CHEMEKETA COMMUNITY COLLEGE

www.chemeketa.edu

CHEMEKETA
CORE VALUES

QUALITY We are committed to creating and sustaining excellent programs and services. We provide work and learning environments of the highest quality.

**Chemeketa Community College
Catalog 2008–2009**

Contents

Chemeketa Community College District

LEGEND

■ Communities with Chemeketa Campuses   ▲ Communities that host Chemeketa classes   ⬠ WorkSource Oregon Centers

Chemeketa Campuses

Salem Campus

4000 Lancaster Dr. NE
Salem, OR 97305-1453

Dallas Center

1340 SE Holman Ave.
Dallas, OR 97338

McMinnville Campus

500 NW Hill Rd.
McMinnville, OR 97128-9508

McMinnville Health Care Education Center

306 NE Norton Lane
McMinnville, OR 97128

Santiam Center

11656 Sublimity Rd. SE
Sublimity, OR 97385-9534

Woodburn Campus

120 E Lincoln St.
Woodburn, OR 97071-5024

Chemeketa-Brooks Regional Training Center

4910 Brooklake Rd. NE
Brooks, Oregon 97305

Chemeketa Center for Business & Industry

365 Ferry St. SE
Salem, OR 97301-3622

Chemeketa at Eola

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

WorkSource Oregon (WSO) Centers

WorkSource Oregon Yamhill Center

370 NE Norton Ln.
McMinnville, OR 97128-8481

WorkSource Oregon Polk Center

580 Main St. SE, Ste. B
Dallas, OR 97338-1911

WorkSource Oregon Salem Center

605 Cottage St. NE
Salem, OR 97301-2419

WorkSource Oregon Woodburn Center

120 E. Lincoln, Ste. 115B
Woodburn, OR 97071-5024
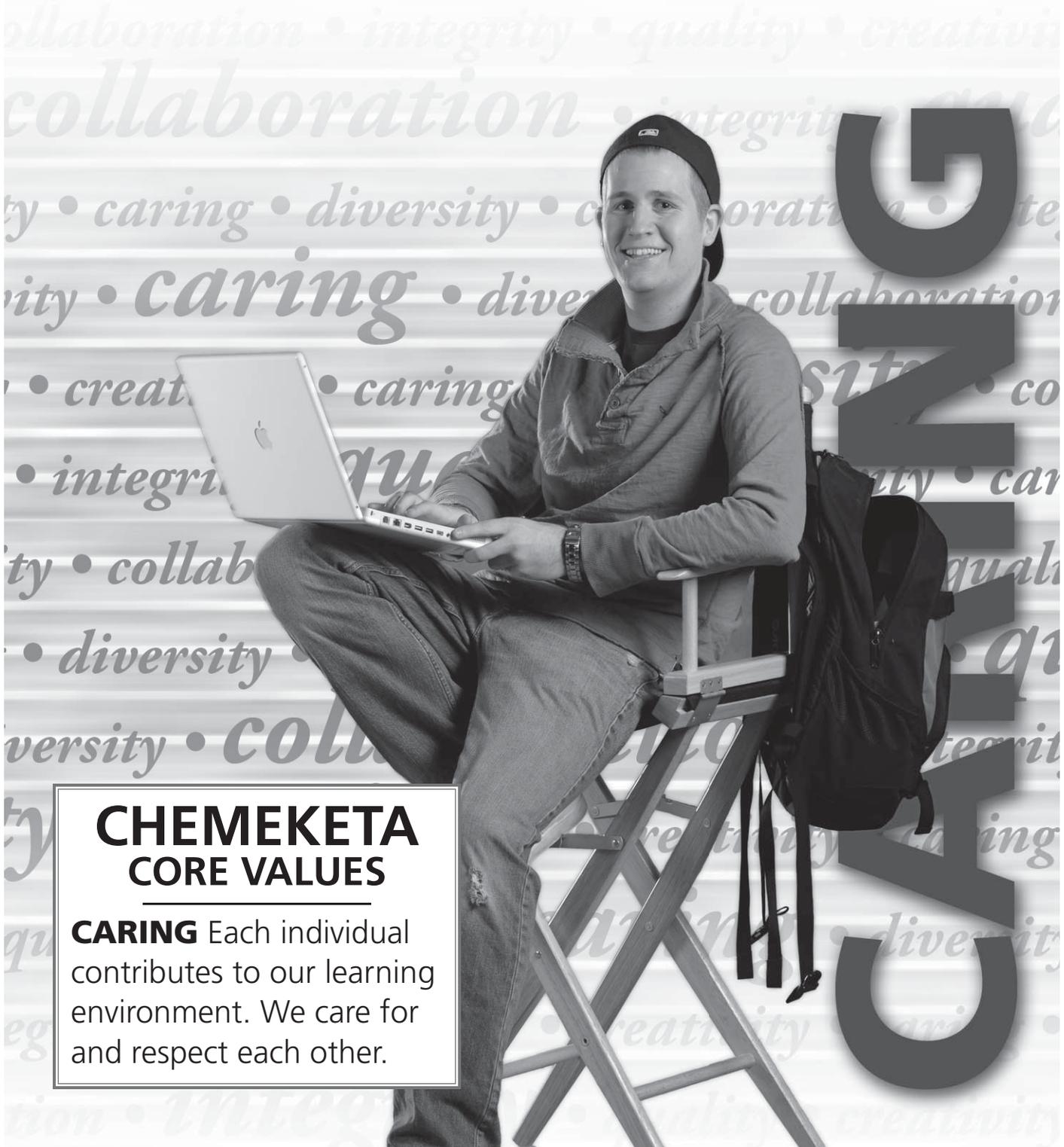
CHEMEKETA
CORE VALUES

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

About Chemeketa

Welcome to Chemeketa
www.chemeketa.edu

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

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

You can fit as much of this as you want into your life. You can go to school full time to finish a one- or two-year program. You can go part time to take a class or a workshop.

