear IC Fundamentals**	4
WR227	**Technical Writing**	4
Term 4		
COMM111	**Fundamentals of Public Speaking**	4
ELT121	**Programming Concepts 1**	4
	or	
CIS133J	**Fundamentals of Java Programming 1**	4
ELT244	**Electronic Circuit Analysis**	4
ELT252	**Digital Circuit Applications**	3
PH121	**Applied Physics**	4
	or	
PH201	**General Physics**	5
Term 5		
ELT253	**Microprocessor Systems**	4
ELT262	**Linear IC Applications**	3
FE205B	**Resumes and Job Search Correspondence**	1
PH122	**Applied Physics**	4
	or	
PH202	**General Physics**	5
	Technical elective*	3
Term 6		
ELT291	**Control, Robotics, and Power Systems**	4
PSY104	**Workplace Psychology+**	4
	Technical electives*	9

+Meets related instruction requirement, see page 45. For subject areas, see page 52.

*Technical electives:

CH121	**College Chemistry 1**	5
ELT283	**Logical Troubleshooting**	4
ELT293	**Flexible Manufacturing Systems and Procedures**	3
MT227A	**Pneumatics and Hydraulics Fundamentals**	3
MTH243	**Probability and Statistics 1**	4

Renewable Energy Management Associate of Applied Science Degree Option

In addition to tuition, estimated costs for students who complete the courses listed below are books, $2,929; class fees, $590; universal fees, $2,914; differential fees, $355; 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.

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

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	**Academic Composition+**	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 45. For subject areas, see page 52.

Engineering

For discipline outcomes, see General Education Outcomes—Math and Science on page 52.

go.chemeketa.edu/engineering

Oregon State University (OSU) and Portland State University (PSU) offer Bachelor of Science degrees in Engineering. OSU offers degrees in Architectural, 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 Program Chair (Halston Tuss 503.399.5229, or halston.tuss@chemeketa.edu), or Advising and First Year Programs 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.

Mathematics

For discipline outcomes, see General Education Outcomes—Mathematics on page 52.

Chemeketa offers a number of mathematics courses. Some of these courses can be used to fulfill the requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 Institute of Technology offers a degree in Applied 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 First Year Programs staff or a Chemeketa Mathematics faculty member. Also, you should contact an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Pre-Medicine

See Science Track – Biology and speak with an advisor.

Sciences

Prepares to transfer to a university for a bachelor's degree.

Chemeketa's Science tracks offer a variety of courses for those interested in pursuing a career in science or pre-professional studies. The Science tracks include courses that are filled with opportunity and discovery. In these various tracks you will find foundational courses in which you will develop critical thinking skills that allow you to analyze and assess a problem. Not only is this essential for a career in the sciences but this has direct application to your everyday life.

Biology

(Includes Pre-Professional Studies)

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

Chemeketa offers a number of biology courses. Many of these courses can be used to fulfill the "Science with a lab" requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 for a complete listing. Oregon universities offering Bachelor of Arts and/or Bachelor of Science degrees in Biology (including botany, zoology and marine biology, etc.) are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

Those interested in pre-professional study (medicine, dentistry, pharmacy, veterinary medicine) should consider the competitive nature of professional schools. We recommend the most rigorous biology and chemistry sequences for which they qualify in addition to required courses in general education. 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.

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

First Year Programs 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.

Chemistry

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

Chemeketa offers a number of chemistry courses. Many of these courses can be used to fulfill the Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Geology

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

Chemeketa offers a few geology courses. Some of these courses can be used to fulfill the Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 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 First Year Programs 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.

Physics

For discipline outcomes, see General Education Outcomes—Science or Computer Science on page 52.

Chemeketa offers several physics courses. Some of these courses can be used to fulfill the Science requirements of the Associate of Arts Oregon Transfer degree and the Associate of Science Transfer degrees in Business and Computer Science. See page 56, page 62, and page 60 for a complete listing.

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physics are Oregon State University, Portland 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 First Year Programs 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.

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 First Year Programs department 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/programs-classes/classes, or access through your MyChemeketa account if you are a registered student.

Note 2: Courses indicating **"Offered as needed"**—Contact Advising and First Year Programs department for assistance.

Note 3: 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
RD: Reading
SSP: Study Skills Program
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
ANES Anesthesia Technology
APR: Apprenticeship
AUM: Automotive Technology
BA: Business Administration (Accounting, Business Management, and Office Administration and Technology)
BLD: Building Inspection Technology
BT: Business Technology (Office Administration and Technology)
CA: Computer Applications (Office Administration and Technology)
CAM: Computer-Aided Manufacturing
CIS: Computer Information Systems
CJ: Criminal Justice, Corrections, and Law Enforcement
CVL: Civil Technology
DEN: Dental Assisting
DRF: Drafting Technology
DSL Diesel Technology
ECE: Early Childhood Education
ELT: Electronics Technologies/Robotics
EMT: Emergency Medical Technology
ES: Emergency Services
FE: Field Experiences
FRP: Fire Protection Technology
HDF: Human Development and Family Studies
HEM: Hemodialysis Technician
HM: Health Information Management
HOR: Horticulture
HS: Human Services
HTM: Hospitality and Tourism Management
MED: Medical Assisting
MT: Industrial Technology
NUR: Nursing

PHM: Pharmacy Technician/Pharmacy Management
PLP: Portfolio for Prior Learning
RNW: Renewable Energy Management
SLP: Speech-Language Pathology Assistant
SOIL: Soil
ST: Skills Training (Occupational)
VC: Visual Communications
VMW: Vineyard Management/Winemaking
WFB: Welding Fabrication
WHO: Wine Hospitality Operations
WLD: Welding

Lower Division Collegiate Courses

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

ART: Art
ASL: American Sign Language
ATH: Anthropology
BA: Business Administration (ASOT-Business: BA101, BA211, BA212, BA213)
BI: Biology
CG: Counseling and Guidance
CH: Chemistry
CHN: Chinese
CIS: Computer Information Systems
CLA: Chicano/Latino Studies
COMM: Communication
CS: Computer Science
EC: Economics
ED: Education
EGR: Engineering
ENG: English
ENL: English as a Non-Native Language
ENT: Entrepreneurship
FA: Film Arts
FLM: Filmmaking
FR: French
FYE: First Year Experience
GE: General Engineering
GEG: Geography
GEO: Geology
GS: General Science
HE: Health Education
HPE: Health and Physical Education
HST: History
HUM: Humanities
JNL: Journalism
JPN: Japanese
LING: Linguistics
MTH: Mathematics
MUP: Musical Performance
MUS: Music
NFM: Nutrition and Food Management
PE: Physical Education
PH: Physics
PHL: Philosophy
PS: Political Science
PSY: Psychology
RD: Reading
REL: Religious Studies
RUS: Russian
SLD: Student Leadership Development
SOC: Sociology
SPN: Spanish
SSC: Social Science
TA: Theatre Appreciation
WR: Writing
WS: Women's Studies

Course Description Terms

Recommended/Suggested Requisite:
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.

Corequisite:
A requirement or course that must be either successfully completed beforehand or taken in combination with another course.

Concurrent:
A course that must be taken in combination with another course.

Anesthesia Technology

ANES101 Introduction to Anesthesia Technology

4 class hr/wk, 4 cr.
Provides an opportunity to learn and apply basic anesthesia competencies and the role of the anesthesia care team, as well as the scope of practice and duties of the Anesthesia Technologist including but not limited to basic airway management; anesthesia machine daily checkout and troubleshooting; basic anesthesia equipment set up maintenance and troubleshooting. Includes patient care skills including positioning and dialogue IV set up and placement, basic physiological monitoring, assisting the anesthesiologist, anatomy and physiology as it applies to anesthesia, the OR environment including appropriate wear, personal protective equipment, and interpersonal skills. Focuses on policies and procedures associated with anesthesia technologist work practice. Differentiates between types of anesthesia: regional, local, general, and MAC. Diagnosis and minor maintenance of anesthesia equipment. Comprehends laws that regulate practice in the healthcare field. Discusses medical ethical issues and are tested on ability to understand the legal and ethical points of different situations including professional liability, medical malpractice healthcare law, patient confidentiality and HIPAA, the medical record, duties of the health care professional and facilities, and the physician/ patient relationship. Comprehend and demonstrate foundational court systems and medico-legal terminology with regard to civil and criminal proceedings. Provides insight into behaviors and practice that best protect themselves and their employers from medical malpractice claims. **Corequisite:** ANES103, ANES112, and PHM243; or consent of instructor.

ANES102 Anesthesia Equipment: Principles and Application

4 class hr/wk, 4 cr.
Learn and handle basic and complex anesthesia equipment and airway management devices. Create algorithms and strategies for preparation and use. Practice set up and troubleshoot routine and complex equipment. **Prerequisite:** ANES104 with a grade of C or better; and concurrent enrollment in ANES130 and ANES105; or consent of instructor.

ANES103 Anesthesia Technology Lab 1

9 lab hr/wk, 3 cr.
Learn and put into practice basic anesthesia competencies including but not limited to: basic airway management, anesthesia machine daily checkout and troubleshooting, basic anesthesia equipment set up maintenance and troubleshooting. Includes patient care skills of positioning and dialogue IV set up and placement, placement and troubleshooting, basic physiological monitoring, assisting the anesthesiologist, intubation strategies, and rapid response to airway management crisis. Demonstrate anesthesia machine checkout, working in the operating room (OR) environment including appropriate wear, personal protective equipment, interpersonal skills, ergonomics, and basic pharmacology. Draw up drugs and sharps safety, the OR turn over, equipment identification handling and use, and regional anesthesia theory and practice. **Corequisite:** concurrent enrollment ANES101, ANSE112, and PHM243; or consent of instructor.

ANES104 Anesthesia Technology Lab 2

12 lab hr/wk, 4 cr.
Build on competencies learned during Anesthesia Lab 1 and practice advanced Anesthesia competencies. Including but not limited to: advanced airway management, advanced anesthesia machine troubleshooting, advanced anesthesia equipment set up maintenance and troubleshooting, advanced physiological monitoring including arterial lines, central and pulmonary artery lines, and assisting the anesthesiologist. Demand strategies for intubation and rapid response to airway management crisis, and care and use of emergency airway management devices. Set up maintenance and troubleshooting of hemodynamic monitoring equipment. **Prerequisite:** ANES103 with a grade of C or better; or consent of instructor. **Corequisite:** BI234 and PHM244.

ANES105 Anesthesia Technology Lab 3

12 lab hr/wk, 4 cr.
Builds on competencies learned during Anesthesia Lab 2 and practice advanced anesthesia competencies. Includes but not limited to; advanced airway algorithms, advanced troubleshooting, advanced anesthesia equipment set up maintenance and troubleshooting, advanced rapid response to airway management crisis, care and use of emergency airway management devices, and hemodynamic monitoring equipment set up maintenance and troubleshooting. **Prerequisite:** ANES104 with a grade of C or better; and concurrent enrollment in ANES130 and ANES102; or consent of instructor.

ANES 110 Medical Law and Ethics for Anesthesia Technologists

4 class hr/wk, 4 cr.
Introduces the concepts of medical law and ethics for health care practitioners specifically working in the Operating room including topics such as HIPAA, Medical Malpractice and Negligence, the physician patient relationship. liability, scope of practice, and ethical concepts as they relate to the medical profession. Examines real cases and ethical dilemmas to promote their own ethical thinking and understanding of law as it relates to their work role in the industry. **Prerequisite:** ANES101, ANES103, ANES112 and PHM243; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ANES112 Operating Room Environments

2 class hr/wk, 2 cr.
Understand the layout and ergonomics of the operating room. Demonstrate operating room attire and protocols with regard to hand hygiene and infection control. Demonstrate the physiology of patient positioning and operating table equipment. **Corequisite:** ANES101, ANES103, and PHM243; or consent of instructor.

ANES130 ACLS/PALS with EKG Analysis

4 class hr/wk, 4 cr.
Enhance skills in treating adult victims of cardiac arrest or other cardiopulmonary emergencies, while earning their American Heart Association ACLS (AHA ACLS) for Healthcare Providers Course Completion Card. Enables Anesthesia Technology students to develop the knowledge and skills necessary to better recognize and treat critically ill infants and children. **Corequisite:** ANES105 and ANES102.

ANES203 Anesthesia Technology Lab 4
12 lab hr/wk, 4 cr.
Builds on competencies learned during Anesthesia Technology Lab 3 and practice advanced anesthesia competencies. Including but not limited to: blood management, cell salvage, balloon pump management and care, advanced rapid response to airway management crisis, care and use of emergency airway management devices, and hemodynamic monitoring equipment set up maintenance and troubleshooting. **Prerequisite:** ANES105 with a grade of C or better; or consent of instructor. **Corequisite:** ANES210.

ANES204 Anesthesia Technology Lab 5
12 lab hr/wk, 4 cr.
Build on competencies learned during all previous Anesthesia Labs and practice advanced anesthesia competencies. **Prerequisite:** ANES203 with a grade of C or better; or consent of instructor. **Corequisite:** ANES211.

ANES210 Anesthesia Technology Clinical Practicum 1
24 lab hr/wk, 8 cr.
Demonstrate practical applications of their knowledge and skills by application of clinical skills and work ethic during the anesthesia technologist clinical rotation. Practice job search skills for an entry-level position as an anesthesia technologist. **Prerequisite:** ANES105 with a grade of C or better; and concurrent enrollment in ANES203; or consent of instructor.

ANES211 Anesthesia Technology Clinical Practicum 2
24 lab hr/wk, 8 cr.
Second course of a three course practicum. Demonstrate the practical applications of their knowledge and skills by application of clinical skills and work ethic during the anesthesia technologist clinical rotation. Practice job search skills for an entry-level position as an anesthesia technologist. **Prerequisite:** ANES210 with a grade of C or better; or consent of instructor. **Corequisite:** ANES203.

ANES212 Anesthesia Technology Clinical Practicum 3
27 lab hr/wk, 9 cr.
Third course of a three course sequence. Apply knowledge of clinical skills and work ethic during the anesthesia technologist clinical rotation. Practice job search skills for an entry-level position as an anesthesia technologist. **Prerequisite:** ANES211 with a grade of C or better; or consent of instructor. **Corequisite:** ANES215.

ANES215 Anesthesia Technology Certification Exam Prep
3 class hr/wk, 3 cr.
Review the core concepts of the Anesthesia Technician program with an emphasis on preparation and strategies for success in the national certification exam. Participate in mock exams and consider relevant content and concepts. Prepare study and revision guides. **Prerequisite:** ANES211 with a grade of C or better; and concurrently enrolled in ANES212; or consent of instructor.

Allied Health
See also CH—Chemistry, and HM—Health Information Management

AH115 Healthcare Career Strategies
2 class hr/wk, 2 cr.
Presents an applied approach to the introduction of health careers. Includes health career options and preparation requirements, professional and ethical behavior, teamwork and leadership, customer service, health promotion, and wellness. Integrates academic success strategies with healthcare applications. Recognize life-threatening emergencies and provide basic life support.

Apprenticeship

APR101 Trade Skills Fundamentals
3 class hr/wk 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.

APR116A Millwright Apprenticeship-Basic Electricity 1A
4 class hr/wk and 2 lab hr/wk, 5 cr.
Covers basic electrical theory, safety procedures, electrical equipment, installation, electrical schematics, electricity measurements, and the industrial application of AC/DC motors.

APR153A Electrician Apprenticeship Fundamentals
4 class hr/wk 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, safety, and an introduction to the Oregon Electrical Specialty Code. **Prerequisite:** MTH070 with a grade of C or better; or equivalent as determined by the instructor; or consent of instructor.

APR153B Electrician Apprenticeship AC/DC Circuits
4 class hr/wk 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 Oregon Electrical Specialty Code. Includes safety procedures. **Prerequisite:** APR153A with a grade of C or better; or consent of instructor.

APR153C Electrician Apprenticeship Measurements
3 class hr/wk, 3 cr.
Provides training for the Inside Wire Electrician Apprentice. Includes direct current (DC) and alternating current (AC) electrical theory, practical residential wiring, safety and related Oregon Electrical Specialty Code. **Prerequisite:** APR153B with a grade of C or better; or consent of instructor.

APR153D Electrician Apprenticeship Theory
4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues training for the Inside Wire Electrician 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, safety, and applicable Oregon Electrical Specialty Code. **Prerequisite:** APR153C with a grade of C or better; or consent of instructor.

APR153E Electrician Apprenticeship Wiring and Print Reading
4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues related training for the Inside Wire Electrician Apprentice. Content includes requirements for wiring and installation of electrical devices, wire devices, hazardous locations, residential calculation, safety and applicable Oregon Electrical Specialty Code. **Prerequisite:** APR153D with a grade "C" or better; or consent of instructor.

APR153F Electrician Apprenticeship Residential Installation
3 class hr/wk, 3 cr.
Continues related training for Inside Wire Electrician Apprentices. Includes requirements for wiring and installation of electrical devices, auxiliary gutters, raceways, fuses, and over-current devices. Covers hazardous locations, busways, residential calculation, safety and applicable Oregon Electrical Specialty Code. **Prerequisite:** APR153E with a grade "C" or better; or consent of instructor.

APR156A HVAC/R Apprenticeship Fundamentals 1

4 class hr/wk 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. Introduces basic electricity concepts. Designed for Oregon State recognized apprentices working in the HVAC/R trade.

APR156B HVAC/R Apprenticeships Fundamentals 2

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on developing a basic understanding of heating, cooling, and associated piping. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156A with a grade "C" or better; or consent of instructor.

APR156C HVAC/R Apprenticeship Fundamentals 3

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on soldering and brazing, bending and flaring tubing, and steel piping. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156B with a grade "C" or better; or consent of instructor.

APR156D HVAC/R Apprenticeship Intermediate 1

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on the principals of AC power, functionality of refrigeration compressors, characteristics and use of refrigerants and oils, leak detection, evacuation, recovery, and charging refrigerant systems. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156C with a grade of C or better; or consent of instructor.

APR156E HVAC/R Apprenticeship Intermediate 2

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on various types of metering devices and their effects, operation fundamentals of heat pumps, inspection and maintenance of HVAC/R systems, principles of combustion, and various venting types and designs. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156D with a grade of C or better; or consent of instructor.

APR156F HVAC/R Apprenticeship Intermediate 3

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on HVAC ducting types and principles; various types and designs of commercial airside systems, indoor air quality design and application, and hydronic systems. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156E with a grade of C or better; or consent of instructor.

APR158A Plumber Apprenticeship Fundamentals

4 class hr/wk 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, 2017 Oregon Plumbing Specialty Code (OPSC), blueprint reading, and safety. **Prerequisite:** Registered apprentice; or consent of instructor.

APR158B Plumber Apprenticeship Math and Print Reading

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues related training for the plumber apprentice to study theory and trade practices. Includes mathematics, installation practices, print reading, related 2017 Oregon Plumbing Specialty Code (OPSC), health and safety, sanitary drainage, and venting. **Prerequisite:** APR158A with a grade of C or better; or consent of instructor.

APR158C Plumber Apprenticeship Pipe Sizing

3class hr/wk, 3 cr.
Continues related training for the plumber apprentice to study theory and trade practices. Includes mathematics, installation practices, related 2017 Oregon Plumbing Specialty Code (OPSC), health and safety, blueprint reading, and gas piping. **Prerequisite:** APR158B with a grade of C or better; or consent of instructor.

APR158D Plumber Apprenticeship Basic Installation

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues related training and trade practices for plumber apprentices. Includes installation and related 2017 Oregon Plumbing Specialty Code (OPSC), safety, rigging and hoisting, welding and brazing, and blueprint reading. **Prerequisite:** APR158C with a grade of C or better; or consent of instructor.

APR158E Plumber Apprenticeship Occupancy

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues theory and trade practices for plumbing apprentices. Includes single occupancy installation and Oregon Plumbing Specialty Code (OPSC), 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.

APR158F Plumber Apprenticeship Advanced Waste Systems

3 class hr/wk, 3 cr.
Covers theory and trade practices for plumber apprentices. Includes installation standards (I.S.) and reviews. Focuses on 2017 Oregon Plumbing Specialty Code (OPSC). **Prerequisite:** APR158E with a grade of C or better; or consent of instructor.

APR166A Sheet Metal Apprentice Fundamentals

4 class hr/wk 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.

APR166B Sheet Metal Apprenticeship: Fundamentals of Drawings

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes layout and fabrication of common fittings and SMACNA standards. **Prerequisite:** APR166A with a grade of C or better; or consent of instructor.

APR166C Sheet Metal Apprenticeship: Fundamentals of Layout

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training consistent with the minimum skill requirements of the sheet metal trade. Includes advanced sheet metal calculations, an introduction to architectural sheet metal, blueprint reading, and layout of common fittings. **Prerequisite:** APR166B with a grade of C or better; or consent of instructor.

APR166D Sheet Metal Apprenticeship Basic Installation

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes common layout methods, roof drainage components, and miscellaneous ventilation fittings. **Prerequisite:** APR166C with a grade of C or better; or consent of instructor.

APR166E Sheet Metal Apprenticeship Architectural Systems

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training material consistent with the minimum skill requirements of the sheet metal trade, including fabrication of roof drainage components and HVAC ductwork. **Prerequisite:** APR166D with a grade of C or better; or consent of instructor.

APR166W Welding Processes for Apprenticeship

2 class hr/wk 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.

APR253G Electrician Apprenticeship Safety and Code

4 class hr/wk 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 and application, and the Oregon Electrical Specialty Code. **Prerequisite:** APR153F with a grade of C or better; or consent of instructor.

APR253H Electrician Apprenticeship Motors and Controls

4 class hr/wk and 2 lab hr/wk, 5 cr.
Offers training for the Inside Wire Electrical Apprentice. Includes motors, generators, controls, safety and applicable Oregon Electrical Specialty Code. **Prerequisite:** APR253G with a grade of C or better; or consent of instructor.

APR253I Electrician Apprenticeship Fiber Optics

3 class hr/wk, 3 cr.
Covers applied electrical theory, residential and commercial wiring practices, busways, and motor fundamentals. Applies applicable Oregon Electrical Specialty Code for Inside Wire Electrician Apprentices. **Prerequisite:** APR253H with a grade of C or better; or consent of instructor.

APR253J Electrician Apprenticeship Math/Test Equipment

4 class hr/wk and 2 lab hr/wk, 5 cr.
Offers 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 Oregon Electrical Specialty Code. **Prerequisite:** APR253I with a grade of C or better; or consent of instructor.

APR253K Electrician Apprenticeship Voltage

4 class hr/wk and 2 lab hr/wk, 5 cr.
Offers training for the Inside Wire Electrician Apprentice. Includes a thorough review of the Oregon Electrical Specialty Code. 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.

APR253L Electrician Apprenticeship Code and Test Prep

3 class hr/wk, 3 cr.
Covers a thorough review of the Oregon Electrical Specialty Code for the Inside Wire Electrician Apprentice. Includes theory and application of motor controls, special termination, layout, hazardous locations, and transformer locations. **Prerequisite:** APR253K with a grade of C or better; or consent of instructor.

APR256G HVAC/R Apprenticeship Intermediate 4

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on operational sequences of HVAC controls, basic refrigeration concepts, and compressor replacement. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR156F with a grade of C or better; or consent of instructor.

APR256H HVAC/R Apprenticeship Intermediate 5

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on understanding the sequence of operations for heat pumps, gas and oil furnaces, and HVAC accessories. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR256G with a grade of C or better; or consent of instructor.

APR256I HVAC/R Apprenticeship Welding

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on identifying variable refrigerant flow, hydronic and steam heating systems; troubleshooting retail refrigeration systems; and the importance of appropriate customer relation skills. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR256H with a grade of C or better; or consent of instructor.

APR256J HVAC/R Apprenticeship Advanced 1

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on energy conservation methods and building management equipment, as well as indoor air quality and water treatment. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR256I with a grade of C or better; or consent of instructor.

APR256K HVAC/R Apprenticeship Advanced 2

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on air balancing; procedures for system startup and shutdown; interpreting industry drawings and specifications; system design; and LEB test prep. Designed for Oregon State recognized apprentices working in the HVAC/R trade. **Prerequisite:** APR256J with a grade of C or better; or consent of instructor.

APR256L HVAC/R Apprenticeship Advanced 3

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on commercial and industrial refrigeration; alternative heating and cooling systems; and crew leadership. 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.

APR258G Plumber Apprenticeship Residential Installation

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues training for plumber apprentices in trade theory and practices. Includes installation of residential and commercial fixtures and appliances, use of mathematics related to gas and pipe sizing, 2017 Oregon Plumbing Specialty Codes (OPSC), related science, and blueprint reading. **Prerequisite:** APR158F with a grade of C or better; or consent of instructor.

APR258H Plumber Apprenticeship Commercial Installation

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues related training for plumber apprentices in trade theory and practices. Includes commercial installation practices, related applied math and science, OSHA, safety, and 2017 Oregon Plumbing Specialty Code (OPSC). **Prerequisite:** APR258G with a grade of C or better; or consent of instructor.

APR258I Plumber Apprenticeship Code

3 class hr/wk, 3 cr.
Covers theory and trade practices for the plumber apprentice. Focuses on 2017 Oregon Plumbing Specialty Code (OPSC). Includes installing fixtures and appliances, reading blueprints, and Interpreting plumbing code. **Prerequisite:** APR258H with a grade of C or better; or consent of instructor.

APR258J Plumber Apprenticeship Industrial Installation

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues training for plumber apprentices to study theory and trade 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 2017 Oregon Plumbing Specialty Code (OPSC). **Prerequisite:** APR258I with a grade of C or better; or consent of instructor.

APR258K Plumber Apprenticeship Basic Waste Water Systems

4 class hr/wk and 2 lab hr/wk, 5 cr.
Continues training for plumber apprentices in trade theory and practices. Covers water supply protection, breaker valve assembly, heating systems, science of hydraulics, pumps and system performance and maintenance, shop and isometric drawings of systems and special components, and 2017 Oregon Plumbing Specialty Code (OPSC). Includes an examination review. **Prerequisite:** APR258J with a grade of C or better; or consent of instructor.

APR258L Plumber Apprenticeship Code and Test Prep

3 class hr/wk, 3 cr.
Covers theory and trade practices for plumber apprentices. Focuses on installation of waste systems, hydraulic theory, isometrics, and related 2017 Oregon Plumbing Specialty Code (OPSC). **Prerequisite:** APR258K with a grade of C or better; or consent of instructor.

APR266F Sheet Metal Apprenticeship Applied Math

4 class hr/wk and 2 lab hr/wk, 5 cr.
Provides related training materials and skill development consistent with the minimum requirements of the sheet metal trade. Course content includes shop math, basic shop practices, draft skills, duct design, blow pipe principles and human relations/ sensitivity. **Prerequisite:** APR166E with a grade of C or better; or consent of instructor.

APR266G Sheet Metal Apprenticeship Triangulation and Fiberglass

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training material consistent with the minimum skill requirements of the sheet metal trade. Includes fabrication, assembly and design of various architectural and general sheet metal tasks. **Prerequisite:** APR266F with a grade of C or better; or consent of instructor.

APR266H Sheet Metal Apprenticeship Calculator Layout

4 class hr/wk and 2 lab hr/wk, 5 cr.
Focuses on architectural and mechanical sheet metal layout and fabrication principles and practices using a calculator. **Prerequisite:** APR266G with a grade of C or better; or consent of instructor.

APR266I Sheet Metal Apprenticeship Radial Line Development

4 class hr/wk and 2 lab hr/wk, 5 cr.
Presents related training materials consistent with the minimum skill requirements of the sheet metal trade applicable to sheet metal fabrication and layout of various fittings. Includes triangulation and pattern development methods. **Prerequisite:** APR266H with a grade of C or better; or consent of instructor.

APR266J Sheet Metal Apprenticeship Duct Sizing

4 class hr/wk 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, and associated equipment and refrigeration. **Prerequisite:** APR266I with a grade of C or better; or consent of instructor.

APR266K Sheet Metal Apprenticeship Job Site Management

4 class hr/wk 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.

APR266L CAD for Apprenticeship

2 class hr/wk 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.

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. **CL**

ART102 The Creativity Class

2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

ART115 Basic Design: Two-Dimensional

2 class hr/wk 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 two-dimensional design. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better or consent of instructor.

ART116 Basic Design: Color
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

ART117 3D Design: Construct + Recycle
2 class hr/wk 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, applies new vocabulary in written proposals and assessment (critique) of course projects, and reflects upon social responsibility and sustainability issues. Independent and collaborative teamwork required. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

ART118 Digital Design and Color
2 class hr/wk 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:** VC114 and ART 115, each with a grade of C or better; or consent of instructor. ART120

Digital Media Time Design
2 class hr/wk 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:** Admission into the Visual Communications program; or consent of instructor.

ART121 Introduction to Digital Arts
2 class hr/wk and 4 lab hr/wk, 4 cr.
Introduces the basics in digital imaging and layout skills using industry standard software and devices through digital imaging, image manipulation, layout, typography, and digital output. Focuses on the computer as both technical and creative tool in art and design. Introduces students to both raster and vector based software with focus on both the technical and creative use of the computer. Includes discussion of formal design concepts, design process, image appropriation and creative solutions.**Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ART115; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ART131 Introduction to Drawing 1
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

ART132 Introduction to Drawing 2
2 class hr/wk 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:** Placement in WR115 (or higher), or completion of WR090 (or higher); and completion of ART131; or consent of instructor based on portfolio review. (All prerequisite courses must be completed with a grade of C or better.)

ART142 Introduction to Photography
2 class hr/wk 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. **Prerequisite:** Placement in WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; consent of instructor.

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.

ART202 History of Photography
4 class hr/wk, 4 cr.
Explores the history of photography from its beginning to the present. Includes technical, artistic, commercial, cultural, and social development of photography as a form of visual communication and artistic expression. **Prerequisite/Corequisite:** WR115 with a grade of C or better; or consent of instructor.

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. **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.

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.

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.

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. **CL**

ART221 Graphic Design 1: Icons and Symbols
2 class hr/wk 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, each with a grade of C or better; and demonstrated ability to work with vector graphic software; or consent of instructor.

ART222 Graphic Design 2: Logo Design
2 class hr/wk 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.

ART223 Graphic Design 3: Package Design
2 class hr/wk 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.

ART224 Type Design 1
2 class hr/wk and 4 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, each with a grade of C or better; or consent of instructor.

ART225 Type Design 2
2 class hr/wk and 4 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.

ART234 Figure Drawing
2 class hr/wk 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: Placement into WR115 (or higher), or completion of WR090 (or higher); and** ART131; or consent of instructor based on portfolio review. (All prerequisite courses must be completed with a grade of C or better.)

ART235 Figure Drawing: Adv. Topics
2 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ART131 and ART234; or consent of instructor based on portfolio review. (All prerequisite courses must be completed with a grade of C or better.)

ART237 Photo Illustration
2 class hr/wk 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:** VC114 with a grade of C or better; or consent of instructor.

ART238 Introduction to Illustration
2 class hr/wk 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.

ART239 Introduction to Digital Illustration
2 class hr/wk, 4 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.

ART240 Advanced Digital Illustration
2 class hr/wk 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.

ART243 Advanced Illustration
2 class hr/wk 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.)

ART249 Emerging Multimedia Arts and Technology
2 class hr/wk and 4 lab hr/wk, 4 cr.
Explores cutting-edge creative technologies and techniques within the field of film/video, photography, motion graphics, and immersive mediums. Topics for this class may include photogrammetry for photography, motion tracking for motion graphics, virtual and augmented reality technologies, and other immersive formats that may be professionally used within the quickly evolving creative industry. **Prerequisite:** ART120 with a grade of C or better and second-year standing in the Visual Communications program; or consent of instructor.

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.

ART258 Introduction to Ceramics
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of Instructor.

ART 259 Pottery: Wheel Throwing
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

ART265 Photography 1
2 class hr/wk 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.

ART266 Photography 2
2 class hr/wk and 4 lab hr/wk, 4 cr.
Introduces studio lighting for portraits and product photography, color correction, and asset management. Includes the role of the photographer in the graphic communications industry. **Prerequisite:** ART265 with a grade of C or better and admission in the Visual Communications program; or consent of instructor.

ART267 Portrait Photography
2 class hr/wk and 4 lab hr/wk, 4 cr.
Explores a variety of techniques and approaches to portraiture. Includes making formal, informal, environmental, and group portraits using studio lighting, location lighting, and available light. Incorporates digital printing and professional practices. **Prerequisite:** ART266 with a grade of C or better; or consent of instructor.

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:** ART266 with a grade of C or better; or consent of instructor.

ART281 Painting 1
2 class hr/wk 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, each with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) 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.

ART281B Painting 2
2 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ART281; or consent of instructor based upon demonstration of fundamental painting and drawing skills. (All prerequisite courses must be completed with a grade of C or better.)

ART291 Beginning Sculpture
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); ART115 (or higher), except for ART201 through ART207; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ART292 Sculpture: The Figure
2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

American Sign Language

ASL111 American Sign Language 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:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; Internet skills.

ASL112 American Sign Language 2
4 class hr/wk, 4 cr.
Continues study in American Sign Language (ASL), supported by vocabulary, grammar, and guided conversation. Introduces various sign systems and methods of communication used by deaf, deaf-blind, non-signing deaf, hard-of-hearing and late-deafened individuals. Discusses information about various perspectives of these community members. Presents Deaf Culture and community as well as historical aspects through reading, writing, and short signed or video-recorded conversations/ presentations. Course has an online component that requires students to use internet resources for coursework. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ASL111 within the past year; and internet skills; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ASL113 American Sign Language 3
4 class hr/wk, 4 cr.
Continues development of expressive and receptive skills learned in ASL111 and ASL112. Expands vocabulary and introduces forms of ASL narrative and dialogue. Advances study in complex grammatical structures. Describes people and things in clothing, including sentence translations and appropriate behaviors in greetings and leaving-takings. Makes requests and asks for advice, using agreement verbs and conjunction. Describes places in the neighborhood and suggests a place to eat by giving directions. Expands signing numbers and finger-spelling with appropriate productions. Rehearses different narrative elements and presents a coherent story. Uses total immersion of ASL for classroom interaction and instruction. Course has an online component that requires students to use internet for coursework and workbook assignments**. Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ASL112 within the past year; and internet skills; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ASL211 American Sign Language 4
4 class hr/wk, 4 cr.
Continues development of expressive and receptive skills learned in American Sign Language (ASL) first year. Expands vocabulary and introduces forms of ASL narrative and dialogue. Advances study in complex grammatical structures. Explores issues pertaining to the Deaf Community with appropriate behaviors to interrupt and resume conversations and to interact in environment. Discusses personal goals and plans including subject broach and conclusion. Gives opinions about tendencies, personal qualities, knowledge, and abilities. Increases signing numbers and fingerspelling with appropriate productions. Uses total immersion of ASL for classroom interaction and instruction. Course has an online component that requires students to use internet for coursework and workbook assignments**. Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ASL113 within the past year; and internet skills; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ASL212 American Sign Language 5
4 class hr/wk, 4 cr.
Continues development of expressive and receptive skills learned in ASL 211. Expands vocabulary and continues study in forms of ASL narrative and dialogue and complex grammatical structures. Shares stories to develop and maintain relationships in the Deaf community. Develops strategies for explaining rules while playing games and discuss general rules in driving and culture. Describes physical arrangements requiring skills to visualize the room and to use the interplay of both hands to show where objects are located. Creates a coherent narrative that contains an introduction, a series of activities in chronological order and a closing. Uses ASL for classroom interaction and instruction. Course has an online component that requires students to use internet coursework and workbook assignments. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ASL211 within the past year; and internet skills; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ASL213 American Sign Language 6
4 class hr/wk, 4 cr.
Continues development of expressive and receptive skills learned in ASL212 and the completion of the second year courses. Expands vocabulary and introduces forms of ASL narrative and dialogue. Advances study in complex grammatical structures. Shares personal experiences with other people about misadventures and childhood incidents. Talks about shopping for bargains and how to save, spend, and make investments. Prepares for future decisions that may impact student's lives. Discusses complaints about health or on-going personal problem. Demonstrates how to describe an object fluently by visualizing the object, choosing appropriate classifiers, and using the interplay of the weak and dominant hands. Uses total immersion of ASL for classroom interaction and instruction. Course has an online component that requires students to use internet for coursework and workbook assignments. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ASL212 within the past year; and internet skills; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Anthropology

ATH101 Human Evolution
4 class hr/wk, 4 cr.
Studies the processes of the bio-cultural 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. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

ATH102 Archaeology
4 class hr/wk, 4 cr.
Covers basic archaeological method and theory and reviews the techniques used for investigating the past. Focuses on the interpretation and assessment of archaeological data. Includes the development of technology and food production, the origins of complex societies and the resulting social inequalities, and the evolution of cultural systems. Includes some of the major contributions of archaeology and discusses the relevance of archaeology to everyday life. Selection of specific societies and sites for study may vary according to each instructor's expertise. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 archaeologic, ethnographic, and ethnohistoric evidence. Major Mexican and Mayan archaeologic sites of Mesoamerica are discussed with an emphasis on change through time. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher); or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

Automotive Technology

AUM151 Basic Automotive Engines
3 class hr/wk 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.

AUM152 Automotive Machine Shop
2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM157 Automotive Brake Systems
3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM158 Automotive Steering and Suspension
3 class hr/wk 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.

AUM159 Automotive Chassis Systems
2 class hr/wk and 7 lab hr/wk, 5 cr.
Presents the theory, operation, and service of automotive chassis systems, including steering, suspension, and brakes.

AUM161 Manual Drive Train and Axles 1

3 class hr/wk 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, AUM157, and AUM168, each with a grade of C or better; or consent of instructor.

AUM168 Automotive Electrical Systems 1

3 class hr/wk and 6 lab hr/wk, 5 cr.
Introduces automotive electricity and electronics systems. Includes an overview of automotive circuits. **Prerequisite:** AUM151 and AUM158, each with a grade of C or better; or consent of instructor.

AUM176 Automotive Electrical Systems 2

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

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.

AUM185A Automotive Machining Fundamentals

2 class hr/wk 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.

AUM186A Automotive Lathe Fundamentals

2 class hr/wk 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.

AUM187A Automotive Milling Machine Processes

2 class hr/wk 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.

AUM188 Automotive Machine Shop—Upper Engine

1 class hr/wk 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.

AUM189 Automotive Machine Shop—Lower Engine

1 class hr/wk 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.

AUM190 Automotive Machine Shop—Engine Assembly

2 class hr/wk 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.

AUM192 Automotive Diesel Engines

2 class hr/wk and 3 lab hr/wk, 3 cr.
Covers construction, working principles, and methods of servicing automotive diesel engines. **Recommended:** AUM151 and AUM168, each with a grade of C or better.

AUM253 Automotive Engines 2

1 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM262 Manual Drive Train and Axles 2

2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM263 Automatic Transmissions and Transaxles 1

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM266 Engine Performance 1

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM267 Engine Performance 2

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM273 Automatic Transmissions and Transaxles 2

1 class hr/wk and 8 lab hr/wk, 4 cr.
Focuses on diagnosis, repair, and service of a vehicle's powertrain with emphasis on automatic transmission and automotive transaxles. Includes electronic transmission diagnostics. Emphasizes speed and accuracy in diagnosis and repair. Builds on prior training. **Prerequisite:** AUM267, AUM282, and AUM286, each with a grade of C or better; or consent of instructor.

AUM277 Electronic Vehicle Controls 1

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

AUM281 Engine Performance 3

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM282 Electronic Vehicle Controls 2

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

AUM284 Rechargeable Energy Storage Systems

3 class hr/wk 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.

AUM286 Auto Heating and Air Conditioning

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

Business Administration

See also ENT—Entrepreneurship

BA100 Business Career Exploration

3 class hr/wk, 3 cr.
First step in becoming a student of business. Provides a broad introduction to the many different business industries and job opportunities represented within Oregon. Examines the educational requirements, as well as the job experiences needed to enter and advance within the different industries. Covers the earning capacities of specific positions to establish clear expectations of future career goals. Through additional course readings students will be exposed to local business success examples.

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.

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.)

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 and ledgers, controlling accounts, worksheets used in preparation of account statements, purchases, sales, and end-of-the-period procedures.

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.

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.

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/group problem-solving and strategies to assist the student in maintaining employment, and demonstrating a professional image and work behavior. **Recommended:** Placement into RD090 and WR121.

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. **CL**

BA206 Business Management Principles

4 class hr/wk, 4 cr.
Analyzes and synthesizes historical and current theories in leadership, group processes, organizational structures, personnel policies, motivation and training that allow an individual to plan, organize, control, staff and direct subordinates in an organization. **Recommended:** Placement into RD090 and WR121; and completion of BA101 with a grade of C or better.

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. Examines social media marketing tools and strategies for implementation in business. **Recommended:** Placement into RD090 and WR121; and completion of BA101 with a grade of C or better; and computer literacy.

BA211 Financial Accounting

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 receivable and interest, and accounting for inventories, long term assets, current and long term liabilities, and stockholders' equity.

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.

BA213 Managerial Accounting

4 class hr/wk, 4 cr.

Covers managers use of accounting. Includes job order and process costing, activity-based costing, variable costing, cost-volume profit analyses, differential analysis and short term decisions, capital investments, time-value-of-money concepts, master budgeting, and flexible budgets and standard costs, performance measurement in decentralized organization. **Prerequisite:** BA211 with a grade of C or better; or consent of instructor.

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. Explores the job search process including resumes, cover letters, and 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.

BA216 Small Business Financial Management

4 class hr/wk, 4 cr.

Explores the financial processes necessary to manage a new or continuing small business. Includes tax, cash management, financial planning, funding, reporting, community resources, and financial responsibility. **Recommended:** Placement into RD090 and WR122; and completion of BA101 with a grade of C or better.

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.

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 and MTH070 or higher. (With a grade of C or better.)

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).

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.

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.)

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.

BA227 Business Law 2

3 class hr/wk, 3 cr.

Covers legal aspects of Uniform Commercial Code (UCC), property, business entities, agency and partnership law. **Recommended:** Placement into RD090 and WR121; and completion of BA101 and BA226, each with a grade of C or better.

BA228 Computerized Accounting

14 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, analysis, and reports. **Prerequisite:** BA115 or BA211, either with a grade of C or better; and computer literacy; or consent of instructor.

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. **Recommended:** BA234 and BA236, each with a grade of C or better; or consent of instructor.

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.

BA235 Procurement for State and Local Governments

4 class hr/wk, 4 cr.

Provides a basic understanding of pertinent topics and influences that shape the public procurement profession. Includes fundamentals of public procurement: competition, impartiality and openness, effective use of public funds, innovation, and flexibility. **Recommended:** Placement into RD090 and WR121; and completion of BA101 with a grade of C or better.

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.

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.

BA240 Governmental/Non-Profit Accounting 1

4 class hr/wk, 4 cr.

Considers budgets, accounting for general funds, special revenue funds, revenue accounting, expenditure accounting, capital projects funds, debt service funds, special assessment funds, enterprise funds, capital assets, and summary of funds and groups. Includes comprehensive study of accounting for state and local governmental and non-profit entities. **Prerequisite:** BA212 with a grade of C or better; or consent of instructor.

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.

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.

BA256 Income Tax 1

4 class hr/wk, 4 cr.

Presents the first of two courses in preparing Federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the educational requirements to take the Oregon Licensed Tax Preparer's exam and the IRS Registered Tax Return Preparer exam.

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.

BA261 Leadership in Organizations and Business

4 class hr/wk, 4 cr.

Explores the principles and practices of effective leadership as applicable to organizations and business activities. Develops strategies for developing leadership skills relating to self, others, organizations and community. Discusses empowerment, integrity, responsibility and use of vision as leadership values. **Recommended:** Placement into RD090 and WR121; and completion of BA101 with a grade of C or better; and computer literacy.

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:** MTH095 with a grade of C or better; or consent of instructor.

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; and BA228 with a grade of C or better; or consent of instructor.

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.

BA279 Computerized Accounting 2

4 class hr/wk, 4 cr.

Continues computer-based accounting for small businesses using QuickBooks Online version. Includes start-up of a new company, building a chart of accounts, completing the accounting cycle, processing payroll, reconciling accounts, preparing financial statements, and preparing a financial analysis of a company using spreadsheet software. **Prerequisite:** BA211 with a grade of C or better; and computer literacy; or consent of instructor.

BA280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience.

BA282 Applied Accounting Capstone

4 class hr/wk, 4 cr.

Serves as a capstone assessment course for review and application of accounting skills previously studied in the Accounting program. Includes: completion of a year-end closing and analysis using accounting software, the preparation of a business tax return, and analyzing accounting best practices. Designed to prepare the student for the professional practice in an accounting career. **Prerequisite:** BA256; and BA228and computer literacy; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BA285 Organizational Behavior

4 class hr/wk, 4 cr.

Explores interpersonal relations in an organizational setting. Topics include: interpersonal communications, individual and group behavior, leadership, forms and sources of power, organizational politics, organizational culture, conflict management, and change management. **Recommended:** Placement into RD090 and WR121; and BA101 with a grade of C or better.

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, each with a grade of C or better.

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. (All recommended courses must be completed with a grade of C or better.)

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.

BA290 Accounting Information Systems

4 class hr/wk, 4 cr.

Prepares students to meet the needs of contemporary business owners and managers who rely on today's accounting professionals to identify and monitor enterprise risks and to provide quality assurance for a company's information systems. **Prerequisite:** CIS101 or CIS210 (or concurrently enrolled); and BA211 (or concurrently enrolled) both with a grade of C or better; or consent of instructor.

BA291 Data Analytics for Accounting

4 class hr/wk, 4 cr.

Prepares students to successfully perform data analytics to provide data-driven insights and recommendations. Students will conduct data analysis using Excel, Access (includeing SQL), Tableau, and Power BI. **Prerequisite:** CIS121; CIS125A (or concurrently enrolled); CIS125E or BA225 (or concurrently enrolled); and BA213; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Biology

BI060 Basic Science for Dental Assistants

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

Designed especially for Dental Assisting program students. Presents introductory concepts of chemistry, cell biology, anatomy and physiology, microbiology and oral histology and embryology. Includes practical application of problem solving, scientific observation laboratory techniques.

BI101 General Biology: Ecology and Diversity

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

Introductory biology course designed for students not majoring in biology or a biology-related field. 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). Includes two mandatory field trips. (BI101, BI102, and BI103 may be taken in any order.) **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI102 General Biology: Cell Biology, Genetics, and Evolution

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

Introductory biology course designed for students not majoring in biology or biology-related fields. Investigates cell structure, cell division, Mendelian genetics, and principles of evolution. Introduces modern techniques in biotechnology and discusses their ethical implications. (BI101, 102 and 103 may be taken in any order). **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI103 General Biology: Plant and Animal Structure and Function

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

Introductory biology course designed for students not majoring in biology or a biology-related field. Includes a mandatory field trip. 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. (BI101, BI102, and BI103 may be taken in any order.) **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI112 Cell Biology Health Occupation

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

Presents an introduction to the study of the scientific method, cellular chemistry, cell structure and function, principles of inheritance and laboratory skills. Includes topics and skills required to continue anatomy and physiology and microbiology. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI121 Introduction to Anatomy and Physiology 1

3 class hr/wk and 3 lab hr/wk, 4 cr.
Survey of the human body in the first term of a two-term sequence. Focuses on anatomical terminology, basic chemistry, cells, tissues, and the following systems: integumentary, skeletal, muscular and nervous. Includes lectures, labs, and dissections. **Prerequisite:** Placement into, or completion of, RD115 (or higher), and WR115 (or higher); or consent of instructor. (Prerequisite courses must be completed with a grade of C or better.)

BI122 Introduction to Anatomy and Physiology 2

3 class hr/wk and 1 lab hr/wk, 4 cr.
Survey of the human body in the second term of a two-term sequence. Focuses on structure and function of the following systems: circulatory, lymphatic, immune, respiratory, digestive, urinary, endocrine, and reproductive systems. Provides topics on nutrition, pregnancy, and genetics. Includes lectures, labs, and dissections. **Prerequisite:** Placement into, or completion of, WR115 (or higher); and completion of BI121; or consent of instructor. (Prerequisite courses must be completed with a grade of C or better.)

BI131 Environmental Science 1

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI132 Environmental Science 2

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher) either with a grade of C or better; or consent of instructor.

BI133 Environmental Science 3

3 class hr/wk and 3 lab hr/wk, 4 cr.
Examines environmental problems and issues related to energy supply and use, environmental contamination waste management and land use. Explores relationships between environmental science and society. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); or consent of instructor. (All prerequisites must be completed with a grade of C or better.)

BI143 Marine Biology

3 class hr/wk 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), the open ocean, deep ocean, hydrothermal vents and other marine environments. Evaluates marine life found along Oregon's coastal environments and the adaptations to a marine existence; particular emphasis on the biology, ecology, physiology, and morphology of marine plants and animals. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI153 Fundamentals of Plant Biology

3 class hr/wk and 3 lab hr/wk, 4 cr.
Introduction to the anatomy and basic metabolic processes (cellular and organismal) of plants. Includes a survey of the evolution of plant diversity and discusses plant life cycles and inheritance. Serves as background for students in the Horticulture programs. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI200 Principles of Ecology—Field Biology

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI101 or BI131, or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI211 Principles of Biology 1

4 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of, or concurrent enrollment in, CH104, or CH121, or CH221; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI212 Principles of Biology 2

4 class hr/wk and 3 lab hr/wk, 5 cr.
Focuses on cell structure, metabolism 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI211; and CH104, or CH121, or CH221; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI213 Principles of Biology 3

4 class hr/wk and 3 lab hr/wk, 5 cr.
Focuses on the cell cycle, 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI212; or consent of instructor. (All prerequisite courses must be completed with a grade C or better.)

BI230 Introductory Microbiology

3 class hr/wk 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 and standard microbiological laboratory techniques. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

BI231 Human Anatomy and Physiology 1

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH110; or CH104 and concurrent enrollment in CH105; or CH121 and concurrent enrollment in CH122; or one year of accelerated college chemistry within the last seven years equivalent to the courses mentioned above as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI232 Human Anatomy and Physiology 2

3 class hr/wk 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, cardiovascular, lymphatic, immune, and respiratory systems. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI231 within the last seven years each with a grade of C or better; and concurrent enrollment in CH106 or CH123 if taking as a chemistry sequence; or completion of CH110; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI233 Human Anatomy and Physiology 3

3 class hr/wk 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 metabolism, body fluids, electrolytes, pH balance, and medical genetics. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI232 within the last seven years; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI234 Microbiology

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI231 within last seven years; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

BI235 Human Dissection

1 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of BI232; and submission of the human dissection class application: and consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Building Inspection Technology

BLD141 International Residential Codes 1

3 class hr/wk, 3 cr.
Covers the administrative, definitions, building planning, and foundation portions of the International Residential Specialty Code (Chapters 1 through 4 and 44) as it relates to residential construction and other applicable codes.

BLD142 International Residential Codes 2

3 class hr/wk, 3 cr.
Covers the floor, wall, roof, chimney, and energy conservation provisions of the International Residential Specialty Code (Chapters 5 through 11) as it relates to residential construction and other applicable codes. Emphasis placed on lateral bracing provisions and preparation to take the ICC Residential Building Inspector Certification Exam. **Prerequisite:** BLD141 with a grade of C or better; or consent of instructor.

BLD151 Building Codes 1

3 class hr/wk, 3 cr.
Studies the scope, meaning, and use of the Model International Residential Building Code including occupancy classifications, building area, height and location limitations, types of construction, exits, and fire resistive standards. Focuses on commercial structures.

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.

BLD153 Building Codes 3

3 class hr/wk, 3 cr.
Provides a comprehensive review of the International 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.

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.

BLD158 Construction Materials, Systems, and Drawings

1 class hr/wk and 2 lab hr/wk, 2 cr.
Provides instruction in the techniques of interpreting construction drawings, particularly those in the civil, architectural, structural, mechanical, electrical, and plumbing sections of blueprints. Covers basic terminology, abbreviations, and symbols, as well as the contents of construction notes, detail drawings, and schedules. Exercises students in determining linear dimensions using architect and engineer scales and viewing blueprints in plan, elevation, and section perspectives. Introduces the most common building materials and systems referenced in construction drawings. Familiarizes students with the building codes and the basic requirements for building design and construction.

BLD161 Structural Inspection 1

3 class hr/wk, 3 cr.
Introduces basic methods of wood and steel framing. Explores the various uses of convential sawn lumber, manufactured lumber products, and newly developed materials. Covers allowable stresses, loads, and fundamental design of construction systems. Introduces building inspection principles, safety practices, and technologies used.

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.

BLD165 Residential Inspection
3 class hr/wk, 3 cr.
Provides a comprehensive overview of residential construction inspection practices from site preparation through final inspection. Introduces inspection of foundations; framing (including floor, wall, and ceiling/roof assemblies); mechanical, electrical, and plumbing systems; moisture and thermal protection; and building final. Identifies code violations, documenting (in writing) those violations, and citing applicable code provisions. **Prerequisite:** BLD141 and BLD151 each with a grade of C or better; or consent of instructor.

BLD166 Commercial Inspection
3 class hr/wk, 3 cr.
Provides a comprehensive overview of commercial construction inspection practices from site preparation through final inspection. Introduces inspection of foundations; framing (including floor, wall, and ceiling/roof assemblies); mechanical, electrical, and plumbing systems; fire-protection systems; moisture and thermal protection; building accessibility; and building final. Identifies code violations, documenting (in writing) those violations, and citing applicable code provisions. **Prerequisite:** BLD152 with a grade of C or better; or consent of instructor.

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.

BLD181 Mechanical Codes 1
3 class hr/wk, 3 cr.
Introduces the thermodynamics of heat and how it relates to the mechanical appliance. Examines the International Mechanical Codes general code requirements for heating, 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.

BLD182 Mechanical Codes 2
3 class hr/wk, 3 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.

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

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.

BLD260 Fire Protection for Buildings
4 class hr/wk, 4 cr.
Covers the installation, function, location, and purpose of sprinkler systems.

BLD266 Plan Review 2
2 class hr/wk and 2 lab hr/wk, 3 cr.
Covers the fundamentals of structural plan review. Includes analysis of beams, columns, and connections. **Prerequisite:** BLD269 with a grade of C or better; or consent of instructor.

BLD267 Plan Review 1
2 class hr/wk and 2 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:** BLD 269 with a grade of C or better; or consent of instructor.

BLD268 Foundations, Excavation, and Grading
3 class hr/wk, 3 cr.
Covers the fundamentals of and the code requirements for regulating excavations and fills for any building or structure, construction of foundation and retaining structures, and general grading. Presents code requirements and emphasizes application to plan review and inspection functions. Uses grading and building plans and soil reports to complement the codes. **Prerequisite:** MTH052 with a grade of C or better; or consent of instructor.

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.

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.

BLD273 International Fire Codes for Building Departments
3 class hr/wk, 3 cr.
Relates the International Fire Code to plan review and inspections for building construction. Correlates the Fire Code with the fire provisions in the International Building Code. **Prerequisite:** BLD153 with a grade of C or better; or consent of instructor.

BLD280A-L Cooperative Work Experience
See CWE-Cooperative Work Experience

BLD290 Building Inspection Technology Capstone

1 class hr/wk and 1 lab hr/wk, 2 cr.
Integrates all aspects of learning in the Building Inspection Technology program, with emphasis on building department organization and responsibilities, building code provisions, plan review, building inspection, and effective communication. Gives students exercises in analysis, evaluation, and creativity relating to the building-development process. Promotes professional growth by requiring students to demonstrate technical skills and encouraging their interaction with experienced mentors in the field of building inspection. Concurrent: Second-year spring-term courses in the Building Inspection Technology program. **Prerequisite:** All Building Inspection Technology courses through the winter term of the second year; or consent of instructor.

Business Technology

(Office Administration and 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.

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.

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.

BT112A Proofreading and Editing

1 class hr/wk, 1 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.