You can attend classes and special events on the Salem Campus or at the college's Dallas or Santiam centers, McMinnville or Woodburn campuses. We also offer classes in schools and other locations in communities throughout the college district. You can even stay home and take a class via television, online or distance learning that will fit your needs and schedule.

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

Programs

Chemeketa has four areas of study:

Career and technical education Prepares students who want to qualify for work in specific fields. You can enroll in more than 40 career and technical training programs. In some of these, you may earn a Certificate of Completion in one year or less. Many programs have other certificates that credential you to work in jobs in your field while attending college. In most programs, you may earn an Associate of Applied Science

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.

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 44 for general education information.

College transfer courses For students who wish to continue their education at a four-year college or university. You may complete the one-year Oregon Transfer Module (see page 53), or if you successfully complete Chemeketa's two-year college transfer program, you may also earn an Associate of Arts Oregon Transfer degree. See page 54 for requirements.

Some of these 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 someone at the four-year institution you wish to attend. Generally, transfer courses are numbered 100 or above.

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

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

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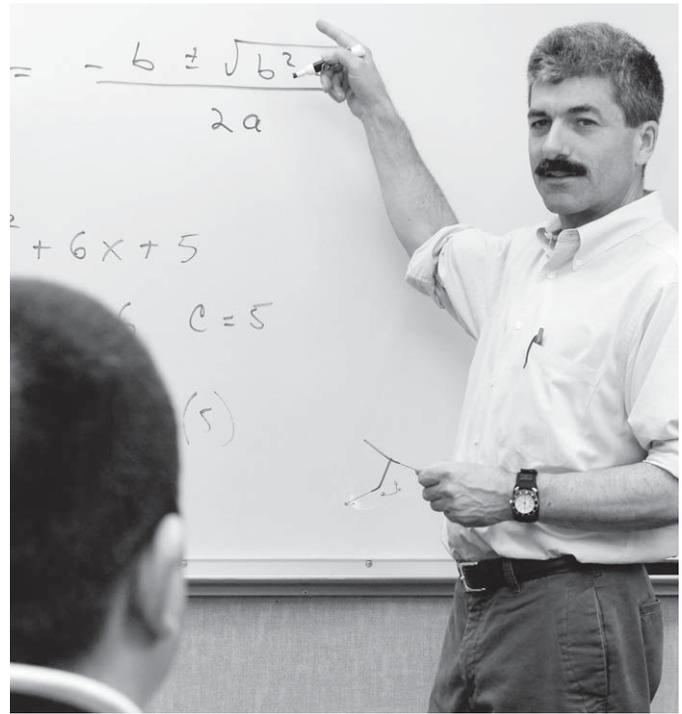
Faculty