BT112B Proofreading and Editing B

1 class hr/wk, 1 cr.
Presents effective proofreading techniques emphasizing spelling, grammar, punctuation, and formatting. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. **Prerequisite:** BT112A with a grade of C or better; or consent of instructor.

BT112C Proofreading and Editing C

1 class hr/wk, 1 cr.
Presents effective proofreading techniques emphasizing spelling, word division, capitalization, abbreviations, numbers, and formatting. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. **Prerequisite:** BT112B with a grade of C or better; or consent of instructor.

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.

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.

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. Includes exploring, organizing, and managing electronic records and files within operating systems currently being used in business and industry.

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.

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); use of reference tools; discussions of small groups; and preparation of written reports with documentation. **Prerequisite:** BT105 with a grade of C or better; or consent of instructor.

BT230 Organization Performance and Customer Service

3 class hr/wk, 3 cr.
Covers various aspects of customer service and the impact on the overall performance and vitality of an organization. Presents strategies for using verbal and non-verbal communication and technology to promote positive customer relationship, including handling difficult encounters, understanding diversity, managing stress and time, and encouraging customer loyalty.

BT271 Administrative Capstone Project

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.)

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.

BT273 Virtual Office 2
4 class hr/wk, 4 cr.
Presents the benefits of and the accounting, legal, and insurance requirements of owning a virtual office assistant business, including licenses and fees. Covers the creation of a marketing plan, advertising documents, an electronic portfolio, customer contracts, and a business website. **Prerequisite:** BA209 and BT272, both with a grade of C or better; or consent of instructor.

BT280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience

Computer Applications
(Office Administration and Technology)

CA100 Beginning Computing
3 class hr/wk, 3 cr.
Explores computer concepts and practical applications for a wide range of uses in both personal and career environments. Covers operating systems, file management, Cloud computing, various applications, Internet/Social Media, and various computer devices.

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.

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.

CA117A Microsoft Publisher 1
1 class hr/wk, 1 cr.
Provides part one of a hands-on introduction to Microsoft Publisher publication software. Covers topics including formatting and enhancing text, working with art, Design Gallery, and drawing tools, and using the Catalog feature for creating publications. **Prerequisite:** BA131 or CA100, either with a grade of C or better; or consent of instructor.

CA117B Microsoft Publisher 2
1 class hr/wk, 1 cr.
Presents part two of a hands-on introduction to Microsoft Publisher publication software. Includes using styles, flowing text into multiple columns, and creating drop caps and reversed text. Covers features for improving publications and creating multiple-page publications. **Prerequisite/Corequisite:** CA117A with a grade of C or better; or consent of instructor.

CA117C Microsoft Publisher 3
1 class hr/wk, 1 cr.
Offers part three of a hands-on introduction to Microsoft Publisher publication software. Includes using special features such as BorderArt, WordArt, text wrap around objects, mail merge, and preparation for commercial printing. Covers features for working efficiently. **Prerequisite/Corequisite:** CA 117B with a grade of C or better; or consent of instructor.

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.

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:** BA131, CA100, or CIS101 with a grade of C or better; or consent of instructor.

CA118B1 Excel Basics 1
1 class hr/wk, 1 cr.
Introduces building and editing worksheets, formatting and printing worksheets, working with formulas and functions, and charting in MS Excel. **Prerequisite:** Computer literacy (prior experience with computer and mouse device), and touch keyboarding ability; or consent of instructor.

CA118B2 Excel Basics 2
1 class hr/wk, 1 cr.
Reinforces basic Excel functions. Introduces sorting, filtering, and analyzing list data; enhancing worksheets and charts; and sharing MS Excel files. **Prerequisite:** CA118B1 with a grade of C or better; or consent of instructor.

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:** CA118B2 with a grade of C or better; or consent of instructor.

CA118C Access Basics
2 class hr/wk, 2 cr.
Introduces and reinforces database basics for forms design; data entry; queries; tables; reports; multiple table and action queries; forms and sub-forms; and importing, exporting, and publishing data. **Prerequisite:** BA131, CA100, or CIS101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better).

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.

CA118C2 Access Basics 2
1 class hr/wk, 1 cr.
Reinforces basic database skills. Introduces multiple table and action queries; forms and sub-forms; and importing, exporting, and publishing data. **Prerequisite/Corequisite:** CA118C1 with a grade of C or better; or consent of instructor.

CA118D Internet for Office Environment
1 class hr/wk, 1 cr.
Introduces the Internet and demonstrates how this resource may be used effectively in a modern office. Emphasizes finding and citing information currently needed by office professionals. **Prerequisite:** CA118A; or CIS101 or CA100, or consent of instructor. (All prerequisites must be completed with a grade of C or better.)

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 (e-mail 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.

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.

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. **Prerequisite:** BA131 or CA100; and CA121; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CA121 Keyboarding and Document Production

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.

CA121A Keyboarding A

1 class hr/wk, 1 cr.
Covers basic touch keyboarding of the alphabetic keys for the standard microcomputer keyboard.

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.

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:** 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.

CA122 Adv Keyboarding and Document Production

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:** CA121 with a grade of C or better; or touch keyboarding ability of 25 words per minute (30 words per minute recommended); or consent of instructor.

CA122A Keyboard Skillbuilding A

1 class hr/wk, 1 cr.
Improves keyboarding skill, including keyboard (alphabetic and numeric) proficiency, speed, and accuracy. Serves as preparation for production keyboarding as well as general skill development. Course may be repeated for a maximum of two (2) credits. **Prerequisite/Corequisite:** CA121 with a grade of C or better; or consent of instructor.

CA122B Keyboard Skillbuilding B

1 class hr/wk, 1 cr.
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.

CA122C Keyboard Skillbuilding C

1 class hr/wk, 1 cr.
Improves keyboarding skill, including keyboard proficiency (alphabetic and numeric), speed, and accuracy. Focuses on numeric, frequently misspelled words, alternate hand, double letter, right and 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.

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:** Keyboarding ability.

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:** CA201D: Tough keyboarding ability of 30 words per minute; or consent of instructor. CA201D2: Touch keyboard ability of 30 words per minute; or consent of instructor. CA201D3: CA202D2 or equivalent, with grade of C or better; and touch keyboarding ability of 35 words per minute; or consent of instructor.

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.

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:** CA202D1: CA201D or equivalent with a grade of C or better; and touch keyboarding ability of 35 words per minute; or consent of instructor. CA202D2: CA202D1 or equivalent with a grade of C or better; and touch keyboarding ability of 35 words per minute; or consent of instructor. CA202D3: CA202D2 or equivalent, with grade of C or better; and touch keyboarding ability of 35 words per minute; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CA208 Workplace Presentation using PowerPoint

3 class hr/wk, 3 cr.
Introduces the product of presentations for the workplace using current presentation software. Includes software techniques, design and typography basics, and production techniques as well as public speaking skills. **Prerequisite:** BA131 or CA100, either with a grade of C or better; or consent of instructor.

CA213 Integrating Office Procedures

3 class hr/wk, 3 cr.
Brings together the knowledge, skills, and abilities required of one-year Office Administration and 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, and CA201D; and BA131 or CA100; and BT210 and CA118C1 (or concurrent enrollment in both courses); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.).

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.

CA220 QuickBooks—Computerized 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.

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.)

Computer-Aided Manufacturing

CAM050 Orientation to Manufacturing Processes

1 class hr/wk 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.

CAM051 Manual Machining Projects 1

3 lab hr/wk, 1 cr.
Provides practice in the manual machine shop to refine previously learned skills. Includes projects or exercises as determined by student and instructor.

CAM052 Manual Machining Projects 2

6 lab hr/wk, 2 cr.
Provides practice in the manual machine shop to refine previously learned skills. Includes projects or exercises as determined by student and instructor.

CAM053 Manual Machining Projects 3

9 lab hr/wk, 3 cr.
Provides practice in the manual machine shop to refine previously learned skills. Includes projects or exercises as determined by student and instructor.

CAM054 Manual Machining Projects 4

12 lab hr/wk, 4 cr.
Provides practice in the manual machine shop to refine previously learned skills. Includes projects or exercises as determined by student and instructor.

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.

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.

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.

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.

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.

CAM105 Precision Measurement

1 class hr/wk and 3 lab hr/wk, 2 cr.
Covers the selection and application of linear English and metric measuring, inspection tools, and equipment used in manufacturing.

CAM110 Benchwork and Manual Fundamentals

2 class hr/wk 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.

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 and basic first-aid training.

CAM115 Geometric Dimensioning/Tolerancing

2 class hr/wk, 2 cr.
Covers geometric dimensioning and tolerancing principles based on ANSI/ASME standards. Includes 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.

CAM120 Manual Milling Processes

2 class hr/wk 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.

CAM121 Manual Lathe Processes

2 class hr/wk 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.

CAM130 CNC Machine Setup/ Operation

2 class hr/wk 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.

CAM140 Metallurgy for Manufacturing

1 class hr/wk 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.

CAM150 Cutting Tools and Materials

1 class hr/wk 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.

CAM160 Intermediate CNC Mill Operations and Programming

2 class hr/wk 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.

CAM190 Intermediate CNC Lathe Operations and Programming

2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

CAM210 Advanced Mill Processes

2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

CAM220 Advanced Lathe Processes

2 class hr/wk 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.

CAM225 Advanced Manual Integration

2 class hr/wk 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. Incudes advanced lathe theory and operations, lathe and mill settings, advanced tooling, safety, and work-holding applications. **Prerequisite:** CAM210 and CAM220, each with a grade of C or better; or consent of instructor.

CAM230 CAM Programming Mills

1 class hr/wk and 4 lab hr/wk, 3 cr.
Introduces the concepts and application of Computer Aided Manufacturing (CAM) software programs for creating CNC milling machine part programs. **Prerequisite:** Fourth-term standing In the Machining Technologies program or consent of instructor.

CAM235 Advanced CNC Mill Operations and Programming

1 class hr/wk 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.

CAM260 CAM Programming Lathes

1 class hr/wk and 4 lab hr/wk, 3 cr.
Introduces the concepts and applications of Computer Aided Manufacturing (CAM) software programs for creating CNC lathe part programs. **Prerequisite:** Fifth-term standing in the Machining Technologies program; or consent of instructor.

CAM265 Advanced CNC Lathe Operations and Programming

1 class hr/wk 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.

CAM270 CAM Machine Design

1 class hr/wk and 4 lab hr/wk, 3 cr.
Covers practical design situations as related to the machining industry . 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, and assembly are an integral part of this course. **Prerequisite:** Fourth-term standing in the Machining Technologies program; or consent of instructor.

CAM275 Tool Design

1 class hr/wk 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:** Second-year standing in the CAD/CAM degree program; or consent of instructor.

CAM280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience

CAM290 Advanced CAD/CAM Integrations

2 class hr/wk and 6 lab hr/wk, 4 cr.
Emphasizes production and assembly methods in manufacturing of parts utilizing manual and CNC milling/turning machines. Includes setup, including 4th axis rotary tables; operation; tool selection and application; calculating proper feed; speeds; and depth of cuts in the production of parts. Also includes 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.)

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.

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.

CG100 Preparing for College

1 class hr/wk, 1 cr.

Introduces students to techniques, strategies and information fundamental to success in the college environment.

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.

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.

CG103 College Prep: International

22 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.

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.

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.

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 process. Includes evaluation of individual personality type, interests, skills, values and work-related preferences. **Prerequisite:** College-level reading and writing skills.

CG130B Career Exploration and Planning

2 class hr/wk, 2 cr.

Uses an individualized study approach to provide information and resources needed in the careers exploratory process. Explores and assesses how interests, skills, values and personality type influence career choice. Includes career research references as well as on job and labor market trends. **Prerequisite:** College-level reading and writing skills.

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. Offers a personal framework for career or life planning. Includes selection of various career components involving assessment, research, planning, decision-making process and educational or training objectives.

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.

Chemistry

CH104 Chemistry for Allied Health

3 class hr/wk, 2 lab hr/wk 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, and chemical reactions. First term of a three-term sequence dealing with the molecular basis for life. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher); or completion of MTH095 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH105 Chemistry for Allied Health

3 class hr/wk, 2 lab hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH104; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH106 Chemistry for Allied Health

3 class hr/wk, 2 lab hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and CH105 with a grade of C or better; or consent of instructor.

CH110 Foundations of General, Organic, and Biochemistry

3 class hr/wk, 2 lab hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher), or completion of MTH095 (or higher, except MTH098 and MTH105); or consent of instructor (All prerequisite courses must be completed with a grade of C or better.)

CH114 Chemistry in Art

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CH115 Chemistry in Society

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CH116 Chemistry in the Environment

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

Introduction to chemistry designed specifically for the non-science student. Covers topics such as energy; chemistry of the earth, air, and water; and relates these topics to current events, pollution, and consumer related concerns. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CH117 Chemistry in the Kitchen

3 class hr/wk 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 and 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CH121 College Chemistry 1

3 class hr/wk, 2 lab hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher), or completion of MTH095 (or higher, except MTH098 and MTH105); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH122 College Chemistry 2

3 class hr/wk, 1 lab hr/wk 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; and chemical equilibrium. Second of a three-term sequence. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH121; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH123 College Chemistry 3

3 class hr/wk, 2 lab hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH122; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH201 Chemistry for Engineers 1

3 class hr/wk 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, Lewis structures, VESPR theory, Shapes and polarity of molecules, intermolecular forces, and chemical thermodynamics: heat, work and energy. **Recommended:** Co-enrollment in CH211, consult with instructor. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher), or completion of MTH095 (or higher, except MTH098 and MTH105); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH202 Chemistry for Engineers 2

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

Provides the second course of a two-term sequence. Covers, Redox, gas laws, 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. **Recommended:** Co-enrollment in CH212, consult with instructor.

CH211 Chemistry for Engineers Prep 1

1 class hr/wk, 1 cr.

Provides guided study in topics and problem solving skills beyond that provided in CH201. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, gas laws, and chemical thermodynamics: heat, work and energy. **Prerequisite:** Placement into MTH111 or higher;or MTH095 or higher(Except MTH098 and MTH105) with a grade of C or better; or consent of instructor.)

CH212 Chemistry for Engineers Prep 2

1 class hr/wk, 1 cr.

Provides guided study in topics and problem solving skills beyond that provided in CH202. Covers Lewis structures, VESPR theory, shapes and polarity of molecules, intermolecular forces, crystal structure, reaction rates, rate laws, reaction mechanisms, acids and bases, chemical equilibrium, spontaneous changes, free energy, voltaic and electrolytic cells, coordination compounds, organic structure, and polymer chemistry. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CH221 General Chemistry 1
3 class hr/wk, 3 lab hr/wk 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, energy flow, experiments on chemical systems, atomic structure, molecular bonding, hybridization, resonance and intermolecular forces. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 (or higher); or completion of MTH111 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH222 General Chemistry 2
3 class hr/wk, 3 lab hr/wk and 1 recitation hr/wk, 5 cr.
Covers solutions and solids; rates and mechanisms of reactions; kinetic molecular theory of gases; thermodynamics; chemical kinetics; properties of solutions and nuclear chemistry. Second of a three-term sequence designed for students majoring in scientific, engineering, and medical fields. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion CH221; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH223 General Chemistry 3
3 class hr/wk, 3 lab hr/wk 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; solid state and organic chemistry. Third of a three-term sequence designed for students majoring in scientific, engineering and medical fields. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH222; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH241 Organic Chemistry 1
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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH123 or CH223; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH241B Organic Chemistry Lab 1
3 lab hr/wk, 1 cr.
Accompanies CH241 Organic Chemistry as a laboratory for students majoring in the physical or life sciences. Emphasizes microscale laboratory experiments related to basic techniques of recrystallization, extraction, melting and boiling point determination, IR spectroscopy, extraction, chromatography, and synthesis. Students requiring lecture and lab credit for transfer must take CH241 and CH241B. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH123 or CH223; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH242 Organic Chemistry 2
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, mechanisms of reactions, and discussion of their biological or industrial importance. Stresses alcohols, ethers, free-radical reactions, aromatic compounds, spectroscopy, oxidation-reduction, aldehydes and ketones. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH241; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH242B Organic Chemistry Lab 2
3 lab hr/wk, 1 cr.
Offers a laboratory course to accompany CH242 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory experiments related to reaction mechanisms, kinetics, spectroscopy, gas chromatography, and synthetic techniques. Students requiring lecture and lab credit for transfer must take CH242 and CH242B. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH241B; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH243 Organic Chemistry 3
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, mechanisms of reactions, and discussion of their biological or industrial importance. Stresses carboxylic acids and their derivatives, amines, condensation reactions, carboxylics, lipids, amino acids, proteins and nucleic acids. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CH242; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CH243B Organic Chemistry Lab 3
3 lab hr/wk, 1 cr.
Offers a laboratory course to accompany CH243 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory synthesis, spectroscopy, biological activity of organic compounds, and qualitative analysis of unknowns. Students requiring lecture and lab credit for transfer must take CH243 and CH243B. **Prerequisite:** Placement into WR115, or completion of WR090 (or higher); and completion of CH242B; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Chinese

CHN101 First Year Chinese 1

4 class hr/wk, 4 cr.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CHN102 First Year Chinese 2

4 class hr/wk, 4 cr.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of Instructor.

CHN103 First Year Chinese 3

4 class hr/wk, 4 cr.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of Instructor.

CHN 201 Second Year Chinese, Term 1

4 class hr/wk, 4 cr.

First course of a three-course sequence of second year Mandarin Chinese language and cultural awareness. Emphasizes effective skills in listening, speaking, reading and writing as it continues to review and introduce major gramatical structures, build the student's vocabulary in Chinese and expand learners' proficiency at the intermediate level, as well as cultural awareness and understanding. All classroom interaction (both by instructor and students) takes place in Chinese. **Recommended:** CHN103 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.)

CHN202 Second Year Chinese, Term 2

4 class hr/wk, 4 cr.

Second course of a three-course sequence of second year Mandarin Chinese language and cultrual awareness. Provides extensive practice in all four language skills (reading, writing, speaking, listening). Includees cultural and literary reading and in-depth review and expansion of basic Chinese grammatical structures and vocabulary as well as broadening of the students' understand of Chinese cultural values. All classroom interaction (both by instructor and students) take place in Chinese. **Recommended:** CHN201 with a grade of C or better. **Prerequisite:** Placement into WR 115 or higher; or completion of WR0090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CHN203 Second Year Chinese, Term 3

4 class hr/wk, 4 cr.

Third course of a three-course sequence of second year Mandarin Chinese language and cultural awareness. This course provides extensive practice in all four language skills (reading, writing, speaking, listening). Includees cultural and literary reading and indepth review and expansion of basic Chinese grammatical structures and vocabulary as well as broadening of the students' understanding of Chinese cultural values. All classroom interaction (both by instructor and students) take place in Chinese. **Recommended:** CHN202 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.)

Computer Information Systems

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.

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 (RFID) tags, location-based tracking technologies, and the Digital Millennium Copyright Act (DMCA). Explores computer security exploits such as buffer overflow**,** Denial of Service, spoofing, viruses, Trojan Horses, phishing and pharming scams, and intrusion detection. Includes how to protect yourself from malicious computer activities. **Prerequisite:** CIS101 or CIS120, either with a grade of C or better; or equivalent knowledge as determined by instructor; or consent of instructor.

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. Topics include: basic computer concepts and history, computer hardware, operating systems, the Internet, online safety and security, e-mail, computer application software including word processors, spreadsheets, presentation graphics, databases, and the impact of computers on society.

CIS120A Computer Info Sciences Pathway

1 class hr/wk, 1 cr.

Exposes students to many different career opportunities in computer information sciences and computer technology, and assists with planning an academic pathway at Chemeketa Community College.

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.

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.

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.

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, or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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.)

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; of consent of instructor.

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.

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.

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.

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.

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.

CIS152 Routing and Switching
4 class hr/wk, 4 cr.
Introduces routing and switching technologies, including configuring a switch, a router, and connecting to a WAN and implementing network security. Focus is placed on routing and switching theory including RIP, IGRP, and OSPF routing protocols, distance vector and link state routing theory, routing loop issues and basic router and switch IOS concepts. Includes theory concepts directed towards the OSI model of encapsulation, TCP/IP basics, IP addressing, access lists and router and switch configurations. Demonstrate experience configuring common routers and switches. Builds a student's ability to use common networking devices and prepares them for the following industry certification exams: the current TestOut Switching and TestOut Routing industry exams. **Prerequisite:** CIS278 with a grade of C or better; or consent of instructor.

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.

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.

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.

CIS186 Computer Forensics
4 class hr/wk, 4 cr.
This course teaches 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.)

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.

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 (GUI) application using a visual Interface Development Environment (IDE). **Prerequisite:** CIS133J with a grade of C or better; or consent of instructor.

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 (AWT) from the Java platform to create programs with graphical user interface (GUI) components (buttons, checkboxes, text fields, etc.). Presents the mechanics for handling events and exceptions generated by GUI components. Covers a conceptual overview of connecting to a database such as SQL Server, Oracle, etc., and manipulate data from the same databases using the Java database connectivity (JDBC) application programmer interface (API). **Prerequisite:** CIS233J with a grade of C or better; or consent of instructor.

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.

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.

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.

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 servers, 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.

CIS280B-L Cooperative Work Experience
See CWE–Cooperative Work Experience

CIS283 Security+
4 class hr/wk, 4 cr.
Provides students with the fundamentals of computer security, and to help prepare for the CompTIA Security+ exam. Covers material related to general computer security concepts, communications security, infrastructure security, basics of cryptography and operational/organizational security. Presents information on capturing, analyzing and generating IP traffic, how to exploit protocol weaknesses and examine defensive solutions. Covers packet filtering, password policies and file integrity checking are also covered. **Prerequisite:** CIS102A and CIS179, each with a grade of C or better; or consent of instructor.

CIS284 Ethical Hacking
4 class hr/wk, 4 cr.
Demonstrates the ethical use of various "white hat" cyber penetration testing tools and techniques consistent with Ethical Hacking training in an enclosed "sandbox" environment. Analyzes various computer hacking skills through protective measures and their effectiveness. **Prerequisite:** CIS102A and CIS179, each with a grade of C or better; or consent of instructor.

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.

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:** CIS178W, or CIS195, or VC237; or consent of instructor. (Prerequisite course must be completed with a grade of C or better.)

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.

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.

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.

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 (DPSST) certification standards. Includes employment disqualifiers as well as desired attributes to assist in selecting the criminal justice career field best suited to specific qualifications. Must pass a criminal history clearance and drug screening, to include Marijuana.

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.

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.

CJ104C CJ Personal Defense–Advanced
3 lab hr/wk, 1 cr.
Presents an active personal defense course 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.)

CJ105 Defense Tactics
3 lec hr/wk, 3 cr.
Introduces the knowledge and safety of personal defense to the criminal justice student. 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 other, if needed. Focuses on mirroring the skills taught at the Oregon police academy to prepare the students for the rigors of their training once hired. **Prerequisite:** CJ103 with a grade of C or better; or consent of instructor.

CJ106 Deadly Force Tactic and Movement
3 lab hr/wk, 3 cr.
Presents specialized training and academic opportunities in the tactics and movement utilized during deadly force encounters. Presents students with training needed by the standard law enforcement professional. Focuses on safe tactics, movement, and decision making during potentially deadly force encounters. **Prerequisite:** CJ103 with a grade of C or better; or consent of instructor. **Su**

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.

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.

CJ112B Advanced Patrol Procedures
3 class hr/wk, 3 cr.
Focuses on the more advanced skills needed on the street by the basic police officer. Introduces students to high risk building clearing, active shooter situations, hostage negotiation, barricaded subjects, perimeter set-up for bombs/improvised explosive devices or hazardous material spills, riot control, and high risk vehicle stops. Designed for base knowledge and skills to be taught in a classroom then practiced in a real world setting, utilizing scenarios to reinforce the knowledge and skills learned. **Prerequisite:** CJ103 with a grade of C or better; or consent of instructor.

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.

CJ125 Public Safety Communications and Documentation
3 class hr/wk, 3 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.

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.

CJ132 Parole and Probation
3 class hr/wk, 3 cr.
Introduces the basic philosophies, principles, and functions of parole, probation, and community corrections. Focuses on the role of community corrections in the administration of justice, community corrections options, techniques and training issues, and current challenges and pressures impacting corrections options.

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.

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

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.

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.

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.

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. (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.

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 Samenow on the criminal mind. **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

CJ153 Ethical Dilemmas/Decision CJ
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.

CJ155 Science and Law in Use of Force

2 class hr/wk, 2 cr.

Presents specialized training and academic opportunities in the science and law in the use of force. **Prerequisite:** CJ103 with a grade of C or better; consent of instructor.

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.

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 (DSMIV). **Prerequisite/Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

CJ200 Family Violence, Deviancy and Sexual Assault

3 class hr/wk, 3 cr.

Discusses the role of criminal justice and multi-disciplinary approaches to crimes of family violence. Examines "red flag" behaviors and detection of crimes such as domestic violence, child abuse, incest, sexual assault and escalation patterns.

CJ203 Crisis Intervention Seminar

3 class hr/wk, 3 cr.

Introduces an overview of the techniques and approaches to crisis intervention for entry-level criminal justice professionals. Covers initial intervention, diffusion and assessment, resolution and/or referral, with emphasis on safety. Includes personal effectiveness, recognition of threat levels, voluntary compliance, verbal and non-verbal communication, active listening, and mediation **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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.

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.

CJ208 Criminal Justice Leadership

3 class hr/wk, 3 cr.

Surveys the leadership practices as understood in the last 75 years and looks to the twenty-first century for a reconstructed understanding of leadership in the postindustrial era. Offers a definition and paradigm for leadership that distinguishes leadership from management in fundamental ways. Looks at how leadership is implemented and understood within criminal justice agencies. **Prerequisite:** CJ103 with a grade of C or better with a criminal history clearance; current professional in the field; or consent of instructor.

CJ209 Introduction to Victimology

3 class hr/wk, 3 cr.

Traces the criminal justice system's historic and current response to crime victims as it relates to their rights. Provides a comprehensive overview of the offender-victim relationship, while addressing victim support policies and programs. Presents a realistic approach to understanding the dynamics of victimization and the broad range of coping mechanisms that victims employ to deal with their particular experiences. Introduces the concept of trauma informed care.

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.

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.

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.

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

CJ217 Interview and Interrogation
3 class hr/wk, 3 cr.
Focuses on becoming a knowledgeable interviewer and interrogator. Introduces multiple interviewing and interrogation technique used in Law Enforcement. 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.

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.

CJ222 Profiling and Case Studies of Serial Killers
3 class hr/wk, 3 cr.
Analyzes a specific offender type, the serial killer. Includes historical perspective, motives, phases, and pre-cursory behaviors. Emphasizes the methodology of profiling, crime scene analysis, and modus operandi, and offender signature as developed by the FBI Investigative Support Unit to assist law enforcement. Covers victimologies, VI-CAP, NCMEC, CASKU 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.

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. **Prerequisite/ Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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

CJ226 Constitutional Law
3 class hr/wk, 3 cr.
Presents an intensive study and analyzes the United States Constitution. Studies court decisions which determine the admissibility of evidence in criminal cases and which affect police procedures. Considers the criminal procedures processes with an emphasis on the role of law enforcement in this process. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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 threat groups, 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, each 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.

CJ230 Introduction to Juvenile Corrections
3 class hr/wk, 3 cr.
Introduces the historical and contemporary aspects of juvenile corrections. Identifies and explores the philosophy, functions, and goals of the juvenile justice system. Emphasizes the role of law enforcement, the courts, community-based corrections, and custodial facilities. Includes an overview of the ongoing debate concerning rehabilitation vs. punishment philosophies in the juvenile justice system, especially as it relates to safety and security issues, and public concerns.

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.

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.

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.

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 including situational leadership, transformational leadership, and servant leadership. **Prerequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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.

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.

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; 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.

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.

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, in 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 and negative drug screen; or consent of instructor.

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 and 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.

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.

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 (DPSST) certification requirements. Identifies preparatory steps to be successful in passing oral board interviews and initial phases of a multi-assessment process. Covers stress, voice control, behaviors, appearance, attitude, and dress. Students are photographed, videotaped, and participate in a competitive oral board scored by professionals in the field of law enforcement, corrections, and parole and probation. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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 (ORPAT) 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.

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 (SFST) applications, Drug Recognition Expert (DRE) abilities, intoxilyzer technology, and Wet labs. Includes tours of Department of Public Safety Standards and Training (DPSST) academy and Marion County Correctional Facility complex. **Prerequisite:** CJ261 with a grade of C or better; or consent of instructor.

CJ263 Law Enforcement Related Experience 3

9 lab hr/wk, 3 cr.

Introduces new skills and practical application of oleoresin-capsicum (OC), baton, tactical knife, taser, and Multiple Interactive Laser Options (MILO) 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 (ORPAT). 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.

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 (MV) codes, conduct traffic stops, recognize Emergency Vehicle Operations Course (EVOC) 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.

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, cybercrime, narcotic investigations and informants, emotionally disturbed persons (EDP) encounters, homicides, scene preservation, the medical examiner (M.E.) 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.

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.

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 (AFIS), 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. Introduces a wide variety of reliable evidence retrieval techniques needed for successful prosecution of criminal cases. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

CJ269 Police Ethics and Professional Conduct

3 class hr/wk, 3 cr.

Provides indepth 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 (CRIs), crime victims, undercover (UC) assignments and operations, traffic stops, domestic violence (DV), emotionally disturbed persons (EDPs), execution of search warrants, evidence collection and handling, reports, and courtroom testimony. Utilizes extensive scenario-based field activities embedded in Law Enforcement Related Experience (L.E.R.E) 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.

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. Also includes 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, and 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.

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.

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, use of 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 (DOC), other Northwest organizations, and professional contacts. **Corequisite:** CJ103 with criminal history clearance; or current professional in the field; or consent of instructor.

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 (C.O.R.E.) sequence of courses. Focuses on topics, training, and practical application of skills including specific DPSST 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 (ORPAT) 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 Department of Public Safety Standards and Training (DPSST) employment standards for certification of Corrections personnel in the state of Oregon.

CJ282 Corrections Officer Related Experience 2
9 lab hr/wk, 3 cr.
Introduces basic information on jail environments and procedures, jail structure, intake, 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 (ORPAT). Introduces Multiple Interactive Laser Option (MILO) 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.

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 (MILO) 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.

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 (DPSST) 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.

Chicano/Latino Studies

CLA201 Introduction 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CLA202 Introduction to Chicano/ Latino Studies 2

4 class hr/wk, 4 cr.

Introduces the social, 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

CLA203 Introduction 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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 contexts. 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 skills 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. **Recommended:** Placement into WR121, or completion of WR115 with a grade of C or better. **Prerequisite:** Placement into WR115; or completion of WR090 with a grade of C or better; or consent of instructor. **CL**

COMM111 Fundamentals of Public Speaking

4 class hr/wk, 4 cr.

Introduces the preparing and delivering of 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 improving physical and vocal delivery skills. **Recommended:** Placement into WR121 (or higher), or completion of WR115 (or higher) with a grade of C or better; or consent of Instructor. **Prerequisite:** Placement into WR115 or completion of WR090 with a grade of C or better; or consent of instructor.

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 crafting speeches for specific audiences. Covers analysis persuasive speeches, media messages, and other forms of persuasion in different arenas, including advertising, business, and politics. **Prerequisite:** Placement into WR115; or completion of WR090 with a grade of C or better; or consent of instructor.

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 higher), or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

COMM130 Business and Professional Speaking

4 class hr/wk, 4 cr.

Focuses on communication in the workplace with an emphasis on the importance of both listening and speaking to help develop the skills necessary for communication in interpersonal, small group, and public business interactions with diverse audiences**. Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

COMM212 Media, Communication, and Society

4 class hr/wk, 4 cr.

Provides an introduction to mass media with an emphasis on the role media play in both shaping and reflecting culture. Focuses on understanding how media operate with emphasis on contemporary social, economic, political, cultural and ethical issues. **Prerequisite:** Placement into WR115 or completion of WR090 with a grade of C or better; or consent of instructor.

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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

COMM219 Team Communication and Leadership

4 class hr/wk, 4 cr.

Emphasizes communication skills used for participation in team settings. Covers the characteristics of small groups, developmental stages of groups, diversity in groups, leadership, and conflict management skills. Applies the skills of decision-making, planning and conducting meetings, making presentations in groups, using technology, and participation in virtual groups. **Recommended:** Placement into WR121 (or higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Recommended:** Placement into WR121 (or higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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 current theories of gender development; the historical bases and evolution of women's and men's movements; gender-differentiated language and conversation styles; strategies for improving gendered communication; gender stereotypes; the influence of media on gendered roles; and the issues of perception, power, and privilege in relation to gender. **Recommended:** Placement into WR121 (or higher), or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 or higher; or MTH111 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 (or higher), or MTH111 or higher; and CS160 or concurrent enrollment in EGR201; or CIS 133SC (for Cybersecurity program students only); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 object oriented programming, inheritance, error handling, recursive algorithms, algorithm complexity, and an introduction to abstract data types. Emphasizes experiences with professional engineering practices. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CS161; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CS205 System Programming and Architecture

4 class hr/wk, 4 cr.

Introduces how high-level software runs on a computer system. Covers C programming and the assembly that C code becomes. Presents the fundamentals of computer architecture and how instructions and data are represented at the machine level. Provides experience analyzing compiled code to build necessary skills for future work in cybersecurity, operating systems, compilers, and other CS topics involving low-level computation. **Prerequisite:** Placement into WR115 or completion of WR090 and CS161, each with a grade of C or better; or consent of instructor.

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CS162; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of CS160 or CIS120; and CS161; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

CS290 Web Development

4 class hr/wk, 4 cr.

Design and implement multi-tier applications using web technologies. Create extensive custom client and server side code. Explore modern frameworks and underlying technologies. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and CS162; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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.

CVL143 Introduction to Civil Survey

2 class hr/wk 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.

CVL144 Intermediate Civil Survey

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

Continues Introduction to Civil Survey (CVL143). Covers plane survey office and field practices. Includes measurement techniques associated with differential leveling and field measurements with advanced electronic survey equipment. Includes basic office calculations relating to surveying, including coordinate geometry, differential levels and simple curves. Covers field survey procedures for staking horizontal curves, data collection and differential levels. Introduces a basic understanding of metes and bounds descriptions. Emphasizes professional-technical development and team workskills. **Prerequisite:** CVL143 with a grade of C or better; or consent of instructor. **Corequisite:** MTH082 or higher.

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.)

CVL280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience

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.

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.

DEN151 Introductory Concepts in Dental Assisting

2 class hr/wk 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.

DEN153 Dental Materials 1

2 class hr/wk 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.

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.

DEN160 Dental Specialties

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

Studies the various fields of specialized dentistry recognized by the American Dental Association Commission. Introduces applied psychology through role playing as related to the clinical application in the specialties. **Prerequisite:** Secondterm standing in the Dental Assisting program.

DEN161 Dental Assisting Practicum 1

1 class hr/wk 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:** Secondterm standing in the Dental Assisting program.

DEN162 Intermediate Clinical Skills

1 class hr/wk 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 alginate impressions, bite registration, oral hygiene instruction, prevention products and their uses, nutritional influences, dietary analysis, patient motivation and dental dam placement and removal. **Prerequisite:** Second-term standing in the Dental Assisting program.

DEN163 Dental Materials 2

2 class hr/wk 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.

DEN164 Dental Radiology 1

2 class hr/wk 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:** Secondterm standing in the Dental Assisting program.

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.

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.

DEN171 Dental Assisting Practicum 2

1 class hr/wk 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.

DEN172 Expanded Functions

2 class hr/wk 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.

DEN174 Dental Radiology 2

1 class hr/wk and 3 lab hr/wk, 2 cr.
Continues DEN164. Allows students to take additional adult and pediatric (pedodontic) manikin films using lowdose 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 views, 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:** Thirdterm standing in the Dental Assisting program.

DEN263 Dental Materials for Dental Hygiene

2 class hr/wk and 6 lab hr/wk, 4 cr.
Examines on general properties, composition and manipulation of common dental materials and restorative materials. Expanded functions including denture relines and amalgam polishing are practiced. **Prerequisite:** Current Oregon Tech Dental Hygiene student.

Drafting Technology

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 that 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. 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.

DRF101 Basic CAD for Electronics

1 class hr/wk 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.

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, architectural and related areas. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor.

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.

DRF130 CAD 1
2 class hr/wk 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.

DRF131 CAD 2
2 class hr/wk 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.

DRF132 CAD 3
2 class hr/wk and 3 lab hr/wk, 3 cr.
Incorporates hands-on experience with AutoCAD. Covers advanced graphics commands for two-dimensional drawings. Introduces elementary customization techniques. Covers three-dimensional models and drawings created from solids. **Prerequisite:** DRF131 with a grade of C or better; or consent of instructor.

DRF140 3-D Modeling with Inventor
2 class hr/wk and 3 lab hr/wk, 3 cr.
Uses AutoDesk Inventor as an introduction to 3-D modeling. Covers fundamentals of graphics communication. Includes multi-view drawings, dimensioning, section views, auxiliary views and descriptive geometry concepts.

DRF150 Architectural Drafting 1
1 class hr/wk 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.

DRF155 Mapping and Platting
1 class hr/wk and 6 lab hr/wk, 3 cr.
Covers map components, legal descriptions, plot plans and contours. Introduces Civil 3D software, including Geographic Information Systems (GIS) and Global Positioning Systems. (GPS). **Prerequisite:** DRF131 with a grade of C or better; or consent of instructor.

DRF160 Spreadsheet and Database Applications
2 class hr/wk 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, perform engineering calculations, and aid in statistical analysis and parametric design. **Prerequisite:** MTH081 or MTH111, either with a grade of C or better; or consent of instructor.

DRF165 CAD System Administration
2 class hr/wk 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:** DRF131 with a grade of C or better; or consent of instructor.

DRF210 Parametric Design with SolidWorks
1 class hr/wk 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.

DRF211 Parametric Design with SolidWorks 2
1 class hr/wk and 6 lab hr/wk, 3 cr.
Covers advanced modelling techniques employed in SolidWorks. Introduces weldment and sheet metal features. Applies features such as configurations, design tables, add-ins, and adaptive parts for sophisticated part and assembly modelling. Explores translation of various file types used for design and drafting to/from SolidWorks. **Prerequisite:** DRF210 or EGR248 with a grade of C or better; or consent of instructor.

DRF220 Geographic Information Systems 1
1 class hr/wk 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.

DRF230 Introduction to MicroStation
2 class hr/wk and 3 lab hr/wk, 3 cr.
Introduces the MicroStation drafting software. Covers basic drawing, editing and display commands. Contrasts operations with AutoCAD.

DRF231 Advanced MicroStation
1 class hr/wk 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.

DRF240 Architectural Drafting 2
1 class hr/wk 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.

DRF241 Structural Drafting
1 class hr/wk 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.

DRF243 Architectural Design
1 class hr/wk 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 and DRF272, each with a grade of C or better; or consent of instructor.

DRF245 Civil Drafting and Design
1 class hr/wk and 9 lab hr/wk, 4 cr.
Introduces AutoCAD Land Development Desktop. Develops residential subdivision and typical utility design documentation. **Prerequisite:** DRF132 and DRF155, each with a grade of C or better; or consent of instructor.

DRF246 Project Development
1 class hr/wk 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.

DRF271 Commercial Drafting with Revit 1
1 class hr/wk 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.

DRF272 Commercial Drafting with Revit 2
1 class hr/wk 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.

DRF273 Commercial Drafting with Revit 3
1 class hr/wk 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.

DRF280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience

Diesel Technology

DSL101 Diesel Technology 1
3 class hr/wk and 18 lab hr/wk, 12 cr.
Examines engine theory, engine components, and proper diesel engine rebuild procedures. Introduces basic engine electrical and fuel systems, shop tool use and maintenance. Includes lift truck inspection and operator training. **Prerequisite:** Placement into WR080 and MTH052; or consent of instructor.

DSL102 Diesel Technology 2
3 class hr/wk and 18 lab hr/wk, 12 cr.
Covers fuel injection systems and how they relate to diesel engine performance and operation. Explores the operations of all major fuel injection devices including diesel fuels, fuel transfer pumps, fuel nozzles, fuel injectors, filtration systems, metering systems and governing systems. Examines basic electrical theory, electrical components, and proper electric diagnostic procedures. Introduces basic electrical systems, diagnostic tool use and maintenance. Includes Electronic Engine controls and basic multiplexing. **Prerequisite:** DSL101 with a grade of C or better; or consent of instructor.

DSL103 Diesel Technology 3
3 class hr/wk and 18 lab hr/wk, 12 cr.
Explores concepts in gear transmissions, differentials and clutches involved in the application of diesel-powered vehicles. Covers fundamentals of hydraulics in theory and shop practice. Provides a solid background in applications of hydraulics in the trucking and heavy equipment industry. Covers heavy-duty air conditioning operation, trouble shooting and system repair. Prepares students to confidently work on power trains and their components and to diagnose and repair hydraulic and air conditioning systems in an industrial environment. **Prerequisite:** DSL102 with a grade of C or better; or consent of instructor.

DSL110 Diesel Engine Diagnosis and Repair
2 class hr/wk and 12 lab hr/wk, 6 cr.
Introduces the student to diesel engine theory and repair, placing emphasis on inspection, testing, and diagnostic techniques for internal combustion engines. Includes general engine diagnosis; removal and reinstallation; cylinder heads and valve trains diagnosis and repair; engine blocks assembly diagnosis and repair; lubrication and cooling systems diagnosis and repair. Concurrent: DSL111. **Prerequisite:** Placement into WR080 and MTH052; or consent of instructor.

DSL111 Diesel Technology Introduction to Electrical and Electronics
2 class hr/wk and 12 hr/wk, 6 cr.
Introduces electrical/electronic fundamentals applied to diesel and agricultural vehicle systems. Includes theory, design, diagnosis, and repair of wiring and circuits, batteries, alternators, and starters, lighting system, gauge, horn, wiper/washer, and accessories. Uses test instruments and electrical troubleshooting manuals currently recommended by the industry. Provides a strong background in the theory, diagnosis, and repair of electrical and electronic systems. Concurrent: DSL110. **Prerequisite:** Placement into WR080 and MTH052; or consent of instructor.

DSL120 Diesel Technology Introduction to Fuels
2 class hr/wk and 12 lab hr/wk, 6 cr.
Covers fuel injection systems and how they relate to diesel engine performance and operation. Explores the operation of all major fuel injection devices including diesel fuels, fuel transfer pumps, fuel nozzles, filtration systems, metering systems and governing systems. Concurrent: DSL121. **Prerequisite:** DSL110 and DSL111 each with a grade of C or better; or consent of instructor.

DSL121 Diesel Technology HVAC Repair and Diagnosis
2 class hr/wk and 12 lab hr/wk, 6 cr.
Covers heady-duty air conditioning operation, trouble shooting and system repair. Prepares students to confidently work on heating and air conditioning systems in an industrial environment. Provides a strong background in the theory, diagnosis, and repair of HVAC systems and there related electrical and electronic systems. Concurrent: DSL120. **Prerequisite:** DSL110 and DSL111 each with a grade of C or better; or consent of instructor.

DSL130 Diesel Technology Introduction to Hydraulics
2 class hr/wk and 12 lab hr/wk, 6 cr.
Covers fundamentals of hydraulics in theory and shop practice. Provides a solid background in application of hydraulics in the trucking and heavy equipment industry. Applies hydraulic principles, maintenance, and repair. Work on open and closed center systems, fixed and variable displacement pumps, linear and rotary actuators, pressure and flow controls, and directional valves. Concurrent: DSL131. **Prerequisite:** DLS120 and DSL121 each with a grade of C or better; or consent of instructor.

DSL131 Diesel Technology Heavy Duty Powertrains

2 class hr/wk and 12 lab hr/wk, 6 cr.
Explores concepts in gear transmissions, differentials and clutches involved in the application of diesel-powered vehicles. Covers fundamentals of heavy-duty drivetrain in theory and shop practice. Prepares students to confidently work on power trains and their components and to diagnose and repair these systems in an industrial environment. Concurrent: DSL130. **Prerequisite:** DSL120 and DSL121 each with a grade of C or better; or consent of instructor.

DSL210 Diesel Technology Heavy Duty Brakes

2 class hr/wk and 12 lab hr/wk, 6 cr.
Examines concepts in medium/heavy duty truck brake systems. Covers air brake systems, hydraulic brake systems, truck foundation brakes, and antilock brakes. Emphasizes safety and the use of service manuals and textbooks. Concurrent: DSL211. **Prerequisite:** DSL130 and DSL131 each with a grade of C or better; or consent of instructor.

DSL211 Diesel technology Heavy Duty Suspension and Steering

2 class hr/wk and 12 lab hr/wk, 6 cr.
Covers suspension and steering, tires and wheels, alignment of medium and heavy-duty vehicles, and fifth wheels. The major emphasis will be on methods used to check and adjust alignment, and inspection and repair methods for suspension systems. Concurrent: DSL210. **Prerequisite:** DSL130 and DSL131 each with a grade of C or better; or consent of instructor.

DSL220 Diesel Technology Automatic and Powershift Transmissions

2 class hr/wk and 12 lab hr/wk, 6 cr.
Introduces advanced theory and application of automatic and power shift transmissions used in the heavy equipment industry. Prepares students to confidently work on heavy duty powertrains and their related components. Concurrent: DSL221. **Prerequisite:** DSL210 and DSL211 each with a grade of C or better; or consent of instructor.

DSL221 Diesel Technology Advanced Fuels

2 class hr/wk and 12 lab hr/wk, 6cr.
Covers fuel injection pumps and their applications, fuel system diagnosis and repair. Prepares students to confidently diagnose and repair fuel injection pumps, governors and electronics in an industrial environment. Emphasizes safety, correct industry procedures, correct tool usage, and diagnosis of common fuel-related problems. Concurrent: DSL220. **Prerequisite:** DSL210 and DSL211 each with a grade of C or better; or consent of instructor.

DSL230 Diesel Technology Advanced Hydraulics

2 class hr/wk and 12 lab hr/wk, 6cr.
Covers advanced hydraulics and hydrostatics used on heavy equipment, farm machinery, and other equipment. Emphasizes troubleshooting procedures and repair. Concurrent: DSL231. **Prerequisite:** DSL220 and DSL221 each with a grade of C or better; or consent of instructor.

DSL231 Diesel Technology Advanced Engine Diagnostic

2 class hr/wk and 12 lab hr/wk, 6 cr.
Covers OEM diesel electronic engine controls, operating and diagnostics. Emphasizes safety and the use of service manuals and textbooks. Prepares students to confidently diagnose and tune-up a diesel engine in an industrial environment. Concurrent: DSL230. **Prerequisite:** DSL220 and DSL221 each with a grade of C or better; or consent of instructor.

DSL201 Diesel Technology 4

3 class hr/wk and 18 lab hr/wk, 12 cr.
Covers Preventative Maintenance Inspection (PMI) of vehicles, Department of Transportation (DOT) out of service criteria, PM scheduling, lubricants and Winterizing. Covers Detroit Diesel Electronic Control (DDEC) operation and diagnostics. Examines concepts in medium/heavy duty truck brake systems, suspension, and steering. Covers air brake systems, hydraulic brake systems, truck foundation brakes, antilock brakes, automatic slack adjusters, wheels, tires and fifth wheels. Emphasizes safety and the use of service manuals and textbooks. Prepares students to confidently diagnose and tune-up a diesel engine in industrial environment. This is an outcome-based course utilizing a lecture/lab format and includes videos, workbooks, demonstrations, lectures, and hands on learning. **Prerequisite:** DSL103 with a grade of C or better; or consent of instructor.

DSL202 Diesel Technology 5

3 class hr/wk and 18 lab hr/wk, 12 cr.
Introduces advanced theory and applications of automatic and power shift transmissions used in the heavy equipment industry. Covers fuel injection pumps and their applications, fuel system diagnostics and electronic engine controls. Prepares students to confidently work on heavy duty power trains and their components and it prepares the student to confidently diagnose and repair diesel fuel injection pumps, governors and electronics in an industrial environment. **Prerequisite:** DSL201 with a grade of C or better; or consent of instructor.

DSL203 Diesel Technology 6

3 class hr/wk and 18 lab hr/wk, 12 cr.
Covers advanced automotive electrical theory, electrical components, and proper electric diagnostic and repair procedures. Includes advanced automotive electrical systems, diagnostic tool use and maintenance. Covers advanced hydraulics and hydrostatics used on heavy equipment, farm machinery, marine equipment, hydraulic cranes, backhoes, and other equipment. Emphasizes troubleshooting. **Prerequisite:** DSL202 with a grade of C or better; or consent of instructor.

Economics

EC200 Introduction to Economics

4 class hr/wk, 4 cr.
Introduces the economic concepts and analysis in the process of studying important issues in modern society such as unemployment, inflation, pollution, poverty, income distribution, health care, and development. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH070 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH095 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH095 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 health and safe environments for children, and establishing a home business.

ECE142 Textiles with Children

1 class hr/wk, 1 cr.

Explores an approach for the use of textiles with children preschool-3rd grade. Involves hands-on experiences with a wide variety of textile activities. Includes discussion of planning and implementing developmentally appropriate textile activities with an emphasis on the value of such experiences across domains. Includes experiences for children of different ages, cultures, and abilities.

ECE144 Creating Sensory-Rich Environments

1 class hr/wk, 1 cr.

Explores and designs sensory-rich environments for young children. Emphasizes infants and toddlers. Connects environments with caregiver and peer interactions. Integrates research on brain architecture with sensory-rich environments.

ECE145 Group Games for School Age Children

1 class hr/wk, 1 cr.

Designed for child care providers, elementary school teachers, and afterschool care providers. Explores non-competitive and cooperative group games and activities for children ages 5 through 8. Emphasizes development across social, emotional, physical, and intellectual domains. Includes games and experiences for children of different ages, cultures, and abilities.

ECE146 Nature Play for Young Children

1 class hr/wk, 1 cr.

Provides a deeper look at how nature play can be integrated into the daily curriculum of toddlers, preschool, and school age children. Designs indoor and outdoor natural spaces. **Prerequisite:** ECE251 with a grade of C or better; or consent of instructor.

ECE147 Movement Experiences in Young Children: Advanced

1 class hr/wk, 1 cr.

Explores importance of movement for young children's development. Connects movement activities with brain development. Examines role of language bridging movement and cognitive development. Surveys appropriate activities for children. Investigates role of the teacher in supporting children's movement activities. **Prerequisite:** ECE153 with a grade of C or better; or consent of instructor.

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.

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.

ECE152 Creative Activities

2 class hr/wk 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.

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.

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 ways to evaluate its appropriateness in a given school situation. Includes the evaluation and reading of children's books and holding story groups with children. **Prerequisite:** Placement into RD090 and WR090; or consent of instructor.

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.

ECE161 Infant and Toddler Practicum

1 class hr/wk 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.

ECE162 Early Childhood Educator Orientation

1 class hr/wk and 5 lab hr/wk, 3 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.

ECE163 Preschool Practicum
1 class hr/wk 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.)

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-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.

ECE261 Student Teaching 1
2 class hr/wk 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.

ECE262 Student Teaching 2
2 class hr/wk and 6 lab hr/wk, 4 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.

ECE280B-L Cooperative Work Experience
See CWE–Cooperative Work Experience.

Education

ED101 Introduction to Practicum and Teaching
1 class hr/wk and 2 lab hr/wk, 3 cr.
Examines teaching as a profession. Provides practicum opportunities for direct experience with, and analysis of, educational settings. Explores current issues in education and characteristics of effective schools with an equity lens.

ED105 Teacher Cadets
1 class hr/wk and 2 lab hr/wk, 2 cr.
Covers practical application of theory and fundamental concepts of preschool, elementary, and secondary education, including history, development, and organization.

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, each with a grade of C or better; or consent of instructor.

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ED100; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ED216 Foundations of Education
3 class hr/wk, 3 cr.
Provides an overview of the American educational system, including historical, legal and philosophical foundations. Explores the governance of local schools and districts and considers the roles and ethical obligations of professional educators. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into, or completion of WR115 (or higher); or completion of RD115 (or concurrent enrollment); and completion of ED200; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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. **Prerequisite:** Placement into or completion of WR115 (or higher); or completion of RD115 (or concurrent enrollment); and completion of ED200; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better.

ED240 Education Practicum and Seminar
2 class hr/wk and 2 lab hr/wk, 4 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 tasks 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 eight credits. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; and consent of instructor. Recommended that course be taken in the term prior to transfer to 4-year university.

ED258 Culturally Responsive Pedagogy

3 class hr/wk, 3 cr.

Explores the concept of culture and the relationship with the learning process. Examines strategies to make culturally responsive teaching accessible as a practice. Discusses the value of cultural identity in the teacher-student-family relationship in linguistic diverse populations. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better.

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. **Prerequisite:** Placement into or completion of WR115 (or higher); or completion of RD115 (or concurrent enrollment); and completion of ED200; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better.

Engineering

See also GE—General Engineering

EGR201 Electrical Fundamentals 1

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252; or consent of Instructor. (All prerequisite courses must be completed with grade of C or better.)

EGR202 Electrical Fundamentals 2

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252 and EGR201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

EGR203 Electrical Control Fundamentals

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252, MTH256, and EGR202; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

EGR211 Statics

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

Analyzes the forces induced in structures and machines by various types of loading. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

EGR212 Dynamics

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of EGR211, MTH252, and PH211; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

EGR213 Strength of Materials

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of EGR211 and MTH252; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

EGR248 Graphics and 3-D Modeling

1 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of DRF130; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Electronics Technologies

See also MT—Industrial and RNW—Renewable Energy Management

ELT100 Electronics Fundamentals for Non-Majors

3 class hr/wk 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.

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.

ELT121 Programming Concepts 1
3 class hr/wk 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.

ELT131 Electronic Concepts 1
3 class hr/wk 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.

ELT132 Electronic Concepts 2
3 class hr/wk and 3 lab hr/wk, 4 cr.
Covers atomic and alternating current (AC) electrical theory applicable to resistors, capacitors, and inductors. Stresses reactive circuit theorems used for circuit analysis. **Prerequisite:** ELT131 with a grade of C or better; or consent of instructor. **Corequisite:** MTH112 or MTH082.

ELT133 Electronic Concepts 3
3 class hr/wk 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.

ELT141 Transistor Fundamentals
3 class hr/wk 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; or consent of instructor.

ELT142 Semiconductor/ Optoelectronic Devices
2 class hr/wk 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.

ELT143 Pulse Circuit Fundamentals
2 class hr/wk 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.

ELT151 Digital Fundamentals
3 class hr/wk 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.

ELT161 Linear IC Fundamentals
3 class hr/wk 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, each with a grade of C or better; or consent of instructor. **Corequisite:** ELT133 and ELT142.

ELT222 Programming Concepts 2
3 class hr/wk 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.)

ELT244 Electronic Circuit Analysis
3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

ELT252 Digital Circuit Applications
2 class hr/wk 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.

ELT253 Microprocessor Systems
3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

ELT254 Computer Hardware
3 class hr/wk 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.

ELT255 Advanced Data Communication

3 class hr/wk 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.

ELT256 Advanced Computer Architecture

3 class hr/wk 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.

ELT262 Linear IC Applications

2 class hr/wk 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:** ELT161 and ELT244, each with a grade of C or better; or consent of instructor.

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, each with a grade of C or better; or consent of instructor.

ELT282 Telecommunications

2 class hr/wk 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.

ELT283 Logical Troubleshooting

3 class hr/wk 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, each with a grade of C or better; or equivalent course as determined by instructor.

ELT291 Control, Robotics, and Power Systems

3 class hr/wk 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, each with a grade of C or better; or consent of instructor.

ELT293 Flexible Manufacturing Systems and Processes

2 class hr/wk 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.)

Emergency Medical Technology

EMT151 Emergency Medical Technician, Part 1

5 class hr/wk and 3 lab hr/wk, 6 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 for the individual 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: Completion of placement testing for writing skills at WR080 or higher, reading at RD090 or higher, and math at MTH052 or higher. Must be concurrently enrolled in BLS Health Care Providers CPR course. Must meet standards as set by the Oregon State EMS Office for licensure which includes health, driving, immunization and criminal record check.