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

History

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

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

Chemeketa Community College Guiding Principles

Strategic Intent
Chemeketa Community College is our community's resource for quality education in a changing world, delivering opportunities for adult literacy, opening the door to all levels of college, and creating centers of excellence in technical training, workforce development, and business support.

Approved by the Board of Education March 15, 2006

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

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

Collaboration: In partnership with others, we invent resourceful and innovative solutions to challenges. We respond with optimism and enthusiasm to opportunities for positive change.

Integrity: We are responsible guardians of the public trust. We provide current, effective educational services to those we serve.

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

Quality: We are committed to creating and sustaining excellent programs and services. We provide work and learning environments of the highest quality.

Approved by the Board of Education September 20, 2006

Academic Calendar

	Summer 2008		Fall 2008	Winter 2009	Spring 2009
	8 weeks June 23–Aug. 15 (Regular Session)	10 weeks June 23–Aug. 29 (Selected Programs Only)	**Sept. 29–Dec 12**	**Jan 5–March 20**	**March 30–June 12**
Employee Inservice			September 15, 22–26		May 8
Program/Project Days			September 16–19		
Continuing Registration	May 22	May 22	May 29	December 2	March 10
New Student Registration	May 23	May 23	August 12	December 8	March 16
Beginning of Term	June 23	June 23	September 29	January 5	March 30
Last Day to Register Without Instructor Signature	June 27	June 27	October 3	January 9	April 3
Last Day to Withdraw and Receive Refund	July 7	July 7	October 10	January 16	April 10
Last Day to Register or Add Classes	July 7	July 7	October 10	January 16	April 10
Audit Requests Due and Pass/No Pass Requests Due	July 18	July 18	October 24	January 30	April 24
Graduation Applications for Next Term Due	July 18	July 18	October 24	January 30	April 24
Academic Year Holidays			November 11, 27–28	January 19	May 25
Other Holidays	July 4	July 4	September 1 December 25–26	January 1–2	
College Closure			December 22–24		
Winter Break/Spring Break			Dec. 15–Jan. 2	March 23–27	
Last Day to Withdraw from Classes without Responsibility for Grades	July 25	July 25	November 21	February 27	May 22
Review & Final Exams	Final exams given during last class period	Final exams given during last class period	December 8–11	March 16–19	June 8–11
End of Term	August 15	August 29	December 12	March 20	June 12

Graduation: Saturday, June 13

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

Location

The Chemeketa Community College district covers more than 2,600 square miles in Oregon's Mid-Willamette Valley, including Marion, Polk, most of Yamhill, and part of Linn counties.

The largest campus is located at 4000 Lancaster Drive N.E., Salem. There are other campuses and centers in Dallas, McMinnville, Sublimity, and Woodburn, as well as college-supported services at four WorkSource Oregon Centers located in Marion, Polk, and Yamhill counties. Credit and non-credit classes, workshops, seminars, and special programs are scheduled in more than 25 locations throughout the college district. These classes meet during the day, evening, and on weekends in schools, businesses, churches, and homes.

The Chemeketa district also includes two centers that provide more specialized services to employers and the community. Chemeketa's Center for Business and Industry is located in Liberty Square, at 365 Ferry Street S.E., in downtown Salem. The Chemeketa-Brooks Regional Training Center, 4910 Brooklake Rd. NE, Brooks, provides training for fire districts and law enforcement throughout the region and houses part of the Fire Science and EMT/Paramedic programs.