EMT152 EMT, Part 2

5 class hr/wk and 3 lab hr/wk, 6 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 for the individual to provide emergency medical care as outlined by scope of practice established by the Oregon Medical Board. Serves as the second in a series of courses making up a national and state EMS training program. Failure of this course will require retaking both EMT151 and EMT152. **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, immunizations, and criminal record check.

EMT153 One Term Emergency Medical Technician

10 class hr/wk and 6 lab hr/wk, 12 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 for the individual to provide emergency medical care as outlined by scope of practice established by the Oregon Medical Board. Serves as a course in a series of courses making up a national and state EMS training program. **Prerequisite:** Placement into WR080 (or higher), RD090 (or higher), and MTH052 (or higher). Not open to students with credit in EMT 151 and/or EMT 152B. Must be concurrently enrolled BLS Health Care Providers CPR certification course. Must meet standards as set by the Oregon State EMS Office for certification which also includes health, immunizations, and criminal record check.

EMT163 Advanced EMT, Part 1

3 class hr/wk 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. **Prerequisite:** Placement into WR080 (or higher), RD090 (or higher), and MTH052 (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.

EMT164 Advanced EMT, Part 2

3 class hr/wk 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 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 both EMT163 and EMT164. **Prerequisite:** EMT163 with a grade of C or better.

EMT167A Oregon Emergency Medical Technician-Intermediate, Part 1

4 class hr/wk 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 (ECG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision-making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and ECG monitoring, defibrillation, pharmacology and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an urgent care clinic. Students successfully completing this course will be recommended to the Oregon State EMS Office for the licensure process. **Prerequisite:** Placement into WR080 or higher; RD090 or higher; and MTH052 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 AEMT license, letter of endorsement from medical advisor, verification of EMT skills, and 80% or better on pre-test.

EMT167B Oregon Emergency Medical Technician Intermediate, Part 2

4 class hr/wk 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 (ECG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision-making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and ECG monitoring, defibrillation, pharmacology and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an 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 both EMT167A and EMT167B. . **Prerequisite:** EMT167A with a grade of C or better.

EMT168 One Term Advanced Emergency Medical Technician

6 class hr/wk and 4 lab hr/wk, 8 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. Required clinical experience to observe patient assessment and evaluation in 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. **Prerequisite:** Recommendation by an EMS agency. Must have current Oregon EMT license. Placement into WR080 (or higher), RD090 (or higher), and MTH052 (or higher). Not open to students completing EMT163 or EMT164.

EMT169 Emergency Medical Technician Rescue

2 class hr/wk 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.

EMT175 Introduction to Emergency Medical Services

3 class hr/wk, 3 cr.

Covers the role and responsibilities of the EMT and paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, history and trends, organization, funding, and the role of ambulance and rescue services in medical care; leadership, personal and career development.

EMT176 Emergency Response Patient Transportation

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

Covers ambulance operations, laws, maintenance and safety, emergency response driving, and route planning.

EMT177 Emergency Response Communication and Documentation

2 class hr/wk, 2 cr.

Covers principles of therapeutic communication via verbal, written, and electronic modes in the provision of EMS; documentation of the elements of patient assessment, care, and transport; communication systems; radio types; reports; codes; and correct techniques.

EMT280B-L Cooperative Work Experience

See CWE–Cooperative Work Experience

EMT296 Paramedic, Part 1

12 class hr/wk 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 and 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.

EMT297 Paramedic, Part 2

10 class hr/wk 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.

EMT298 Paramedic, Part 3

1 class hr/wk 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.

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.

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 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ENG105 Introduction to Dramatic Literature

4 class hr/wk, 4 cr.

Features critical analysis and appreciation of drama from the classical Greek to contemporary periods written by an international range of playwrights. Introduces concepts and types of dramatic literature, including comedy and tragedy, as well as the elements and conventions of drama as both a literary and performing art. Introduces literary criticism and the conventions of writing literary analysis. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

ENG106 Introduction to Poetry

4 class hr/wk, 4 cr.

Teaches students to enjoy, understand, analyze, and interpret Poetry. Introduces the breadth of poetry across periods, forms, and styles, both originally written in English and in translation. Introduces literary criticism and the conventions of writing literary analysis. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 l450 C.E. Explores the connection between literature and power and literature and social and cultural change. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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 (or higher), or completion of WR090 or WR115 (or higher); and placement into RD090; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **CL**

ENG201 Introduction to Shakespeare

4 class hr/wk, 4 cr.

Surveys selected early (1587-1600) Shakespearean works, emphasizing dramatic structure, characterization, imagery and theme. Uses critical essays to explore these plays and poems to provide background on the nature of the different genres of Shakespeare's works including at least one example from each of these genres: comedies, tragedies, histories, and sonnets, and covering a minimum of six plays. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor.

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; WR115 or higher, with a grade of C or better; or consent of instructor.

ENG204 Survey of English Literature: Beowulf to Milton

4 class hr/wk, 4 cr.

Surveys selected representative English literature from its beginnings in the Anglo-Saxon period through Milton (c. 1660). Situates literature as the product of specific historical contexts. Requires careful reading. Fosters thoughtful interpretation, analysis, and appreciation of literature. Emphasizes genre, structure, characterization, imagery, and theme. Uses critical essays to explore assigned texts and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **CL**

ENG205 Survey of English Literature: Restoration to Romantics

4 class hr/wk, 4 cr.

Surveys selected representative readings of English literature from the mid-17th century to 1832. Situates literature as the product of specific historical contexts. Requires careful reading. Fosters thoughtful interpretation, analysis, and appreciation of literature. Emphasizes genre, structure, characterization, imagery, and theme. Uses critical essays to explore assigned texts and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **CL**

ENG206 Survey of English Literature: Victorian to Postcolonial

4 class hr/wk, 4 cr.

Surveys selected, representative readings of English literature from 1832 through the twentieth century, including works from nations colonized by Britain. Situates literature as the product of specific historical contexts. Requires careful reading. Fosters thoughtful interpretation, analysis, and appreciation of literature. Emphasizes genre, structure, characterization, imagery, and theme. Uses critical essays to explore assigned texts and to examine issues of class, gender, race, nation, imperialism, government, and the "other" in these texts and in this time period. **Prerequisite:** Placement into WR121; or WR115 with a grade of C or better; or consent of instructor. **CL**

ENG216 Comic Books as Literature

4 class hr/wk, 4 cr.

Explores the graphic novel/comic book as a literary art form by examining and analyzing literary techniques, cultural context, history, and the development of the genre. Encourages students to use contemporary and traditional forms of literary analysis and critical thinking to better understand the text and its influence on pop culture. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor.

ENG220 Introduction to Literature for Children and Young Adults

4 class hr/wk, 4 cr.

Introduces themes and conventions of literature written for children and adolescents from at least three different genres, such as picture books, folktales, fairytales, fables, comics, short stories, novels, poetry, film, and drama. Examines the gendered, political, cultural, and ideological dimensions of literature written for children. Engages discussion as to influences that determine what's appropriate and inappropriate for children and youth to read. Course may be organized historically, chronologically, thematically, culturally, or ideologically. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **CL**

ENG245 Diverse Voices in American Literature

4 class hr/wk, 4 cr.

Surveys selected representative readings from underrepresented populations in American Literature. Examines issues of class, race, gender, ethnicity, physical disabilities, mental illness, and sexual identity and orientation through poetry, fiction, memoir, comics, and film. **Prerequisite:** Placement into WR 121; or WR115 with a grade of C or better; or consent of instructor. **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.

ENG253 Survey of American Literature

4 class hr/wk, 4 cr.

Introduces the literature of the land now called the United States from before European contact through 1865. Surveys literary traditions and several genres from a variety of cultures, including Native American, African American, and European American. Emphasizes discussion of literary works as products of history as well as culture and explores the dynamics of the cultural encounters they reveal as well as the complexity of the many voices and perspectives that make up early American literature. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **CL**

ENG254 Survey of American Literature

4 class hr/wk, 4 cr.

Introduces students to the literature of the United States from 1865-present. Surveys literary traditions, genres, and representative writers from a variety of experiences, including Hispanic American, Native American, African American, Asian American and European American. Emphasizes literary works as products of history and culture, exploring the important developments in American culture through literature. **Prerequisite:** Placement into WR121; or WR115 or higher, with a grade of C or better; or consent of instructor. **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.

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.

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. **CL**

English as a Non-Native Language

ENL031L Intermediate Listening C1

3 class hr/wk, 3 cr.

Develops listening skills and strategies for everyday situations, the workplace and introduces listening in the academic environment. **Prerequisite:** Placement according to established criteria based on standardized test scores.

ENL031M Intermediate Reading C1

4 class hr/wk, 4 cr.

Develops reading skills for academic disciplines and career fields. Broadens the use of grammar, vocabulary, and strategies for reading. Designed for intermediate non-native speakers of English. **Prerequisite:** Placement according to established criteria based on standardized assessments.

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 based upon standardized assessments.

ENL031S Intermediate Speaking 1

3 class hr/wk, 3 cr.

Develops speaking skills and strategies for everyday situations and the workplace Introduces basic academic speaking strategies. **Prerequisite:** Placement according to established program criteria based upon standardized assessments.

ENL032G Intermediate Grammar C2

3 class hr/wk, 3 cr.

Focuses on improving grammatical accuracy in communication and academic comprehension through greater understanding of grammatical structures. **Prerequisite:** Placement according to established program criteria based on standardized test scores.

ENL032P English Pronunciation C2

3 class hr/wk, 3 cr.

Reviews principles of U.S. American English pronunciation. Focuses on using phonetic alphabet, pronouncing English vowels and consonants, rhythm in sentences, intonation in discourse and comprehending connected or rapid speech. **Prerequisite:** Academic Development Program orientation and placement according to established program criteria based upon standardized assessments.

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 issues driving the growth of entrepreneurship. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 threecourse sequence. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ENT150A; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of ENT150B; and basic mastery of Excel; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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.

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.

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.

FE180B-D Introductory Work Based Learning

See CWE—Cooperative Work Experience

FE205B Resumes and Job Search Correspondence

1 class hr/wk, 1 cr.
Covers the process in creating written materials utilized in the job search process and career management. Includes composition and evaluation of written correspondence, including applications, resumes, and other employment-related communications.

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.

FE280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience

Filmmaking

FLM230 Audio Production and Sound Design

2 class hr/wk and 4 lab hr/wk, 4 cr.
Introduces the concepts of controlled sound recording, production, and design including Foley effects, and field recording. Audio editing and processing techniques covered may include equalization, bussing, compression, digital signal processing (DSP), general sound workflow, automation, mixing, and mastering. **Prerequisite:** ART120 with a grade of C or better or concurrent enrollment; or consent of instructor.

FLM265 Documentary Filmmaking

2 class hr/wk and 2 lab hr/wk, 4 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:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; and demonstrated ability to work with computers; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

FLM266 Narrative Filmmaking

2 class hr/wk and 2 lab hr/wk, 4 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of FLM265; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

FLM267 Advanced Filmmaking
2 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of FLM266; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

FLM268 Independent Filmmaking
2 class hr/wk and 2 lab hr/wk, 4 cr.
Allows students with skills acquired either through personal experience or in previous course work to work on an independent film. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of FLM265 or FLM266.

Film Arts

FA255 Understand Movies: Film Styles
3 class hr/wk and 2 lab hr/wk, 4 cr.
Features critical analysis and appreciation of cinema through the viewing and study of narrative film, while exploring other film forms. Introduces the historical, cultural, generic, and stylistic variety of cinematic art within its social context. 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.

FA256 Understand Movies: Great Film Directors
3 class hr/wk and 2 lab hr/wk, 4 cr.
Features critical analysis and appreciation of cinema through the viewing and study of films from the standpoint of the director as creator. Highlights the films of one or two directors in an effort to understand and critique the individual films as the work of an artist, especially within the context of viewing the films as an evolving body of work expressing a particular and unique view of the world. Analyzes the generic, thematic, and stylistic tendencies of the director. Also introduces basic cinematic terminology and concepts, film criticism, and the conventions of writing film analysis. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 8 credits total. **Prerequisite:** Placement into WR115; or WR090 with a grade of C or better; or consent of instructor.

FA257 Understand Movies: Themes & Genres
3 class hr/wk and 2 lab hr/wk, 4 cr.
Features critical analysis and appreciation of cinema through the viewing and study of films within the context of a specific film genre, national movement, or thematic topic. Emphasizes analysis of categorical similarities, significant differences or deviations, and explores the films¿ continued relevance. Also introduces basic cinematic terminology and concepts, film criticism, and the conventions of writing film analysis. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 8 credits total. **Prerequisite:** Placement into WR115; or WR090 with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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(All recommended courses must be completed with a grade of C or better.); FR103: FR102, or two years of high school French. (All recommended courses must be completed with a grade of C or better.) **Prerequisite:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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, and 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 (All recommended courses must be completed with a grade of C or better.); FR202: FR201, or four years of high school French; FR203: FR202, or four years of high school French. (All recommended courses must be completed with a grade of C or better.) **Prerequisite:** Placement into WR115 or higher; or WR090 (or concurrent enrollment), or WR115 or higher; or consent of instructor. (All prerequisite courses must be completed in a grade of C or better.)

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.

FRP151 Fire Incident Related Experience 1
9 lab hr/wk, 3 cr.
Provides an introductory orientation to Fire Incident Related Experience that fulfills the requirements of OR-OSHA and the Department of Public Safety Standards and Training for Entry-Level Firefighter. These standards must be met prior to an individual responding to emergency incidents. **Prerequisite:** Admission restricted to students chosen through an application process. Consent of instructor required.

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.

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.

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, each with a grade of C or better; or consent of instructor.

FRP156 Principles of Fire and Emergency Services
3 class hr/wk, 3 cr.
Introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavior change throughout the emergency services.

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.

FRP158 Fire Pump Construction and Operation
2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

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.

FRP160 Incident Safety Officer
1 class hr/wk, 1 cr.
Covers NFPA 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.

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.

FRP162 Managing Fire Personnel
1 class hr/wk, 1 cr.
Introduces fire department human resource management techniques. Includes hiring, supervision and performance review procedures.

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.

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.

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 public safety awareness.

FRP166 Firefighter's Law
1 class hr/wk, 1 cr.
Covers the legal responsibilities and rights of firefighters in driving, inspection, emergency operations, communication and fire prevention. Includes a firefighter's rights as a civil service employee.

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.

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.

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, and fire pumps.

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.

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 and liabilities. Provides preparation for presentations in court.

FRP174 Fire Investigation
3 class hr/wk 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.

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 Department of Public Safety Standards and Training 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.)

FRP256 Emergency Services Rescue Practices
2 class hr/wk 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.

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.

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.)

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.

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.

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.

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; or consent of instructor.

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.

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.

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.

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.

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.

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.

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. This course meets the competency standards established by the National Fire Protection Association (NFPA) 1041 Standard for Fire Service Instructor Professional Qualifications, Instructor II.

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 passed with a grade of C or better.)

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.

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, each with a grade of C or better; or consent of instructor.

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, building codes, and National Fire Protection Standards. **Prerequisite:** FRP171 with a grade of C or better; or consent of instructor.

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.

First Year Experience
See also CG—Counseling and Guidance

FYE105 Creating College Success
2 class hr/wk, 2 cr.
Develops the skills needed to succeed in college. Builds skills that allow students to manage their time, their emotions, and their workload. Promotes building healthy relationships and accessing college resources. Introduces attitudes and beliefs that improve confidence and college success. Recommended for first year students across all fields. **Prerequisite:** Placement into RD085 or higher, and WR080 or higher; or consent of instructor.

General Engineering
See also EGR—Engineering

GE101 Engineering Orientation
2 class hr/wk and 2 lab hr/wk, 3 cr.
Introduces the engineering profession and engineering problem-solving. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and 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.)

GE102 Engineering Computations
2 class hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 (or higher), or MTH111, or MTH112, or MTH251 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

GE103 Engineering Computations
2 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of GE101; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. Special emphasis is placed on the unequal distribution of power in the U.S. with regard to religion, ethnicity, and language. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

Geology

GEO142 Geology of Pacific Northwest Volcanoes, Mountains, and Earthquakes
3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GEO143 Geology of Pacific Northwest Rocks and Minerals
3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GEO144 Geology of Northwest Rivers, Glaciers, and Deserts
3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GEO201 Geology: Rocks and Minerals
3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GEO202 Geology: Surface and Environmental Geology
3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GEO203 Geology: Evolution of the Earth

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

General Science

GS104 General Science: Physics

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS105 General Science: Chemistry

3 class hr/wk and 3 lab hr/wk, 4 cr.
Offers a broad, non-quantitative, and descriptive survey of chemical principles relevant to everyday life. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS106 General Science: Earth Science

3 class hr/wk and 3 lab hr/wk, 4 cr.
Introduces various branches of the earth sciences. Includes basic terminology, fundamental processes and respective interrelations. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS107 General Science: Astronomy

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH070 (or higher), or MTH070 and MTH095 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

GS108 General Science: Oceanography

3 class hr/wk and 3 lab hr/wk, 4 cr.
Surveys the four classic disciplines of the ocean sciences: geological oceanography, chemical oceanography, physical oceanography, and biological oceanography. Focuses on the basic principles of the ocean sciences and stress the interdisciplinary nature of oceanography. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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.

GS141 General Science: Earth Systems Science

3 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS142 General Science: Geology

3 class hr/wk and 3 lab hr/wk, 4 cr.
Introduces geology using the Annenberg Earth Revealed video series. Studies the Earth as a system. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS151 Marine Environmental Systems

3 class hr/wk and 3 lab hr/wk, 4 cr.
Investigates a variety of environmental issues facing the world's oceans, including ocean acidification, sea level rise, melting Arctic sea ice, creation of dead zones, mining and drilling in the ocean, overfishing, invasive species, and more. Emphasis placed on the role of humans in causing physical or chemical changes in the oceans that negatively impact marine life. Also explores solutions and methods to mitigate impacts through field experiences and case studies. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

GS290 Introduction to Research

4 class hr/wk, 4 cr.
Focuses on the basic skills essential to ethical conduct of research in the biomedical and social sciences. Covers research misconduct, conflict of interest, use of human and non-human animal subjects in research, research collaboration, peer review, data acquisition and ownership, responsible authorship an publishing, the scientist as a responsible member of society, contemporary and historical issues in biomedical ethics, and the environment and societal impacts of scientific research. **Prerequisite:** Consent of instructor.

Human Development and Family Studies

HDF140 Home Visiting in Early Childhood Programs

1 class hr/wk, 1 cr.
Discusses home visitation program history, purpose, and practices. Explores a developmental approach to parenting, parent education, and parent support.

HDF141 Sciences Experiences with Young Children

1 class hr/wk, 1 cr.
Explores planning and implementing developmentally appropriate science activities with young children from 2½ to 6 years old. Focuses on hands on, child-centered activities with an emphasis on understanding how young children learn. Includes children of different ages, cultures, and abilities.

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.

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.

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.

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.

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.

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.

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, each with a grade of C or better; or consent of instructor.

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.

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.

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.

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.

HDF286 Professional Issues and Leadership 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, leadership, and development of a professional attitude and point of view. 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.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

HE232 Science of Happiness
3 class hr/wk, 3 cr.
Evaluates personal happiness and positive psychology applications in mental health. Explores the power of thinking for healthy behavior change and building emotional resiliency in all aspects of life by re-infusing passion and purpose. Examines several concepts, including but not limited to the concept of success, science of happiness, stress, depression, anxiety, growth mindset, and brain health. Creates real-life applications and strategies that students can add to their life-coping tool-kit. **Prerequisite:** Placement into WR090 (or higher) or completion of WR115 (or higher) with a grade of C or higher; or consent of instructor.

HE240 Drugs, Behavior, and Health
3 class hr/wk, 3 cr.
Analyzes current information concerning the impact of drugs on society, personal health, and behavior. Examines a variety of issues related to health and drug use including mental, physical, emotional, and environmental aspects of alcohol and other drugs. **Prerequisite:** Placement into WR115 (or higher) or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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.

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.

HM121 Medical Terminology 2
4 class hr/wk, 4 cr.
Focuses on the 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.

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, each with grade of C or better; or consent of instructor.

Horticulture
See also SOIL—Soil Science

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.

HOR111 Introduction to Horticulture
2 class hr/wk 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.

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.

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.

HOR116 Introduction to Phytotechnology

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

Provides an overview of innovative technologies that use plants to clean water, soil, and 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.

HOR125 Biological Control Agents

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

Focuses on the concepts of biological control in natural and managed systems using natural enemies to reduce pest densities as well as current applications within the horticulture industry to create an ecological and integrated approach to pest management. Creates a solid understanding of biological control to prepare students to develop effective Integrated Pest Management (IPM) programs that reduce chemical usage.

HOR130 Irrigation Principles and Practices

3 class hr/wk, 3 cr.

Focuses on irrigation system characteristics, management, maintenance, and scheduling. Explores plant-soil-water relationships and how they relate to irrigation methods, system components and equipment, and efficiency.

HOR135 Irrigation Controllers and Instrumentation

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

Discusses irrigation controls, installation, sensors, programming for water efficiency and conservation, irrigation control systems, and troubleshooting. Includes residential, commercial, agricultural and nursery/greenhouse irrigation systems. Analyzes the types of control systems and procedures. Includes a practical, hands-on lab to demonstrate knowledge of industry-based practices and procedures. Focuses on the installation and troubleshooting of irrigation systems, valves, sprinklers, system piping, controls, and wiring. Pending State Approval.

HOR140 Irrigation Pump Applications

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

Explores pump types commonly used in irrigation applications and the operating characteristics, advantages, and disadvantages of each pump type. Presents information needed to select a pump and the associated components including power and drive units. Presents information on installation practices. Pending State Approval.

HOR145 Irrigation Design and Components

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

Creates irrigation design, components, and installation for irrigation systems including agriculture, nursery and greenhouse, and commercial and residential. Applies site evaluation, valve and sprinkler selection, systems design, controllers and installation. Gains hands-on experience designing and installing different irrigation systems. Pending State Approval.

HOR150 Irrigation Blueprint Reading and Sketching

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

Introduces basic construction plan interpretation. Covers symbol usage, line types, dimensioning, section views, axillary views and integration of construction plans from various trades. Pending State Approval.

HOR201 Growing Vegetables in the Willamette Valley

3 class hr/wk 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.

HOR203 Fall Horticulture Practicum

1 class hr/wk 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.)

HOR204 Winter Horticulture Practicum

1 class hr/wk 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.)

HOR205 Spring Horticulture Practicum

1 class hr/wk 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.)

HOR211 Plant Propagation

3 class hr/wk 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.

HOR212 Advanced Plant Propagation

1 class hr/wk 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.

HOR215 Developing an IPM Program

1 class hr/wk and 3 lab hr/wk, 2 cr.
Identifies steps for setting up an Integrated Pest Management (IPM) program by following reasonable and logical procedures for each pest management situation through gathering information, interpreting data, creating a flexible management plan, making timely decisions, and taking the proper action. Communicates pest management decision effectively with colleagues and clients.

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.

HOR225 Greenhouse Production and Management

3 class hr/wk 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.

HOR226 Fall Plant Identification

3 class hr/wk 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.

HOR227 Winter Plant Identification

3 class hr/wk 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.

HOR228 Spring Plant Identification

3 class hr/wk 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.

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.

HOR237 Integrated Pest Management: Insects and Diseases

3 class hr/wk 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.

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.

HOR240 Sustainable Landscape Design

3 class hr/wk 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.

HOR251 Growing Fruit in the Willamette Valley

2 class hr/wk 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.

HOR255 Identification of Herbaceous Plants 1

2 class hr/wk 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.

HOR256 Identification of Herbaceous Plants 2

1 class hr/wk 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.

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.

HOR265 Integrated Pest Management: Scouting and Monitoring

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

Monitors crops to prevent infestations to create an effective IPM program and to make good crop decisions. Covers how to identify the objectives of a monitoring program, sampling methods, tools and techniques, the role of precision agriculture, and using monitoring records to develop a long-term monitoring plan.

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.

HOR275 Innovative Strategies for Water Quality 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.

HOR276 Organic Gardening

2 class hr/wk 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.

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.

HOR280B-L Cooperative Work Experience

See CWE—Cooperative Work Experience.

HOR286 Organic Gardening Summer Practices

1 class hr/wk and3 lab hr/wk, 2 cr.

Surveys summer organic garden practices. Applies practical skills and techniques used in the summer in the organic garden. Topics covered may include planting, bed preparation, irrigation, trellising (as needed), pest control, fertilization, harvest, and post-harvest handling of vegetable crops.

Health and Human Performance

See also PE—Physical Education

HPE184 Sports Medicine: Prevention and Care of Athletic Injuries

3 class hr/wk, 3 cr.

Covers 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

HPE285 Advanced Prevention and Care of Athletic Injuries

3 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of HPE184; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

HPE295 Health and Fitness for Life

3 class hr/wk, 3 cr.

Examines practices and behavior skills to improve lifelong fitness and wellness. Includes information on multi-dimensional concepts of health, fitness and wellness to help students develop practices that increase longevity and quality of life. Examines a student's personal practices that contribute to wellness and gain an understanding of how determinants of health influence health status.

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.

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.

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.

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.

HS122 Women and Substance Disorder Treatment
2 class hr/wk, 2 cr.
Explores the historical, sociological and physiological implications for women with substance use disorder.

HS123 Men and Substance Disorder Treatment
2 class hr/wk, 2 cr.
Explores the historical, sociological, and physiological implications of men and chemical dependency.

HS124 Working with LGBTQ+ Clients
1 class hr/wk, 1 cr.
Explores the historical, sociological and barriers of working with the LGBTQ+ population.

HS129 Grief, Loss, and Transition
3 class hr/wk, 3 cr.
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.

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.

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.

HS150 Personal Effectiveness
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.

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.

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.

HS155 Fundamentals of Interviewing
3 class hr/wk, 3 cr.
Introduces students to theory, intentional and motivational interviewing, and advocacy as a foundation for developing basic counseling skills**. Prerequisite:** HS150 with a grade of C or better; or consent of instructor.

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.

HS158 Trauma Informed Management Care
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.

HS170 Introduction to Practicum
4 class 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 agencies and organizations to make appropriate referrals. **Prerequisite:** Enrollment in the Human Services program.

HS201 Addiction: 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.

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.

HS206 Involuntary Clients, Criminality, and Substance Use Disorders

3 class hr/wk, 3 cr.

Assists Human Services workers to develop skills for clients with substance use disorders who may be court-ordered into treatment services, or who may have a history of inappropriate, possibly illegal behaviors with or without legal history, or who are under threat of some form of legal sanctions. Includes information on recognizing, confronting, and treating cognitive distortions. **Prerequisite:** HS101 with a grade of C or better; or consent of instructor.

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.

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.)

HS211 Wellness Counseling

4 class hr/wk, 4 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.

HS213 Multicultural Issues

3 class hr/wk, 3 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.

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 skill acquisition through practice. Second of a two-course sequence. **Prerequisite:** HS155 and WR121 with a grade of C or better; or consent of instructor.

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.

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.

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, each with a grade of C or better; or consent of instructor.

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.

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.

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. **Recommended:** Concurrent enrollment in HS284-288. **Prerequisite:** HS150 and HS170, each with a grade of C or better; or consent of instructor.

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.

HS225 Therapeutic Recreation
3 class hr/wk, 3 cr.
Describe the foundations of therapeutic recreation including models of service, definitions and benefits of therapeutic recreation, history and development of the profession and the nature of therapeutic recreation service. Explain both theories and experiential activities that both drive and support the profession.

HS250 Leadership in Behavioral Health
4 class hr/wk, 4 cr.
Learn key principles, practices of behavioral health and clinical leadership. Recognize their own leadership styles, while learning leadership techniques to deal with both clinical and managerial issues in a culturally competent and ethically appropriate manner.

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 and WR121 with a grade of C or better; or consent of instructor.

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 and WR121 with a grade of C or better; or consent of instructor.

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.

HS284A-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 Mental Health Addiction Certification 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 Mental Health Addiction 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.)

HS284D-288D Practicum: Human Services—Direct Support Specialist
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 Direct Support Specialist students two different practicum sites, each at least two terms in length, during the Associate of Applied Science degree acquisition. The second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. **Prerequisite:** HS103, HS150, HS155, and HS170; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

HS284S-288S Practicum: Human and 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.)

History

HST104 World Civilization: 3500 B.C. to 1450
4 class hr/wk, 4 cr.
Surveys human cultural, social, economic, intellectual, and political development of world civilizations from 3500 B.C to 1450. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

HST105 World Civilization: 1450 C.E. to 1870
4 class hr/wk, 4 cr.
Surveys human cultural, social, economic, intellectual, and political development of world civilizations from 1450 C.E. to 1870. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

HST106 World Civilization: 1870 to the Present

4 class hr/wk, 4 cr.

Surveys human cultural, social, economic, intellectual, and political development of world civilizations. Covers 1870 to the present. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

HST201 United States: to 1840

4 class hr/wk, 4 cr.

Explores the cultural, economic, social, and political developments of the United States to 1840. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HST202 United States: 1840 to 1900

4 class hr/wk, 4 cr.

Explores the cultural, economic, social, and political developments of the United States from 1840 to 1900. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HST203 United States: 1900 to Present

4 class hr/wk, 4 cr.

Explores the cultural, economic, social, and political developments of the United States from 1900 to present. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HST228 History of Modern Europe

4 class hr/wk, 4 cr.

Introduces the history and culture of Europe from 1900 to the present. Analyzes the impact of war and revolution, the end of colonialism and the decline of European empires, and the search for European unification. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HST262 Women in U.S.

4 class hr/wk, 4 cr.

Studies the transformation of the role of women in American society. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

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.

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.

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.

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. Explores labor cost control, revenue forecasting, income statement analysis and budgeting.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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). **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HUM221 Global Leadership

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

Provides a methodology to assess 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. Creates an immersive, intercultural, and global service learning experience. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

HUM225 Effective International Development: Theory to Practice

2 class hr/wk 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

Journalism

JNL215 Publications Lab

4 lab hr/wk, 2 cr.

Covers practical application of journalism, photojournalism, and newspaper production skills through work on the student newspaper. Course may be repeated for a maximum of 12 credits. **Prerequisite:** Placement into WR115 (or higher), or WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 non-majors. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

JNL240 Multimedia Journalism

2 class hr/wk 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.

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; JPN102: 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.)

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.)

Linguistics

LING210 Introduction to Linguistics

4 class hr/wk, 4 cr.

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.

Medical Assisting

MED124 Medical Assisting, Basic Procedures

3 class hr/wk 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.

MED125 Medical Assisting, Advanced Procedures

4 class hr/wk 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.

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.

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.

MED132 Medical Assisting Clinical Practice

2 class hr/wk 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.)

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.

MT105 Introduction to Robotics

1 class hr/wk 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.

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. Promotes and supports sustainable and green technologies. **Prerequisite:** MTH070 with a grade of C or better; or consent of instructor.

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.

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.)

MT212 Sensors and Control Elements 2

2 class hr/wk 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.)

MT215 Instrumentation

2 class hr/wk 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.)

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.

MT221 Fluid and Vacuum Systems
3 class hr/wk 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.

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.

MT227A Pneumatics and Hydraulics Fundamentals
2 class hr/wk 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.

MT231 Programmable Logic Controllers 1
2 class hr/wk 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.)

MT232 Programmable Logic Controllers 2
1 class hr/wk 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.)

MT235 Human Machine Interfaces
1 class hr/wk 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, each with a grade of C or better; or consent of instructor.

MT241 System Calibration and Standards
1 class hr/wk 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.)

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.

MT281 Process Control Practicum
16 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.)

MT282 Process Control Practicum
26 lab hr/wk, 2 cr.
Provides related on-the job experience with area employers, under instructional oversight. Utilizes supervised industrial experience to develop intermediate process control procedures, including equipment maintenance, standardization, limited calibration, and process management at local industry partners. **Prerequisite:** MT281 with a grade of C or better; or consent of instructor.

MT283 Process Control Practicum
31 class hr/wk 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.

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.)

MT292 Robotic Capstone
2 class hr/wk 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.

Mathematics

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.

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.

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 equivalent course as determined by instructor; or consent of instructor.

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.

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.

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.

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.)

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.

MTH081 Technical Mathematics 1

4 class hr/wk, 4 cr.

Offers the first course of a two-term technical mathematics sequence designed to meet the needs of technology students from various disciplines and lay the groundwork for applying mathematical concepts and problem solving in the technical fields of engineering, drafting, mechanical design, forestry and electronics. Covers fundamental algebra concepts, graphing, ratio, proportions and variation, basic right angle trigonometry, statistics and empirical methods, operations with linear, quadratic and rational expressions, solutions of linear, quadratic and rational equations. Emphasizes using mathematics and technology to solve applied problems. **Prerequisite:** MTH070 with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor.

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.

MTH095 Intermediate Algebra

4 class hr/wk, 4 cr.

Introduces the study of functions with a focus on linear (including arithmetic sequences), quadratic (including an introduction to complex numbers), and exponential functions (including geometric sequences). Also covers converting rates using dimensional analysis. Uses a variety of methods including logarithms to solve equations. Explores topics using a graphing calculator (required) as well as traditional approaches. **Prerequisite:** Placement into MTH095 or higher; or completion of MTH070 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor.

MTH098 Quantitative Literacy

5 class hr/wk, 5 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 through Cooperative Learning Experience. **Prerequisite:** Placement into MTH070; or completion of MTH060 with a grade of C or better, or equivalent course as determined by instructor.

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH105 (or higher), or concurrent enrollment in MTH105A, or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH105A Corequisite Support for MTH105 (Math in Society)

1 lab hr/wk. 1 cr.

Focuses on the foundational skills and concepts needed to be persistent and successful in MTH105 (Math in Society). Provides support in arithmetic, algebra, problem solving, technology, and study skills in an interactive setting. Concurrent: Requires concurrent enrollment in specific section of MTH105. **Prerequisite:** Placement into MTH105 with corequisite support via multiple measures placement (completion of algebra 1 in high school) or completion of MTH060.

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher), or completion of MTH095 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 (higher), or completion of MTH111 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH111 (or higher); or completion of MTH095 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH212 Elementary Mathematics 2

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH211 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH213 Elementary Mathematics 3

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH212 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH231 Discrete Mathematics 1

4 class hr/wk, 4 cr.

Introduces elementary logic and set theory, relations, proofs, contradiction, contraposition, mathematical induction, elementary combinatorics, recurrence, basic graph theory and minimal spanning trees. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH112 (or higher), or completion of MTH111 (or higher); or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH232 Discrete Mathematics 2

4 class hr/wk, 4 cr.

Topics in Functions, Number Theory, Elementary Group Theory. Applications in public key cryptography. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH231 or higher with a grade of C or better, or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed by a grade of C or better.)

MTH241 Elementary Calculus

4 class hr/wk, 4 cr.

Emphasizes techniques of calculus in applied problem solving. A one-term terminal course with an intuitive approach to differential and integral calculus. Intended for non-math majors. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH241 (or higher), or completion of MTH111 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH243 (or higher), or completion of MTH105 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH243 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH251 Differential Calculus

5 class hr/wk, 5 cr.

Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers limits, continuity rates of change, and derivatives with applications. Introduces the indefinite integral. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH251 (or higher), or completion of MTH112 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH252 Integral Calculus
5 class hr/wk, 5 cr.
Covers the development of definite and indefinite integrals, the fundamental theorem of calculus, applications of integrals, constructing functions from their rates of change, and techniques of integration. Introduces differential equations. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH251 (or higher) or equivalent course as determined by the instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MTH253 Series Calculus and Linear Algebra
5 class hr/wk, 5 cr.
Combines topics from linear algebra and infinite series. Includes geometric, Taylor and Fourier series work with applications; and systems applications using matrices and determinants. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH254 (or higher) or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH254 or MTH255 or equivalent course as determined by instructor; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Music Performance
See also MUS-Music

MUP100A Applied Piano Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the piano, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the piano; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100B Applied Violin Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the violin, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the violin; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100C Applied Viola Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the viola, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the viola; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100D Applied Cello Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the cello, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the cello; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100E Applied String Bass Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the string bass, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the string bass; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100F Applied Flute Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the flute, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the flute; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100G Applied Oboe Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the oboe, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the oboe; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100H Applied Clarinet Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the clarinet, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the clarinet; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100I Applied Saxophone Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the saxophone, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the saxophone; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100J Applied Bassoon Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the bassoon, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the bassoon; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100K Applied Trumpet Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the trumpet, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the trumpet; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100L Applied French Horn Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the French horn, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the French horn; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100M Applied Trombone Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the trombone, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the trombone; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100N Applied Euphonium Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the euphonium, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the euphonium; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100O Applied Tuba Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the tuba, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the tuba; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100P Applied Percussion Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the percussion, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the percussion; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100Q Applied Ukulele Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the ukulele, including the fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the ukulele; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100R Applied Conducting Lessons

1 class hr/wk, 1 cr.

Provides instruction in the basics of conducting, including the fundamentals of music, reading, and theory; basic conducting patterns; score study and preparation; beneficial practice habits. **Students may repeat this course for a maximum of 9 credits.**

MUP100S Applied Composition Lessons

1 class hr/wk, 1 cr.

Covers methods for exploring musical composition techniques and technologies, including the creative process, hand-written notation, computer notation, Digital Audio Workstation (DAW), music business, orchestration, score study, and analysis. **Students may repeat this course for a maximum of 9 credits.**

MUP100T Applied Harp Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the harp, including fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the harp; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100U Applied Drum Set Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the drum set, including fundamentals of music, reading, and theory; beneficial practice habits; repertoire for drum set; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100V Applied Electric Bass Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the electric bass, including fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the electric bass; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP100W Applied Guitar Lessons

1 class hr/wk, 1 cr.

Covers pedagogy of the guitar, including fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the guitar; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP102 Concert Band

3 lab hr/wk, 1 cr.

Offers an instrumental experience that focuses on performing standard concert band literature of many styles. Emphasizes ensemble skills, and musicality in various band performance practices. **Students may repeat this course for a maximum of 9 credits.**

MUP106 String Orchestra

3 lab hr/wk, 1 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. **Students may repeat this course for a maximum of 9 credits.**

MUP174 Applied Lessons in Voice

1 class hr/wk, 1 cr.

Covers pedagogy of the voice, including fundamentals of music, reading, and theory; beneficial practice habits; repertoire for the voice; interpretation; and performance techniques. **Students may repeat this course for a maximum of 9 credits.**

MUP175 Concert Choir

3 lab hr/wk, 1 cr.

Offers singing in a non-auditioned mixed voice (soprano, alto, tenor, bass) choir. Includes instruction in 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. Students may repeat this course for a maximum of 9 credits. **Recommended:** Previous experience singing with a school, community, or church choir.

MUP177 Chamber Singers

3 lab hr/wk, 1 cr.

Offers singing at an advanced level in a mixed-voice (soprano, alto, tenor, bass) choir. Includes continued development of proper singing habits, basic musical terms and expressions, rehearsal techniques and procedures, and exposure to a wide variety of music literature, culminating in a final performance. Students may repeat this course for a maximum of 9 credits. **Recommended Requisite:** Previous experience singing with a school, community, or church choir. **Prerequisite:** Consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

MUS111 Music Theory 1

2 class hr/wk and 2 lab hr/wk, 3 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

MUS112 Music Theory 2

2 class hr/wk and 2 lab hr/wk, 3 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS111; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS113 Music Theory 3

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

Continues detailed exploration of Western European music practices, including music notation, terminology, analysis, and four-part writing. Introduces advanced musical practices including figured bass realization, harmonic progressions, modulation, cadences, transposition, and form. Emphasizes advanced terminology and compositional concepts. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS112 within the year; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS114 Aural Skills 1

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

Provides instruction in the fundamental concepts of common-practice period melody, harmony, and rhythm and provides practice in ear training, including but not limited to sight-singing, melodic and rhythmic dictation, and intervallic recognition. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

MUS115 Aural Skills 2

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

Provides continued instruction in introductory concepts of common-practice period melody, harmony, and rhythm and provides practice in ear training, including but not limited to sight-singing, melodic, harmonic and rhythmic dictation, and intervallic recognition. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS114; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS116 Aural Skills 3

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

Provides instruction in the fundamental concepts of common-practice period melody, harmony, and rhythm and provides practice in ear training, including but not limited to sight-singing, melodic and rhythmic dictation, and intervallic recognition. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS115; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS161 Music Appreciation

3 class hr/wk, 3 cr.

Highlights 12th to 21st century instrumental and vocal music and the growth of the orchestra. Covers acknowledged masters such as Mozart, Haydn, and Beethoven. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

MUS196 Music Teacher In-Service

1 class hr/wk, 1 cr.

Consists of attendance at, participation in, and evaluations of lectures, clinics, demonstrations and/or performances by leading professional authorities in the fields of music performance, music pedagogy, and rehearsal techniques, along with reviews of select outside readings and/or videos.

MUS211 Music Theory 4

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

Expands upon the theoretical concepts introduced in the first year of Music Theory. Covers common-practice melody, harmony, and voice leading, and demonstrates their analytical and compositional uses. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS113; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS212 Music Theory 5

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

Expands upon the theoretical concepts introduced in the first year Music Theory sequence. Covers common practice melody, harmony, and voice leading, and demonstrates their analytical and compositional uses. Includes continued analysis and part-writing, secondary dominants and secondary leading-tone chords, modulations, formal structure, mode mixture, Neapolitan chords, augmented sixth chords, extended chords, chromatic mediants, altered dominants, and enharmonic spellings and modulations. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS211; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS213 Music Theory 6

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

Expands upon the elements of common-practice harmony, and introduces late and post-Romantic techniques. Introduces concepts of post-tonal theory; and 20th and 21st century composers, styles, and techniques. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS211 and MUS212; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS214 Aural Skills 4

1 class hr/wk and 2 lab hr/wk, 2 cr.
Provides instruction in advanced concepts of common-practice period melody, harmony, and rhythm and provides practice in ear training, including but not limited to sight-singing, melodic, harmonic and rhythmic dictation, and intervallic recognition. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS116; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS215 Aural Skills 5

1 class hr/wk and 2 lab hr/wk, 2 cr.
Provides instruction in advanced concepts of Late-19th and Early-20th century western harmony, with special emphasis on advanced rhythm. Also provides practice in ear training including but not limited to sight-singing, melodic, harmonic and rhythmic dictation. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS214; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

MUS216 Aural Skills 6

1 class hr/wk and 2 lab hr/wk, 2 cr.
Provides instruction in advanced concepts of 20th century western harmony, as well as harmony of non-western music and American Vernacular music. Also provides practice in ear training, including but not limited to sight-singing, melodic dictation, and harmonic dictation. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MUS215; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Network Technology

See also ELT—Electronics Technologies

NET123 Network Computer Operating Systems

3 class hr/wk 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.

NET141 Network for Small Business

3 class hr/wk and 3 lab hr/wk, 4 cr.
The first course in a 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.

NET142 Medium Business Networks

3 class hr/wk 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.

NET143 Routing and Switching Systems

3 class hr/wk 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.

NET144 Network Design and Support

3 class hr/wk and 3 lab hr/wk, 4 cr.
The fourth course in a 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.

NET171 Fundamentals of Wireless LANs

3 class hr/wk 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.

NET261 Fundamentals of Network Security

3 class hr/wk 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.

NET271 IP Telephony

3 class hr/wk 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.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

NFM240 Nutrition in the Lifecycle

3 class hr/wk, 3 cr.
Understand how nutrition impacts key life stages from pregnancy through old age. Explore how lifestyle factors play an important role in nutritional requirements at different life stages.

Nursing

NUR106 Fundamentals of Nursing
5 class hr/wk 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).

NUR108 Acute and Chronic Conditions 1
6 class hr/wk 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).

NUR109 Acute and Chronic Conditions 2
5 class hr/wk 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).

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.

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.

NUR206 Complex Health Problems
6 class hr/wk 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 with a grade of C or better. **Corequisite:** PSY201 (may be completed prior to enrollment).

NUR208 Care in Urgent and Community Settings
5 class hr/wk 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 with a grade of C or better. **Corequisite:** PSY237 (may be completed prior to enrollment).

NUR209 Entry into Practice
3 class hr/wk and 15 lab hr/wk, 8 cr.
Provides students with opportunities to demonstrate mastery of the knowledge, skills, and attitudes inherent in the beginning practice roles of an associate degree registered nurse. Theoretical concepts focus on the first-level management skills necessary for providing nursing care to groups of patients in a variety of settings. As the culmination of the Nursing program clinical sequence, NUR209 incorporates a clinical preceptorship during which students demonstrate achievement of program outcomes. **Prerequisite:** NUR208 with a grade of C or better. **Corequisite:** WR121 (may be completed prior to enrollment).

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.

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.)

Occupational Skills Training
See Skills Training

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.

PE185BG Baseball—Advanced
3 lab hr/wk, 1 cr.
Introduces students to the fundamentals of baseball.

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.

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.

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.

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.

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.

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.

PE185ES Emergency Service Tactical Athlete

3 lab hr/wk, 1 cr.

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. **Prerequisite:** Must be a current Criminal Justice, Fire, or EMT student with Chemeketa Community College.

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.

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 classes. Covers knowledge and skills needed to perform safe and proper group and individual fitness exercises. Activities promote and emphasize improved cardiorespiratory conditioning as well as muscle strength and endurance, flexibility, and body composition, and Skills to help students incorporate exercise into their lifestyle.

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.

PE185HA, HB, HC At-Home Fitness – Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Designs a fitness program that can be done at home intended to complement individual interests, needs, and goals. Improves some or all of the areas of physical fitness: cardiovascular, muscular, flexibility, and body composition. Utilizes a combination of exercise techniques and formats that require no equipment, including cardio endurance training, interval training, circuit training, body weight training, core training, functional training. and flexibility exercises to improve cardiorespiratory endurance, muscular strength and endurance, flexibility, and overall health.

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.

PE185JJ, JK, JL Jogging—Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Develop and participate in a jogging or running program to gain and maintain cardiorespiratory fitness.

PE185KA, KB, KC Karate—Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Develops the basic language and movements of martial arts.

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. **Prerequisite:** PE185PA: None; PE185PB: PE185PA; PE185PC: PE185PB.

PE185PD, PE, PF Pilates—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.

PE185PR, PS, PT Backpacking—Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Introduction to backpacking.

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.

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.

PE185SH, SJ, SK Skiing—Beginning, Intermediate, Advanced

3 lab hr/wk, 1 cr. each

Presents fundamental downhill skiing techniques through instruction and skill application.

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.

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.

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.

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.

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.

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.

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.

PE185WA, WB, WC Weight Management—Beginning, Intermediate, Advanced
3 lab hr/wk, 1 cr. each
Educates, supports, and motivates individuals interested in managing their weight. Includes nutrition information, weigh-in, class discussion and daily exercise management.

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.

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.

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.

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.

PE185ZA, ZB, ZC Zumba—Beginning, Intermediate, Advanced
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.

Physics

PH060 Applied Physical Science
2 class hr/wk 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.

PH121 Applied Physics
3 class hr/wk 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.

PH122 Applied Physics
3 class hr/wk 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.

PH201 General Physics
4 class hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH251 (or higher), or completion of MTH112 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH202 General Physics
4 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PH201 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH203 General Physics
4 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PH202 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH207 Astronomy: Solar System
3 class hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH095 (or higher, except MTH098), or completion of MTH070 (or higher, except MTH098 and MTH105); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH208 Astronomy: Stars
3 class hr/wk and 3 lab hr/wk, 4 cr.
Focuses on stellar coordinates and sidereal time, the nature of light and the spectroscope, and the birth and death of stars. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and placement into MTH095 (or higher, except MTH098), or completion of MTH070 (or higher, except MTH098 and MTH105); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH209 Astronomy: Galaxies
3 class hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH095 (or higher, except MTH098), or completion of MTH070 (or higher, except MTH098 and MTH105); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH211 Physics for Engineers and Scientists
4 class hr/wk 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 WR115 (or higher), or completion of WR090 (or higher); and placement into MTH252 (or higher); or completion of MTH251 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH212 Physics for Engineers and Scientists
4 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of MTH252 and PH211; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PH213 Physics for Engineers and Scientists
4 class hr/wk 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PH212; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

PHL204 Critical Thinking and Logic
4 class hr/wk, 4 cr.
Develops critical thinking skills to identify reasons for believing truth claims and to assess the cogency of these reasons. Facilitates sympathetic understanding of beliefs one does not share and enables one to subject to critical scrutiny one's own beliefs and one's own reasons for believing. Uses logic as the technique for the rational assessment of argument. Identifies both informal and formal reasons for the success or the failure of arguments. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

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.

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.

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.

PHM120 Pharmacy Operations/ Laboratory
2 class hr/wk and 1 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.

PHM130 Pharmacy Info: Law and Ethics
3 class hr/wk, 3 cr.
Focuses on collecting, organizing, screening, and evaluating information/ payment and prescription documentation pertaining to the patient. Covers customer health records as well as determining counseling requirements in accordance with the laws and ethics that apply to pharmacy operations. Also stresses the management of inventory within the pharmacy. **Prerequisite:** Third-term standing in the Pharmacy Technician program.

PHM150 Pharmacy Tech Practicum
21 lab hr/wk, 7 cr.
Provides pharmaceutical workplace experience in a healthcare or related setting. **Prerequisite:** Third-term standing in the Pharmacy Technician program.

PHM151 Pharmacy Tech Seminar 1
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.

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 institution's 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:** Completion of PHM216 with a grade of C or better; and sixth-term standing in the Pharmacy Technician Program with a grade of C or better in all courses.

PHM161 Pharmacy Tech Seminar 2
11 lec hr/wk, 1 cr.
Prepares a pharmacy student for future eligibility to sit for the advanced national pharmacy certification examination (CSPT) Pharmacy Technician Management program. Coincides with the hospital externship. **Prerequisite:** Completion of PHM216 with a grade of C or better; and sixth-term standing in the Pharmacy Technician Program with a grade of C or better in all courses.

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.

PHM215 Sterile Compound/ Cytotoxic Meds
2 class hr/wk 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.

PHM216 Advanced Sterile Compound/Cytotoxic Meds

2 class hr/wk and 3 lab hr/wk, 3 cr.
Provides advanced 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:** Fifth Term student in Pharmacy Management Program.

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.

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.

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.

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.

PHM233 Pharmacology 3

3 class hr/wk, 3 cr.
Provides a basic understanding of structure and function of certain biological systems within the human body, including gastrointestinal, integumentary, renal, reproductive systems, and special senses. Continues pharmacological principles involving therapeutic medications and diseases/pathophysiology affecting said body systems. **Prerequisite:** PHM232 with a grade of C or better; or consent of instructor.

PHM243 Pharmacology 1 for the Anesthesia Technologist

3 class hr/wk, 3 cr.
Provides a basic understanding and principles of pharmacology and medical terminology in anesthesiology. Examines pharmaceutical terms such as pharmacokinetics/pharmacodynamics, pharmacogenetics/pharmacogenomics; a brief introduction of types of anesthesiology medications: more in depth study of the cardiovascular system medications; discussion of medication use, labeling, handling and storage; route of administrations, variables that affect drug actions including drug contraindications and drug interactions; efficacy and toxicity of xenobiotics as well as pathophysiology of various body systems; acid-base understanding; and introduction to pharmacology mathematics. **Prerequisite:** MTH095 with a grade of C or better; and concurrent enrollment in ANES101, ANES112, and ANES103; or consent of instructor.

PHM244 Pharmacology 2 for the Anesthesia Technologist

4 class hr/wk, 4 cr.
Second term of pharmacology for anesthesia technicians. Continues introduction of families and classifications of medications including nervous system, respiratory system, endocrine system, ophthalmic system, gastrointestinal system, immune system and neuromuscular system, and further discussion of aseptic including infectious diseases and antibiotics; also overview of general anesthetic which includes IV fluid physiology, emergency medications, sedation, laboratory tests and values, anaphylaxis, malignant hyperthermia, transfusions; pediatric anesthesiology, obstetric anesthesia. **Prerequisite:** MTH095 (or higher); and completion of PHM243 with a grade of C or better; and concurrent enrollment in ANES104 and BI234; or consent of instructor.

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 a prior learning portfolio, 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.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PS201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PS207; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PS250 Introduction to Law 1
4 class hr/wk, 4 cr.
Introduces the concept of law and lawmaking in the context of the American legal system. Focuses on the process of settling disputes through alternative dispute resolution and the court system. Examines the role of lawyers in the legal process. Provides an overview of criminal law, criminal procedure, and juvenile justice. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

PS251 Introduction to Law 2
4 class hr/wk, 4 cr.
Introduces the concept of civil law and examines each of the major branches of civil law including: Torts, Consumer law, Family Law and Individual Rights and Liberties. Explores contemporary issues in law. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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.

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.

PSY201 Introduction to Psychology: Mind and Body
4 class hr/wk, 4 cr.
Focuses on psychology as a natural science stressing history, methodology, the biological foundations of behavior, human development, sensation, perception, consciousness, learning, and memory. **Prerequisite:** Placement into WR115; or completion of WR090 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PSY202 Introduction to Psychology: Mind and Society
4 class hr/wk, 4 cr.
Focuses on psychology as a social science stressing language, thinking, emotion, motivation, intelligence, personality, health, abnormal behavior, therapy, and social thinking. **Prerequisite:** Placement into RD115, or completion (or concurrent enrollment) of RD080 and RD085, or RD090; and placement into WR115 (or higher), or completion of WR090 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201, or BI212, or BI171, or BI231; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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, or completion (or concurrent enrollment) of RD080 and RD085, or RD090; and placement into WR115 (or higher), or completion of WR090 (or higher); or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

PSY239 Abnormal Psychology
4 class hr/wk, 4 cr.
Provides a broad overview of abnormal psychology. Includes assessment and classification of psychological disorders, and biological and environmental factors associated with psychopathology, treatment, and ethical legal issues. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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 globe. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.) **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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of PSY201; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

Reading
See also SSP—Study Skills

RD085 College Reading
3 class hr/wk, 3 cr.
Provides instruction, in conjunction with XRD5320A, in an intensive practice with active reading strategies in order to achieve a variety of learning goals. Students practice a study reading process to understand and use information from college-level texts. Includes application of study reading skills to specific academic disciplines and career fields. **Prerequisite:** Placement into RD085; and concurrent enrollment in XRD5320A; or consent of instructor.

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.

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. Placement into RD115; or completion RD085 or RD090; or consent of instructor. Also placement into WR090; or completion of WR080; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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.

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.,Zorastrianism, 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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

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 higher); or completion of WR115 (or higher) with a grade of C or better. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

Renewable Energy Management
See also ELT—Electronics Technologies

RNW110 Solar Energy Systems
2 class hr/wk 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.

RNW120 Wind Energy Systems
2 class hr/wk 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.

RNW130 Biomass Energy Systems
2 class hr/wk 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.

RNW140 Hydroelectric and Geothermal Energy Systems
2 class hr/wk 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.

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.

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 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.)

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.)

Student Leadership Development

SLD101 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.

SLD121A Student Mentor TRIO/ CAMP
1 class hr/wk 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.

SLD121B Personal Mentoring
1 class hr/wk 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.

SLD121C Peer to Peer Mentoring
1 class hr/wk and 3 lab hr/wk, 2 cr.
Builds on and expands mentoring and community leadership skills. Complements and enhances SLD121B and SLD121D. 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.

SLD121D Critical Mentoring
1 class hr/wk and 3 lab hr/wk, 2 cr.
Expands on and wraps up mentoring, community leadership, and college access skills developed in SLD121B and SLD121C. Teaches student to facilitate their mentees' transitions to high school or college, and to transfer the skills they learned to other classes, to their career, and to other community engagement opportunities. Guides mentees through a mini-lesson and 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.

SLD123 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.

SLD124 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:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; and 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.

SLD125 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of SLD124; and be a member of the incoming Associated Students of Chemeketa (ASC) Executive Board; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

SLD126 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:** Placement into WR115 (or higher), or completion of WR090 (or higher); and completion of SLD125; 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. (All prerequisite courses must be completed with a grade of C or better.)

SLD127A 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.

SLD127B 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.

SLD127C 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.

SLD127D Latino Culture Through 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.

SLD128 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.

SLD129 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:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; and must be hired in a Student Retention and College Life Leadership position.

SLD140 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.

SLD141 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:** SLD140 with a grade of C or better; or consent of instructor.

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.

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.

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.

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.

SLP284 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.)

SLP285 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.

SLP286 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, each with a grade of C or better; or consent of instructor.

SLP287 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.

SLP288 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.

SLP289 SLPA Practicum 1

1 class hr/wk 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.

SLP290 SLPA Practicum 2

1 class hr/wk 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:** SLP289 with a grade of C or better; or consent of instructor.

SLP291 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.

SLP292 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, each with a grade of C or better; or consent of instructor.

SLP293 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, each with a grade of C or better; or consent of instructor.

SLP294 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, each with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **CL**

Soil Science

See also HOR—Horticulture

SOIL205 Soil Science

3 class hr/wk 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.

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.

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.)

SPN111, 112, 113 Beginning Spanish Conversation, Terms 1, 2, 33 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 (With a C or better.); SPN113: SPN112, 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 higher) with a grade of C or better; or consent of instructor.

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.)

SPN160 Spanish for Educators

4 class hr/wk, 4 cr.

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, p lus 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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

SPN201, 202, 203 Second Year Spanish, Terms 1, 2, 3

4 class hr/wk, 4 cr. each

Provides extensive practice in all four language skills (reading, writing, speaking, listening). Includes cultural and literary readings and an in-depth review and expansion of basic Spanish grammar and vocabulary, as well as a broadening of the student's understanding of Hispanic culture. All classroom interaction (both by instructor and students) takes place in Spanish. **Recommended:** SPN201: 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.)

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 (With a grade of C or better.); SPN212: SPN211, or three years of high school Spanish (With a grade of C or better.); SPN213: SPN212, or three years of high school Spanish. (With a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

SPN214, 215, 216 Heritage Spanish 1, 2, 3

4 class hr/wk, 4 cr. each

Develops reading, writing, speaking and grammar skills that emphasize critical thinking and professional use of Spanish. Builds student identity and pride in Hispanic cultures, and deepends understanding and appreciation of cultural and liguistic diversity. All classroom interaction takes place in Spanish. Offers students the opportunity to prepare for and obtain the Oregon State Seal of Biliteracy in Spanish. **Recommended:** SPN214: None; SPN215: SPN214; SPN216: SPN215. (All with a grade of C or better.) **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better or consent of instructor; and Native Spanish speaker (grew up speaking Spanish at home). Students are expected to be familiar with the written language.

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.)

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor.

SSC290 Introduction to Research

4 class hr/wk, 4 cr.

Focuses on the basic skills essential to ethical conduct of research in the biomedical and social sciences. Covers research misconduct, conflict of interest, use of human and non-human animal subjects in research, research collaboration, peer review, data acquisition and ownership, responsible authorship an publishing, the scientist as a responsible member of society, contemporary and historical issues in biomedical ethics, and the environment and societal impacts of scientific research. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; and consent of instructor.

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 RD085; or consent of instructor.

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.

SSP112 Effective Learning

3 class hr/wk, 3 cr.

Develops active and effective learning strategies to meet learning challenges in academic and career settings. Develops metacognition, note taking, textbook study-reading, time management, test-taking and memory strategies. Identifies the importance of using campus and academic resources. **Prerequisite:** Placement into RD090; or, completion of RD085; 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.)

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.

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.

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.

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.

SSP125 Learning Strategies for Online Students

1 class hr/wk, 1 cr.

Online course prepares students to manage responsibilities and technology for online class success. Covers learning strategies and skills necessary to accomplish online goals.

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. Each course (A-Q) is repeatable a maximum of 9 times. The program is designed to prepare each participant to be competitively employable for an entry-level position that has been mutually agreed to by the student, the funding or sponsoring agency (if a part of training program) and OST staff.

Visual Communications

See also ART

VC111 Intro to Visual Communications

4 class hr/wk, 4 cr.

Presents an overview of visual communication design. Includes explorations in problem-solving, creative strategies, ethics, and potential career paths. **Prerequisite:** Admission in the Visual Communications program; or consent of instructor.

VC114 Intro to Digital Graphics 1

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

Introduces students to raster and vector image editing software for graphic and multimedia artists. Includes instruction in professional software used in photo editing, multimedia editing, and vector illustration. **Prerequisite:** Admission into the Visual Communications program; or consent of instructor.

VC115 Intro to Digital Graphics 2

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

Introduces students to software and tools for creating work in both print and web design for graphic designers. Includes instruction in page layout software for creating documents for print, and design and development techniques used in the creation of basic websites. **Prerequisite:** VC114 with a grade of C or better; or consent of instructor.

VC130 PhotoShop 1

1 class hr/wk 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.

VC133A InDesign 1

1 class hr/wk 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.

VC139 Illustrator 1

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

Introduces the use of vector graphic software Illustrator. **Prerequisite:** Previous computer experience; or consent of instructor.

VC140 Illustrator 2

1 class hr/wk 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.

VC147 Cascading Style Sheets

1 class hr/wk 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.

VC224 Layout 1: Page Design

2 class hr/wk 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:** VC115 and ART224, each with a grade of C or better; or consent of instructor.

VC225 Layout 2: Intermediate Page Design

2 class hr/wk 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.

VC226 Layout 3: Publication Design

2 class hr/wk 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.

VC235 Interface Design

2 class hr/wk and 2 lab hr/wk, 4 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, each with a grade of C or better; or consent of instructor.

VC237 Web Design 1

2 class hr/wk 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.

VC238 Web Design 2

2 class hr/wk 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.

VC239 Web Design 3

2 class hr/wk 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.

VC241 Interactive Media

2 class hr/wk 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, each with a grade of C or better; or consent of instructor.

VC243 Animation and Motion Graphics 1
2 class hr/wk and 4 lab hr/wk, 4 cr.
Covers concepts, methods, and techniques of creating animations and motion graphics. Surveys a range of traditional animation methods and principles as well as explores the art of storytelling through the use of storyboarding and implementing various industry standard software and contemporary techniques. **Prerequisite:** ART120 with a grade of C or better; or consent of instructor.

VC244 Animation and Motion Graphics 2
2 class hr/wk and 4 lab hr/wk, 4 cr.
Applies the principles of animation and motion graphics using industry standard software and techniques. Includes animated branding as well as developing a short animation project by first scripting and storyboarding the project, then using both traditional and contemporary techniques to animate it. **Prerequisite:** VC243 with a grade of C or better; or consent of instructor.

VC246 File Prep
2 class hr/wk and 2 lab hr/wk, 4 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, image color correction, PDF files, and final proofing and output. **Prerequisite:** VC115 with a grade of C or better; or consent of instructor.

VC271A-VC273A Design Studio
1–3 class hr/wk, 1–3 cr. each
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:** ART225 and VC224, each with a grade of C or better; or consent of instructor.

VC271B-VC273B Web Studio
1–3 class hr/wk, 1–3 cr. each
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.

VC271C-VC273C Photo Studio
1–3 class hr/wk, 1–3 cr. each
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.

VC272D Multimedia Arts Studio
2 class hr/wk, 2 cr.
Provides the opportunity to work with an instructor on the production of multimedia arts 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 ART120 (or concurrent) with a grade of C or better; or consent of instructor.

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

VC284 Portfolio
2 class hr/wk 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 and consent of instructor. **Corequisite:** VC283

VC285A Design Portfolio Preparation
1 class hr/wk 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.

VC285B Web Portfolio Preparation
1 class hr/wk 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.

VC286 Multimedia Arts Portfolio
2 class hr/wk and 4 lab hr/wk, 4 cr.
Serves as a capstone course for all students pursuing a Multimedia Arts degree in the Visual Communications program. Includes resumes, branding, business, and the analysis and reworking of previous projects and the development of new projects to include in a digital portfolio or demo reel to assist students in getting started on a career path. **Prerequisite:** Second-year standing in the Visual Communications program and consent of instructor.

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.

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.

VMW103 Vineyard Tractor and UTV Operation
3 class hr/wk, 3 cr.
Establishes and reviews safety rules and guidelines for the protection of workers and property relating to agricultural tractors and utility terrain vehicles (UTV).

VMW114 Winter Vineyard Practices
3 class hr/wk 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.

VMW115 Spring Vineyard Practices
3 class hr/wk 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.

VMW116 Summer Vineyard Practices

3 class hr/wk 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. VMW114 and VMW115, both with a grade of C or better; or consent of instructor.

VMW117 Fall Vineyard Practices

3 class hr/wk and 2 lab hr/wk, 4 cr.
Surveys fall vineyard management practices. Focuses on harvest practices, harvest contracts, and ripening parameters. Compares different ripening characteristics for a variety of clones and rootstocks. Covers fall canopy management, disease problems, and weather effects on ripening. **Prerequisite:** VMW114, VMW115, and VMW116; or consent of instructor. (All prerequisite courses must be completed with a grade of C of better.)

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.

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.

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.

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.

VMW170 Selling and Marketing Wine

3 class hr/wk, 3 cr.
Explores the marketing and selling of wine in Oregon. Introduces concepts and topics useful to winery and vineyard owners/managers, with a focus on direct-to-consumer (DTC) marketing personnel, such as tasting room and wine club managers.

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: MTH095 (or higher);** CH110, or CH121, CH122 and CH123; VMW101; VMW122; and VMW131; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

VMW224 Chemical Analysis of Must and Wine

3 class hr/wk 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.

VMW225 Wine and Food Microbiology

3 class hr/wk and 2 lab hr/wk, 4 cr.
Survey the history, anatomy, and physiology of microorganisms emphasizing food, beverage, and food additive production. Examine the anatomy, taxonomy, metabolic pathways, and growth of food microbes. Cover spoilage organisms and the impact on food and wine production.

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.

VMW233 Sensory Evaluation of Wine Components

3 class hr/wk, 3 cr.
Stresses sensory evaluation of wine components. Surveys the most important components commonly found in table wines. Emphasizes identification of components through tasting a series of wines which have been constructed to show the effects of steadily increasing the amount of the component in a wine. **Prerequisite:** VMW222 with a grade of C or better; or consent of instructor.

VMW244 Wine Production

4 class hr/wk 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:** VMW101, VMW122, and VMW131; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better).

VMW245 Wine Clarification and Stabilization

2 class hr/wk 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 with a grade of C or better; or consent of instructor.

VMW246 Wine Aging, Filtration, and Bottling

3 class hr/wk 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.)

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 work place safety. **Prerequisite:** VMW122 with a grade of C or better; or consent of instructor.

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.

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.

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.

VMW263 Organic and Biodynamic Viticulture
4 class hr/wk, 4 cr.
Covers the principles, practices and certification processes of organic and biodynamic viticulture systems. Investigates theory and applied integrated approaches for vineyards managed under the above systems. Develops planning and decision-making skills involved in implementation of organic and biodynamic viticulture. Reviews certification and conversion processes

VMW280B-L Wine Studies Internship
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:** VMW222 with a grade of C or better; and must be in the last term of Vineyard Management and/or Winemaking program. Instructor approval required.

Welding Fabrication

WFB088 Fabrication Practices 4
1 class hr/wk and 6 lab hr/wk, 3 cr.
Includes instruction and experience in production-type welding with use of jigs, fixtures, and positioners.

WFB096 Shop Projects
1 class a hr/wk and 3 lab hr/wk, 2 cr.
A course designed to provide practical experience in maintenance and repair of weld shop machines, accessories, and fixtures. Selected fabrication and repair projects are also used to develop resourcefulness and confidence in the application of skills and knowledge developed in concurrent courses. **Prerequisite:** Concurrent registration as a full-time student in the Welding Technology program; or consent of Program Chair.

WFB097 Welding Shop Problems 2
1 class hr/wk 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 Technology program; or consent of program chair.

Welding

WLD059 Ornamental Iron Work
1 class hr/wk and 3 lab hr/wk, 2 cr.
Introduces the design and creation of metal sculpture and decorative structures through welded fabrication.

WLD105 Introduction to Welding
2 class hr/wk 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.

WLD151 Basic Arc Welding
2 class hr/wk 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.

WLD152 Intermediate Arc Welding
2 class hr/wk 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.

WLD153 Advanced Arc Welding
1 class hr/wk and 7 lab hr/wk, 4 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.

WLD155 Fabrication Procedures
1 class hr/wk 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 basic welding fabrication projects in a job shop environment. Also includes job search techniques. **Prerequisite:** Third-term standing in the Welding Technology program; or consent of program chair.

WLD156 Blueprint Reading and Sketching
2 class hr/wk and 7 lab hr/wk, 5 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.

WLD157 Introduction to Layout and Fabrication
1 class hr/wk and 4 lab hr/wk, 3 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.

WLD161 Basic MIG Welding
1 class hr/wk 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.

WLD162 Intermediate MIG Welding
1 class hr/wk 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.

WLD163 Advanced MIG Welding
1 class hr/wk 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 program chair; or consent of program chair.

WLD170 Oxyacetylene Processes
1 class hr/wk and 6 lab hr/wk, 3 cr.
Familiarizes the student with the safe use, care, and operation of oxyacetylene welding, brazing, and cutting equipment.

WLD173 Basic TIG Welding
1 class hr/wk 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 Technology program; or consent of program chair.

WLD177 Welding Processes
2 class hr/wk 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.

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.

WLD197 Welding
1 class hr/wk 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.

WLD256 Fabrication Practices 1
1 class hr/wk and 7 lab hr/wk, 4 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 Technology program; or consent of program chair.

WLD257 Fabrication Practices 2
1 class hr/wk and 7 lab hr/wk, 4 cr.
Studies of metal fabrication technology. Includes a comprehensive overview of economic and cost factors related to this field (equipment and consumable costs, labor costs), as well as time studies regarding various welding processes. **Prerequisite:** Fifth-term standing in the Welding Technology program; or consent of program chair.

WLD258 Welding Shop Problems
2 class hr/wk 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 Technology program; or equivalent industrial experience as determined by program chair; or consent of program chair.

WLD270 Advanced Oxyacetylene Processes
4 lab hr/wk, 2 cr.
Studies safe use and care of oxyacetylene cutting and welding equipment, used for cutting, welding steel, and other ferrous alloys. **Prerequisite:** Fifth-term standing in the Welding Technology program; or consent of program chair.

WLD273 Advanced TIG Welding
4 lab hr/wk, 2 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:** Fifth-term standing in the Welding Technologyprogram; or consent of program chair.

WLD277 Advanced Welding Processes
4 lab hr/wk, 2 cr.
Continues the instruction and demonstration of advanced shielded metal arc welding (SMAW), metal inert gas welding (MIG), and air arc (AAC) procedures. **Prerequisite:** Fourth-term standing in the Welding Technology program; or consent of program chair.

WLD280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience

Writing
See also SSP—Study Skills

WR080 Basic Writing
3 class hr/wk, 3 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; and concurrent enrollment in XWR5350A; or consent of instructor.

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.

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. **Prerequisite:** WR088 with a grade of C or better; or equivalent course as determined by instructor; or consent of instructor.

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.

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.

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.

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.

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.

WR115 Introduction to Composition
4 class hr/wk, 4 cr.
Introduces the expectations of college-level writing, reading, and thinking. Students will learn the conventions and skills of college-level writing, practice analyzing, responding to, and making use of college-level texts, and will learn to think about the many ways and reasons writing projects are created. They will produce multiple kinds of writing projects for a variety of purposes and audiences. **Prerequisite:** Placement into WR115; or completion of WR090 with a grade of C or better.

WR121 Academic Composition
4 class hr/wk, 4 cr.
Writing 121, Academic Composition, focuses on college-level writing, reading, and thinking. Students will use the conventions and skills of college-level writing, including research and formal citations, to produce compositions including essays and at least one other genre, for a variety of purposes and audiences. The class will introduce multimodal composing strategies. Students will analyze, respond to, and make use of college-level texts. They will consider and reflect upon their own participation and the many ways and reasons compositions are created. **Prerequisite:** Placement into WR121; or completion of WR115 (or higher), with a grade of C or better. **IL**

WR122 Argument, Research, and Multimodal Composition
4 class hr/wk, 4 cr.
Continues the focus of WR 121 in its review of rhetorical concepts and vocabulary, in the development of reading, thinking, and writing skills, along with metacognitive competencies understood through the lens of a rhetorical vocabulary. Specifically, students will identify, evaluate, and construct chains of reasoning, a process that includes an ability to distinguish assertion from evidence, recognize and evaluate assumptions, and select sources appropriate for a rhetorical task. Students will employ a flexible, collaborative, and appropriate composing process, working in multiple genres, and utilizing at least two modalities, one of which must be writing. **Prerequisite:** WR121 with a grade of C or better. **IL**

WR227 Technical Writing
4 class hr/wk, 4 cr.
Successful completion of WR227 prepares students to produce instructive, informative, and persuasive documents. Technical documents, often based on complex information, aimed at well-defined and achievable outcomes. The purpose and target audience determine document design, style, vocabulary, sentence and paragraph structure, and visuals. WR227 is grounded in rhetorical theory and focuses on producing usable, reader-centered content that is clear, concise, and ethical. Students will engage in gathering, reading, and analyzing information, work individually and in groups, and to learn strategies for effective communication in the digital, networked, global workplace. **Prerequisite:** WR121, WR122, or BA214; or consent of instructor. (All prerequisite courses must be completed with a grade of C or better.)

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.)

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.)

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.)

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.)

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.)

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.)

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.

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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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. **Prerequisite:** Placement into WR115 (or higher), or completion of WR090 (or higher) with a grade of C or better; or consent of instructor. **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, 2021

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

Aguirre, Blanca A—Counselor-Student Support Services
MS, Counseling — Oregon State University
BA, Psychology — Western Oregon University

Alexander, Karen L—Director-Student Accessibility Services
MA, Psychology — National-Louis University
BA, Behavioral Science — National-Louis University

Alpernas, Gregori Z (Grisha)—Director-Information Technology
MPA, Public Administration — Portland State University
MS, Mathematics — Vilnius State University-Lithuania
MA, Education — Vilnius State University-Lithuania

Alvarez, Maria E (Cleo)—Counselor-Student Support Services
MS, Counseling — Western Oregon University

Alvarez, Rory—Director-Facilities and Operations
AAS, Licensure, Journeyman Electrica — Lane Community College

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

Archer, Angela S—Coordinator-TRiO Student Support Services (SSS) &Disability Student Support Services (DSSS)
MS, Academic Advising — Kansas State University
BS, Biology — Oregon Institute of Technology

Bailey, Christie N—Instructor-Nursing
PHD, Nursing — Florida Atlantic University
MSN, Nursing — Florida Atlantic University
BSN, Nursing — Florida Atlantic University

Ballard, Justus D—Instructor-Composition/Literature
MFA, Creative Writing — Antioch University
BA, English — University of California-Los Angeles

Barber, Wayne G—Instructor-Mathematics
MS, Teaching: Mathematics — University of Oregon
BS, Mathematics — University of Oregon

Barrett, Deroll A—Coordinator-Job Corps
BS, History — University of the West Indies
Diploma, Teaching/History and Geography — Mico Teacher's College-Jamaica

Beach, Natalie D—Dean-Library & Learning Resources
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

Berenguer, Bryan J—Instructor-Vineyard Management
MS, Viticulture and Oenology — Vinifera Euomaster Program Montpellier SupAgro-France; Bordeaux Sciences Agro-France; Hochschule Geisenheim University-Germany
MS, Forestry — North Carolina State University
BS, Biology — Davidson College

Bermingham, Jordan M—Executive Director-Corrections Education
MS, Education — Portland State University
BA, Psychology — American University

Bernhisel, Donna J—Instructor-English/Writing
PHD, Education — Oregon State University
MA, English — Utah State University
BS, Social Work — Brigham Young University

Bledsoe, Karen E—Instructor- Life Science/Biology
PHD, Science — Oregon State University
MAT, Teaching Program — Willamette University
BS, Biology — Willamette University

Borden, Tiffany E—Counselor-Student Support Services
MS, Counseling — Western Oregon University
BA, Liberal Arts — Stephens College

Brase, Donald L (Don)—Executive Dean-General Education & Transfer Studies
MA, English — University of Montana
BA, English — University of Washington

Brose, Johnathan M (Johnny)—Instructor-Wine making
BS, Fermentation Science/Chemistry — Oregon State University

Buckholz, Cheryl J—Instructor-Pharmacy Technician
PHD, Pharmacy — Oregon State University
BS, Botany — Oregon State University

Bunch, Kathleen M (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, Michele LH—Reference Librarian
MLS, Library Science — Emporia State University
BA, Philosophy — Portland State 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)—Chief Diversity Officer
MBA, Business Administration — George Fox University
BA, Mass Communication/Journalism — Centro Universitario do Sul de Minas

Camp, Reanna L—Instructor-Physical Science
MS, Geology — East Carolina University
BS, Geology — University of Nebraska

Cheyne, Larry D—Dean-Applied Technologies
MS, Sport Management — California University of Pennsylvania
BA, English — Drake University

Christensen, Autumn—Instructor-Physical 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

Clark, Corey R—Instructor-Pharmacy Technician
AAS, Pharmacy Management — Chemeketa Community College
CERT, Pharmacy Technician — Chemeketa Community College

Claysmith, Christopher S—Instructor-Astronomy-Planetarium
MA, Astronomy — Boston University
BS, Physics — Oregon State University

Clemetsen, Bruce A—Vice President Student Affairs
PHD, Philosophy — Bowling Green State University
MA, College & University Administration — Michigan State University
BS, Biology & Economics — Willamette 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

Coleman, Beverly J—Instructor-Nursing-Clinical
MBA — Cumberland University
MS, Nursing — Western Governors University
BS, Nursing — Western Governors University

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

Covey, Brian L—Instructor-Automotive
AAS, Automotive Technology — Mt. Hood Community College

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

Darby, Sydney L—Instructor-English
MA, English — Boston College
BA, English — Portland State University

Darland, Joshua D—Instructor-Fire Protection Technician
AAS, Emergency Management — Clackamas Community College
NFPA Certificates — Department of Public Safety Standards & Training

Davis, Cheryl M—Instructor-Health Information Management
MBA — George Fox University
BS, Health Education — University of Oregon

Davis, Paul A—Director-Wine Studies & 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

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

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

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

Evans, Michael A (Mike)—Dean-Student Retention & College Life
MS, Counseling — Western Oregon University
BS, Psychology — Corban College
AA, Refrigeration/Heating/Air Conditioning — Linn-Benton Community College

Evans, Paul L—Instructor-Communications
MAT, Teaching — Lewis and Clark College
MA, English — Portland State University
BA, English — University of Arizona

Ewing, Demitrus D—Instructor-Psychology
MS, Psychology — Oakland University
BS, Psychology — Grand Valley State University

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—Dean/Registrar-Student Recruitment, Enrollment & Graduation Services
EDM, College Student Services Administration — Oregon State University
BS, Business Administration — Oregon State University

Furey, Kevin P—Instructor-Economics
PHD, Economics — University of Washington
BA, Chemistry — California State University

Gabbard, Marie L (Murry)—Dean-Life and Physical Science
MS, Animal Sciences — California State Polytechnic University
BS, Agronomy — Colorado 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

Gaterud, Abbey—Director-Chemeketa Press
MAT, Education Marylhurst University

Gilliard, Heidi—Director-Institutional Research & Reporting
MED, Education Arizona State University
BA, Business Administration-Marketing University of Wisconsin

Goldblatt, Heather N—Instructor-Adult Basic Education
MAT, Education Marylhurst University

Gonzalez, Megan E—Instructor-Criminal Justice
BS, Chemistry/Forensic Science Western Oregon University

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 P—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

Griffith, Ellen M—Instructor-Nursing
MS, Nursing Western Governors University
BS, Nursing Western Governors University
BS, Biotechnologies Montana State University
AS, Nursing Miles Community College

Grotewohl, Herbert A—Instructor-Physics
MS, Physics University of Oregon
BS, Physics Colorado State University

Guerra, Manuel—Executive Dean-Student Development & Learning Resources
BA, Social Sciences Portland State University
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—Vice President-Governance & Administration
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

Hastings, Sara MB—Dean-High School Partnerships
MED, School Counseling & Guidance University of Arizona
BA, Communication University of Arizona

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

Hensel, Kaley—Instructor-Horticulture
MS, Plant, Insect, & Microbial Sciences University of Missouri
BS, Soil, Atmospheric & Environmental Sciences University of Missouri

Herman, Silvia C—Instructor-Spanish
MA, Spanish University of Oregon
BA, Linguistics University of Oregon
AAOT Mt. Hood Community College

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MSW, Social Work Portland State University

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

Hibbeler, Duane M—Instructor-CAD/CAM
AS, Industrial Mechanical Technology Chemeketa Community College

Hillis, H. David—Instructor-Mathematics
MS, Mathematics Colorado School of Mines
BS, Engineer Physics Colorado School of Mines

Hillyer, Rebecca L—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 StudiesOccidental 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—Assistant Director-Financial Aid
BS, Sociology Western Oregon University

Hoffman, Danielle A—Director-Student Services YVC
MA, Counseling Lakeland University
BS, Consumer Science University of Wisconsin-Madison

Hornibrook, Debra C (Debbie)—Instructor-Communication
EDD, Educational Leadership: Curriculum & Instruction Portland State University
MS, Speech Communication Portland State University
BS, Psychology Portland State University

Howard, Jessica H—President/Chief Executive Officer
PHD, Performance Studies New York University
MMUS, Music Theory Rice University, Shepherd School of Music
BA, English Rice University
BMUS, Music Theory Rice University, Shepherd School of Music
AA, Music San Antonio College

Hughes, Mary T—Instructor-English as a Second Language
MA, TESOL Seattle Pacific University
BS, Business Administration-International Business Rochester Institute of Technology

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PHD, Education California State University-Fullerton
MS, Public Administration California State University-Fullerton
BS, Zoology California State University-Long Beach

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Master of Library & Information Science Dominican University
BA, Sociology California State University-Fullerton

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MA, English Portland State University
BA, English Willamette University
AAOT, Lower Division Oregon Transfer Chemeketa Community College

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AAS, Emergency Medical Technology Chemeketa Community College

Jensen, Erik L—Instructor-Physical Science
MS, Physics Oregon State University
BS, Physics Portland State University

Johansen, Barbara W—Instructor-Office Administration and Technology
MBA, Business Administration Portland State University
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Johns, Jennifer S—Instructor-Life Science
PHD, Ecology and Evolution Rutgers
BA, Biology and German Duke University

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MMUS, Music University of Maryland College
BA, Music Oregon State University

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 MB—Student Equity & Intercultural Programs
BA, Spanish University of Oregon
AA, Speech Communication Clatsop Community College

Kato, Christopher T (Chris)—Dean-Academic Development
MA, Linguistics University of New England
MA, Education University of Phoenix
BS, Biology Brigham Young University-Hawaii

Keechle, Brian S—Instructor-Welding/Fabrication
AAS, Welding Technology Clackamas Community College
AA, General Studies Clackamas Community College

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

Kinkade, Michael W—Interim Vice President/Chief Information Officer
BA, Management & Organizational Leadership George Fox University
AS, General Studies Linn-Benton Community College

Kittelson, Lorene F—Instructor-Nursing
MSN, Nursing, Leadership in Health Care Systems Grand Canyon University
BSN, Nursing Grand Canyon University
AAS, Nursing Chemeketa Community College

Klein, William R (Bill)—Instructor-Fire Protection Technology
AAS, Fire Protection/Fire Suppression Chemeketa Community College

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—Coordinator-College Assistance Migrant Program (CAMP)
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

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

Lazzara, Edward J (Ed)—Instructor-Spanish
MA, Romance Linguistics & Literature University of California-Los Angeles
BS, Mathematics Montclair State College

Leon-Cipriano, Laura J—Coordinator-High School Equivalency Program (HEP)
BA, Social Science Western Oregon University
BA, Spanish Western Oregon University

Lenox, Stephanie B—Instructor-Chemeketa Press
MFA, Creative Writing University of Idaho
BA, English Whitworth University

Limbird, Marty W—Instructor-Physical Education
MAT, Education University of Portland
BA, Athletic Training Linfield College

Liss, Layli—Associate Dean-Center for Academic Innovation
MED, Education University of St. Thomas
BA, International Studies DePaul University

Lomax, Jillian M (Jill)—Instructor-Dental Assisting
MA, Adult Education Oregon State University
BS, Interdisciplinary Studies: Health & Social Science Western Oregon University
AAOT, Dental Assisting Program Chemeketa Community College

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, 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

Mariger, Heather A—Instructor-Accessibility Advocate
PHD, Instructional Technology Utah State University
MS, Institution Management Kansas State University
BA, Hotel/Restaurant Administration University of Nevada-Las Vegas
AA, Culinary Arts Paul Smith College

Marrow, Taylor A—Instructor-History
MA, History Ball State University
BA, History Indiana University
BA, Telecommunications Indiana University

Martinez, Eduardo F—Instructor-Adult Basic Education
BA, Liberal Studies/Bilingual Education Loyola Marymount University-LA

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

Mathis, Jon B—Director-Title IX/Professional Development
PHD, Candidate Azusa Pacific University
MED, College Student Affairs Azusa Pacific University
BA, Communication Biola University

McDaniel, Heather M—Director-Human Resources
MA, Conflict Resolution Portland State University
BA, Humanities Western Oregon University

McLaran, Diane L—Director-Community Relations
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

McNicholas, James P—Coordinator- Accelerated Pathways to Success
BA, History, Spanish University of Oregon
BSBA, Business Administration-Finance Old Dominion University

Meiner, Karl J—Instructor-High School Programs
MAT, Teaching Lewis and Clark College
MA, English Portland State University
BA, English University of Arizona

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MSED, Student Affairs Administration in Higher Education University of Wisconsin-La Crosse
BA, History-Secondary Education Endorsement Clarke University

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Course Work, Travel Operations Chemeketa Community College

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MED, College Student Services Administration Oregon State University
BS, Psychology/Human Services Corban College
CERT, Career Development/Facilitator Training Chemeketa Community College

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MA, Mathematics — Oregon State University
BS, Mathematics — Western Oregon University

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EDD, Educational Administration — Brigham Young University
MA, Health Education — University of Northern Colorado
BA, Health Education — University of Northern Colorado
BS, Nursing — Metropolitan State College
DIPL, Nursing — Akron General Hospital and School of Nursing

Monson, Bryan R—Instructor-Office Administration and 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

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EDD Education — University of Portland
MS, Education — Portland State University
BA, English — Lewis and Clark College

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Police Officer Training Certificates — DPSST-Oregon
Criminal Justice Studies — Chemeketa Community College

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MA, Christian Counseling Psychology — Western Evangelical Seminary

Murphy, Bernadette—Instructor-Nursing
MSN, Nursing Education — University of Phoenix
MBA — City University
BSN, Nursing — San Jose State University

Myers, Michael J (Mike)—Instructor-Welding/Fabrication
AS, Welding — Chemeketa Community College

Navarro, Yesica Y—Coordinator-Completion Program
AS, General Studies — Chemeketa Community College

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MS, Chemistry: Organic — University of Illinois Urbana
BA, Chemistry — Central University of Iowa

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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

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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—Executive Director-Chemeketa Center for Business & Industry
MBA, Administration — George Fox University
BA, Management — George Fox 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—Tutoring Center Coordinator
MS, Museum and Field Studies — University of Colorado
MS, Ecology and Evolutionary Biology — Iowa State University
BS, Geosciences — University of Arizona

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

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

Potts, Christopher I (Chris)—Associate Dean-Counseling & Career Services
PHD Candidate, Adult & Higher Education — Oregon State University
Graduate Certificate, Student Affairs in Higher Education — Portland State University
MS, Conflict Resolution — Portland State University
BA, Criminal Justice — Washington State University

Powell, Kelsie E—Instructor-Nursing
MSN, Nursing — Johns Hopkins University

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
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

Radu, Kara M—Instructor-Dental Assisting
BS, Human Services University of Phoenix
AAOT, Lower Division Transfer
Chemeketa Community College
CERT, Dental Assisting Chemeketa Community College

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MA, Bilingual/Multicultural Education University of Arizona
BS, Human Development
California Polytechnic State University
AA, General Education Ventura County Community College

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

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MS, Mathematics University of Texas-San Antonio
BS, Mathematics University of Texas-San Antonio

Roache, Marshall M—Executive Dean-Career & Technical Education
MA, Liberal Studies Fort Hays State University
BA, English University of Oregon

Rogers, Doug P—Instructor-Automotive
AAS, Automotive Technology Chemeketa Community College
Continuous Training-Multiple Categories
General Motors Center of Learning/Service Technical College

Rollins, Bryan D—Instructor-Adult Basic Education
MA, TESOL Portland State University
BA, Spanish Western Oregon University

Romine, Erika P—Instructor-Early Childhood Education
MA, Marriage & Family Therapy Northwest Christian University
BS, Psychology University of Oregon

Ruby, Kevin L—Instructor-Diesel Technologies
BS, Automotive Technology Montana State University-Northern

Rupert, Jill N—Instructor-English
PHD, English Tulane University of Louisiana
MA, English Tulane University of Louisiana
BA, English Whitman College

Russell, Keith A—Dean-Liberal Arts
PHD, English Southern Illinois University
MA, English/TESOL Southeast Missouri State University
BA, English Northeast Missouri State University

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

Saffary, Timor—Dean-Math, Engineering & Computer Science
PHD, Mathematics Helmut-Schmidt University
PHD, Physics University of Hamburg
MS, Mathematics University of Hamburg
MS, Physics University of Hamburg
Vocational Degree, Chemical Technical Assistant
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Salinas-Oliveros, Rebecca—Cooperative Work Experience Coordinator
MS, Education: Policy Foundation & Administration
Portland State University
BS, Human Development & Family Science
Oregon State University

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MBA, General Management Marylhurst University
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
AAS, Manufacturing Engineering Technologies-Mfg. Tech
Chemeketa Community College

Scholer, Andrew—Instructor-Computer Science
MS, Computer Sciences University of Southern California
BS, Science University of California-Los Angeles

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PHD, Biology: Plant University of California-Berkeley
BA, Biology Knox College

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BA, History Oregon State University

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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

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MA, English Portland State University
BA, History Mount Holyoke College

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MA, Anglo-Irish Literature Trinity College-Dublin
BA, English Literature/Spanish Language Pacific University
CERT, TEFL College of Ireland

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MBA, Master of Business Administration Marylhurst University
BS, Business Management Marylhurst University
AAS, Electronic Engineering Chemeketa Community College

Sessions, Patricia M (Patti)—Instructor-Office Administration and Technology
PMSC, Computers in Education University of Oregon
MS, Business Education Montana State University
BS, Business Montana State University

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BS, Dental Hygiene Oregon Institute of Technology
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MBA, Business Administration Texas A&M University-Commerce

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AAOT, General Studies Chemeketa Community College

Steiger, Christina R—Instructor-Human Services
MED, Counseling University of Oregon
BS, Psychology Oregon State University
AAOT Linn-Benton Community College

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MED, Business Education Oregon State University
BS, Business Education Oregon State University

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MSW, Social Work Portland State University
BS, Psychology Western Oregon University
AAOT, Lower Division Transfer Chemeketa Community College

Surton, Robert J—Instructor-Computer Information Systems
PHD, Computer Science Cornell University
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BS, Computer Science Rensselaer Polytechnic Institute

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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

Tobey, Allison S—Instructor-English/Writing
MFA, Creative Writing Antioch University
BA, Psychology Grinnell College

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MSN ED, Nursing Walden University
BSN, Nursing Walden University
ADN, Nursing Excelsior College
AAS, Medical Assisting University of Alaska

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

Tufts, Denise—Instructor-Nursing
MSN/ED, Nursing University of Phoenix
BSN, Nursing University of Southern Maine
Diploma, Nursing Linfield-Good Samaritan School of Nursing

Tuss, Halston J—Instructor-Engineering
MS, Civil Engineering Oregon State University
BS, Civil Engineering Oregon State University

Tuss, Lana L—Instructor-Accounting
MS, Taxation Golden Gate University
MM, Management Southern Oregon University
BS, Business Administration-Accounting Portland State University

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MED, Adult Education Oregon State University
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BA, Health Care Administration George Fox University
AGS, General Studies Chemeketa Community College
CERT, Medical Administrative Assistant
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MS, Physiology University of California-San Francisco
BS, Animal Science California Polytechnic State University

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MSE, Information Technology
Western Oregon University
BA, Arts & Letters Portland State University
CERT, Teaching English as a Second Language
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VanStavern, Jan E—Instructor-Composition/Literature
PHD, English University of California-Davis
MA, English University of California-Davis
BA, Creative Writing Oberlin College

Vargo, Michael C—Vice President of Academic Affairs
PHD, Clinical Psychology (APA-accredited) University of Arkansas
MA, Clinical Psychology University of Arkansas
BS, Psychology Grand Valley State University

Vasquez, Robert B—Instructor-Anesthesia Technology/ Certification
American Society of Anesthesia Technologist & Technicians

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

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MA, Mathematics California State University-Fullerton
BA, Mathematics Walla Walla College

Watkins, Carmen R—Instructor-Mechanical Design
BS, Mechanical Engineering University of Alaska Fairbanks

West, Gary E—Instructor-Anesthesia Technician
AS, Medical Assistant City & Guilds of London Institute
CERT, Hospital Operating Department Assistants
NE Thames Regional Health Authority

West, Ryan M—Director-Financial Aid & Veterans' Services
MED, College Student Services Administration
Oregon State University
BS, Business Western Oregon 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, 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

Woods, Edward A (Ed)—Coordinator-Mid-Willamette Education Consortium/Perkins (MWEC)
MED, Education Oregon State University
BS, Elementary Education Western Oregon University
BA, Business/Economics George Fox University

Wu, Jack—Instructor-Accounting/Business Management
MBA, Business Administration—Finance
University of Connecticut

Yamada, Zachary AM—Instructor-Computer Information Systems
MS, Cybersecurity & Information Assurance
Western Governors University
BS, Computer Science University of Oregon

Yancey, Theresa C—Reference Librarian
MLIF, Library Science
University of Washington

Student Rights and Responsibilities

Student Rights and Responsibilities

Adopted July 1, 2017, Revised May 2021

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 through enrollment in a course or program.

B. Student Rights

1. Right to Proper Academic Evaluation
    i. Students have the right to consistent academic evaluation in relation to other students. ii. Students are free to take reasoned exceptions 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.
    ii. Students have the right to be informed about classroom requirements and college policies and procedures.
2. Right to Freedom From Harassment, Discrimination and Retaliation
    i. Chemeketa is committed to providing everyone with an environment focused on learning and growth, free of harassment or discrimination.
    ii. Chemeketa prohibits retaliation against an individual or group of individuals, as outlined in Policy #1750, Harassment/Discrimination
3. RIght to Privacy of Student Records
    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 to Freedom of Association through Student Organizations and 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 participate in self-governing student bodies which provide channels of communication and means for using democratic processes to solve problems.
    iii. Students have the right to participate in the institutional governance and policy formation as defined by the appropriate governing body.
5. Right to Free Expression and Inquiry
    i. 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.
    ii. 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.

College Contact Information

Office of Student Affairs
Salem Campus, Building 2, Room 208 • 503.399.5076
studentconcerns@chemeketa.edu

Student Code of Conduct

A. Introduction

Enrollment in a course or program at Chemeketa Community College requires students and participants 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.

B. Purpose

The purpose of the code of conduct is to support and educate students about the expectations of participating as a member of a learning community, balancing personal rights and community standards in accordance with the Student Rights and Responsibilities.

C. 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.

D. Student Responsibilities

The Student Code of Conduct establishes rules governing academic and social conduct of students, including due process rights.

E. 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. TheVice President of Student Affairs or designee 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. The student conduct code is not a substitute for civil or criminal actions. Students are not denied the opportunity to pursue legal proceedings.

F. Scope

1. The Student Code of Conduct establishes rules governing academic and social conduct of students, including due process rights.
2. 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.

G. Violations of Local, State, and Federal Law

1. 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.
2. The college will cooperate with law enforcement and other agencies in the enforcement of criminal law on campus, in accordance with student privacy laws, as defined by FERPA. Members of the college community, acting in their personal capacities, are free to interact with governmental representatives, as they deem appropriate.

H. Examples of Student Misconduct

This list 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

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:
   a. Any means of assault, abuse, unlawful harassment, intimidation, or threats toward a student, employee, vendor, visitor, or guest of Chemeketa;
   b. Engaging in other forms of unwanted conduct directed at another person that:
      i. Threatens, endangers or harms a person's physical or mental health or their property;
      ii. Creates a reasonable fear of such a threat or action; or
      iii. 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:
   a. Repeated unwanted physical, verbal, or written acts which are hostile or offensive
   b. Cyber stalking or cyber bullying
   c. 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
   d. Behaviors that intimidate, threaten, disrupt, and humiliate individuals or groups vi. Making derogatory remarks that mock, ridicule, condescend or insult
   e. 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 Disruption**—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:

a. 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.
b. 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.
c. 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
d. 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.

   Examples include, but are not limited to:

   a. Any behavior that is disorderly or disruptive to the educational or administrative processes of Chemeketa as determined by a Chemeketa official.
   b. Conduct that interferes with Chemeketa's educational responsibility of ensuring the opportunity for all members of the Chemeketa community to attain their educational objectives.

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:

   a. 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;
   b. 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. **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.
9. **Forgery, furnishing false information, identity theft, or dishonest conduct**

   Examples include, but are not limited to:

   a. Attempts to Defraud
   b. 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.

10. **Gang Activity on Campus**—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.

11. **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. Refer to Policy #5230.

    In response to allegations of hazing under this regulation, it is not a defense that:

    a. The victim gave consent to the conduct;
    b. The conduct was not part of an official organizational event or sanctioned or approved by the organization;
    c. The conduct was not required as a condition of membership in the organization

12. **Alcohol and Drugs: Illegal or Unauthorized Possession/Use**—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.
13. **Weapons: Illegal or Unauthorized Possession/Use**—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, when serving in their professional capacity, are exempt from this policy. The college Public Safety Director in consultation with appropriate Executive Administration, may grant other exemptions for training or safety purposes.
14. Indecent or Lewd Behavior—

    Examples include, but are not limited to:

    a. Indecent exposure
    b. Urinating or defecating in public
    c. Public indecency
    d. Lewd conduct
    e. Obscene Displays
    f. Voyeurism

15. **Misuse or Unauthorized Possession or Use of Public or Private Propert**y

    Examples include, but are not limited to:

    a. Theft or the taking or unauthorized use or possession of public or private property or unauthorized use or acquisition of services.
    b. 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.

16. **Obstruction/Abuse of Student Conduct Process**—

    Examples include, but are not limited to:

    a. Failure to comply with a request to participate in the student conduct process
    b. Falsification, distortion, or misrepresentation of information
    c. Disruption or interference with the orderly process of a conduct investigation
    d. Attempting to discourage an individual's proper participation in or use of the student conduct process
    e. Attempting to influence the impartiality of a conduct officer prior to and/or after the student conduct process
    f. Verbal or physical harassment and/or intimidation of a conduct officer
    g. Failure to comply with decisions, recommendations or sanctions imposed
    h. Influencing or attempting to influence another person to commit an abuse of the conduct process.
    i. Retaliation against any individuals involved in a student conduct case

17. **Refusal to Identify and/or Comply**

    Examples include, but are not limited to:

    a. Refusal to comply with directions of College officials or designees acting in the performance of their duties
    b. Refusal to produce proper identification for a College official when asked.

18. **Safety Violations**

    Examples include, but are not limited to:

    a. Conduct that endangers the health or safety of others
    b. Intentionally or recklessly starting a fire or causing an explosion
    c. Misusing fire safety equipment, fire escapes or elevators
    d. Intentionally or recklessly endangering the welfare of any individual
    e. Intentionally or recklessly obstructing fire, police, or emergency services
    f. Using, possessing, or storing dangerous chemical, fireworks, or explosives
    g. Using, possessing, or storing any object classified as a weapon by the State of Oregon on college property
    h. Utilizing any instrument in a manner that endangers or tends to endanger any person
    ix. Obstructing the free flow of pedestrian or vehicular traffic
    i. Falsely alerting others about an emergency
    j. Blocking or preventing the use of access to exit doors, fire exits, and building hallways.

19. **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.
20. **Theft or damage to property**

    Examples include, but are not limited to:
    a. Theft or the taking or unauthorized use or possession of public or private property or unauthorized use or acquisition of services
    b. 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
21. **Threatening Behavior**—A student can be found responsible for 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:
    a. 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
    b. Interference by force, threat, harassment or duress with personal safety, academic efforts, employment, and/or participation in College-sponsored activities
22. **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:
    a. 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
    b. Unauthorized possession, duplication or use of keys or access cards for any College property
    c. 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
23. **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:

a. Academic Honesty Policy and Procedure
b. Smoke-Free Policy
c. Use of College Network, Technology, Communications Resources Policy
d. Use of Copyright Materials Policy
e. Harassment/Discrimination Policy
f. Sexual Harassment, Discrimination, and Misconduct Policy
g. Service Animals Policy and Procedure
h. Affirmative Action/Non-harassment/Hate Crimes/Bias Incident

I. 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. **Emergency 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. **Temporary exclusion** may not exceed five days, but does not restrict the ability to submit course materials as needed. The appropriate Dean/Director, in consultation with the Student Affairs office, may impose temporary exclusion.
3. **Emergency suspension:** In certain circumstances, the Vice President of Student Affairs or designee, may impose an emergency suspension. Emergency suspension may be imposed:
    a. To ensure the student's own physical or emotional safety and well-being; or
    b. To ensure the safety and well-being of members of the college community or preservation of college property; or
    c. If the student poses an ongoing threat of disruption or interference with the normal operations of the college.
    d. 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 Vice President of Student Affairs or designee determines to be appropriate.
    e. 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 Vice President of Student Affairs or designee 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.

J. Investigatory Process

The Student Code of Conduct investigatory process is 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

Chemeketa Community College emphasizes the importance of direct, courteous, and respectful communication to informally resolve concerns and complaints whenever possible.. This process may include a meeting with theVice President of Student Affairs or designee 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 to the Office of Student Affairs by using the online Student Concern Reporting Form within 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 Vice President of Student Affairs or designee will schedule an initial meeting with the respondent to discuss the complaint.
3. During the initial meeting, the Vice President of Student Affairs 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 Vice President of Student Affairs 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 Vice President of Student Affairs or designee has sole discretion to permit the conferences concerning each respondent to be conducted either separately or jointly.
5. The Vice President of Student Affairs 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, theVice President of Student Affairs 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 Vice President of Student Affairs 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 believes that the college has violated its own policies in investigating the case, or new information or evidence of bias, becomes available, , the respondent may appeal the decision in writing to the Vice President of Student Affairs or designee within ten (10) business days, see Appeal Process section.
8. At any time during this process, failure to respond to the Vice President of Student Affairs, or designee may subject the respondent to an academic hold and the outcome of the complaint will be reviewed in the respondent's absence.

K. 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.
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 Student Affairs or designee 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:** 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 Vice President of Student Affairs or designee 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.
11. **Expulsion:** Permanent separation of a student from a program or service area or conditional separation from the college. The Vice President of Student Affairs or designee may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.

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 Student Affairs.

The following sanctions may be imposed upon groups or organizations:

1. Those listed above in Sanctions (1–11);
2. Loss of selected rights and privileges for a specified period of time or indefinitely;
3. 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.

L. 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 Student Affairs within ten (10) business days of the mailing date of the 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 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 Student Affairs has the authority to:
   i. i. Return the case to the original investigator for any corrections to process or procedure required as a result of finding in favor of the appeal
   ii. In limited circumstances, the Vice President may alter, or amend disciplinary action if information on appeal merits such action
   iii. 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
   iv. Dismiss the case if the finding is held to be unsupported by the evidence
7. Disciplinary action for suspension may be deferred while an appeal is pending, unless, in the discretion of the Vice President of Student Affairs , 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.

M. 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 http://go.chemeketa.edu/titleix. The College has also established a Harassment Network of staff who can assist students with these issues. For more information, visit http://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. For more information, refer to the college Guideline for Grade Appeals.
    i. When a student believes that he or she has been given an inappropriate grade, the student will speak directly with the instructor in an attempt to resolve the issue.
    ii. If a student receives an unsatisfactory or no response from the instructor, the student may appeal the grade by completing the online grade appeal form and attaching supporting documentation of the facts cited in the appeal.
    iii. The appeal must be submitted no later than 30 calendar days after the grade is posted for the academic term of the dispute. No exceptions will be made to this deadline. Please note, professional-technical program specific deadlines for Grade Appeals supersede this college-wide deadline for appeal.
    iv. Upon submission, the appeal and supporting documentation is routed to the appropriate Academic Dean or Director.
    v. The Academic Dean or Director has 30 calendar days from the date of receipt to respond to the student via email.
    vi. The decision of the Academic Dean or Director is final, and there is no further appeal beyond this point.
    vii. The Academic Dean or 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 Office of Student Affairs that includes the student's name and nature of the complaint, and any necessary related supporting documentation.
    ii. Upon receipt of the complaint, it will be reviewed and routed to the appropriate department Administrator for response.
    iii. In the event that the resolution proposed by the department Administrator is not acceptable to the student, the student may make a secondary appeal to the appropriate Vice President/ Associate Vice President.
    iv. The decision of the Vice President/Associate Vice President will be final and not subject to further appeal.

N. 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 Vice President of Student Affairs or designee, or the Director of Human Resources.

O. Interpretation and Revision

1. Any question of interpretation or application of the code of student conduct will be referred to the Vice President of Student Affairs or designee 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 Vice President of Student Affairs.

P. 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 Student Affairs

Student Development and Learning Resources

Salem Campus, Building 2, Room 208 • 503.399.5076

studentconcerns@chemeketa.edu

College Policy and Procedures Web Resources

Academic Honesty

go.chemeketa.edu/studentrights

Affirmative Action

go.chemeketa.edu/policies

Chemeketa Policies

go.chemeketa.edu/policies

Complaints and Concerns

chemeketa.edu/complaints-and-concerns

Family Educational Rights and Privacy Act (FERPA) and Student Records

go.chemeketa.edu/studentrights

Free Speech Guidelines

go.chemeketa.edu/studentrights

Grade Appeal

chemeketa.edu/students/student-forms

Harassment/Discrimination

chemeketa.edu/complaints-and-concerns

Public Safety

go.chemeketa.edu/publicsafety

Service Animals

go.chemeketa.edu/disabilityservices

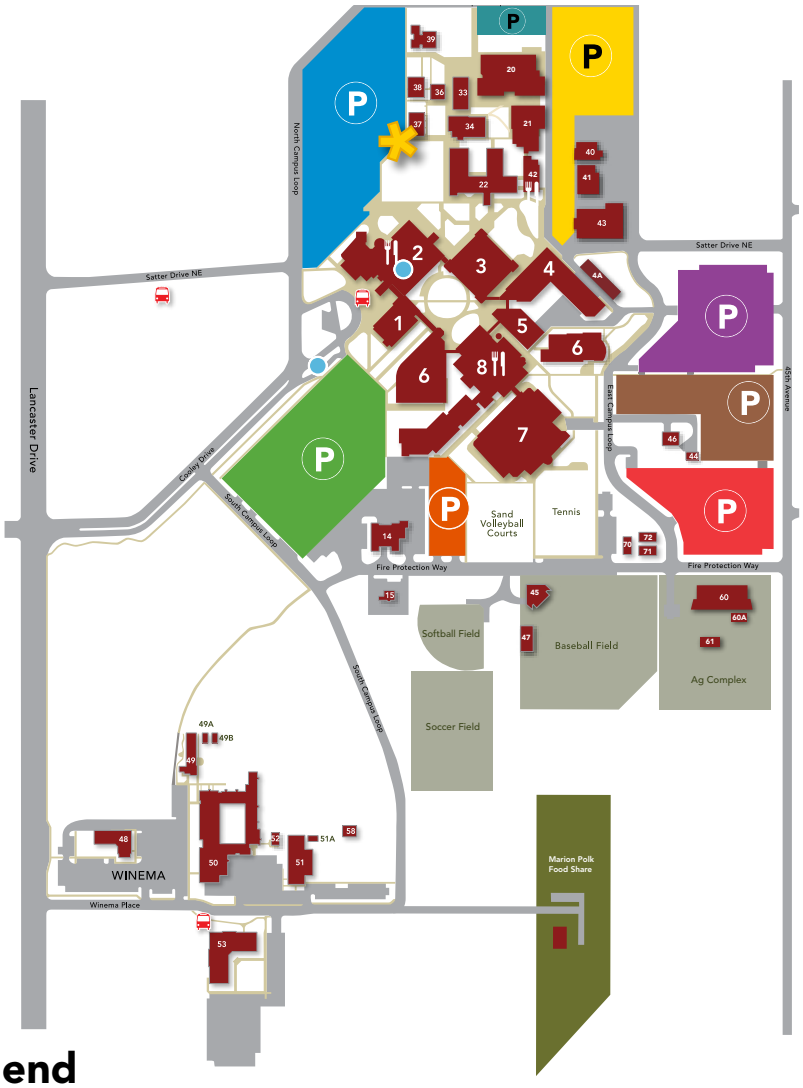
Sexual Harassment, Discrimination and Misconduct Policy and Procedure

go.chemeketa.edu/titleix

Use of Copyright Materials Policy

go.chemeketa.edu/studentrights

Discover Chemeketa Community College



Campus Map Legend

001 1st Floor: Bookstore

001 2nd Floor: Faculty Offices

002 1st Floor: Advising & Counseling; Career Center; Convenience Store; Student Accessibility Services; Food Court; Information Center; Multicultural Center; Planetarium; Public Safety; Student Recruitment; Student Retention & College Life; Student Support Services; Testing Services

002 2nd Floor: Business Services; CAMP; Chemeketa Completion Program; Enrollment Center; Foundation; Graduation Services; Financial Aid; TRiO; Talent Search; Upward Bound; Tutoring Services; Veteran's Services; College Support Service's; Human Resources; Presidents Office; Public Information, Marketing; STEPS.

003 1st Floor: Gretchen Schuette Art Gallery; Classrooms;

003 2nd Floor: Classrooms; Math Learning Center; Instruction and Student Services, Placement Testing

004 1st Floor: Automotive Program; Electronics Program

004 2nd Floor: Visual Communications; Robotics; Electronics Programs

005 1st Floor: Art Classrooms;

005 2nd Floor: Classrooms

006 1st Floor: Auditorium; Classrooms

006 2nd Floor: Classrooms; Employee Development

007 Gymnasium; Physical Education Classrooms

008 1st Floor: Dental Clinic; Health & Science Classrooms;

008 2nd Floor: Health & Science Classrooms

009 1st Floor: Classrooms; Center for Academic Innovation; Curriculum; Instruction; Accreditation; Television Studio; Online Programs

009 2nd Floor: Library; Writing Center; Computer Lab; Study Rooms

014 Public Safety

015 Burn Tower

020 Drafting; Engineering; Machining Program

021 Welding Program

022 Academic Development; HEP; Information Technology

033 Apprenticeship Program

034 Conference Rooms; SOAR

037 Faculty Offices

038 Faculty Offices; Occupational Skills Training; Cooperative Work Experience

039 Child Development Center

040 Facilities & Operations

041 Facilities & Operations

042 Catering Kitchen; Northwest Innovations

043 Copy Center; Mail Room; Recycling

044 Horticulture Potting Shed

045 Activity Field

046 Greenhouse

048 Conference Rooms; Maps Credit Union; Winema Market & Deli

049 Mid-Willamette Education Consortium, Youth GED Options

050 High School Partnerships

051 Winema High School; Robotics; Lab

052 Classrooms

053 Department of Human Services

058 Facilities & Operations Annex

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061 Classrooms

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