Facilities

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

The Learning Resource Center is located in Building 9. It includes the library, which is equipped with computers for research, a television studio, teleconferencing rooms, and facilities for audio, graphics, and multimedia production.

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

Accreditation

The Northwest Commission on Colleges and Universities granted accreditation to Chemeketa in December 1972. In addition, the Oregon State Board of Education approves all career and technical programs and college transfer courses. Professional associations have also accredited those career and technical education programs that require such approval.

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

Teaching and Learning Values

We are a college that…

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

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

How to enroll at Chemeketa

Student Classification	1. Applying for admission	2. Placement testing	3. Orientation/ Academic and Career Advising	4. Registration for classes
Enrolling for most Salem Campus classes	Complete the online Admission Application at applyonline.chemeketa.edu	Contact Counseling and Career Services, Building 2, Salem Campus.	Contact Counseling and Career Services, Building 2, Salem Campus.	**New Students**—Register through my.chemeketa.edu using instructions sent by Enrollment Services. **Continuing Students**—Register via my.chemeketa.edu.
Enrolling for classes held outside of Salem	Complete the online Admission Application at applyonline.chemeketa.edu	Contact nearest Chemeketa campus.	Call the college's Dallas, Santiam, McMinnville or Woodburn campuses or contact Counseling and Career Services, Building 2, Salem Campus.	**New Students**—Register through my.chemeketa.edu using instructions sent by Enrollment Services. **Continuing Students**—Register via my.chemeketa.edu.
Enrolling for Salem evening, weekend, or non-credit classes	Complete the online Admission Application at applyonline.chemeketa.edu	Contact Counseling and Career Services, Building 2, Salem Campus (optional).	Contact Counseling and Career Services, Building 2, Salem Campus.	**New Students**—Register through my.chemeketa.edu using instructions sent by Enrollment Services. **Continuing Students**—Register via my.chemeketa.edu.
Earning a GED or taking English as a Second Language (non-credit)	Students under the age of 18 must submit an Underage Consent Form. Contact Admissions at 503.399.5006 or admissions@chemeketa.edu	GED: Contact the Developmental Education Office, Building 22. ESL: Contact the Developmental Education Office, Building 22, Salem Campus.	Contact the Developmental Education Office, Building 22, Salem Campus; or the college's Dallas, Santiam, McMinnville or Woodburn campuses.	Consult quarterly *Schedule of Classes*. Students must attend a program orientation before registering for classes.
Earning a high school diploma	Submit high school transcript to Building 50, Room 154, Salem Campus. Students under the age of 18 must submit an Underage Consent Form.	Contact Counseling and Career Services, Building 2, Salem Campus.	Contact the Adult High School Completion Office, Building 50, Room 154, Salem Campus; or the college's Dallas, Santiam, McMinnville or Woodburn campuses (optional). During summer, contact the Developmental Education Office, Building 22.	**New Students**—Register through my.chemeketa.edu using instructions sent by Enrollment Services. **Continuing Students**—Register via my.chemeketa.edu.

The science and health building, Building 8, has modern, well-equipped laboratories for science and health-related programs.

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

Other buildings provide modern classrooms and welding and manufacturing shops. The Chemeketa-Brooks Regional Training Center and the station facilities on the Salem campus also serve as working fire stations

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

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

Admission and Registration
Enrolling at Chemeketa

503.399.5006; Fax 503.399.3918
admissions@chemeketa.edu

Chemeketa has an "open door" policy. In general, you may enroll in Chemeketa classes if you are 18 years of age or older and can benefit from the instruction.

If you are an international student, see page 9.

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

Please contact Counseling and Career Services in Building 2 on the Salem Campus at 503.399.5120 or at your local Chemeketa outreach location. Talk with a counselor about your academic

Affirmative action and non-harassment policy

It is the policy of Chemeketa Community College that discrimination on the grounds of race, color, religion, sex, national origin, marital status, age, disability, or family relationships will not exist in any area, activity, or operation of the college as required by Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973; Title VI and VII of the Civil Rights Act of 1964; the Age Discrimination Act; the Americans with Disabilities Act of 1990; Oregon Civil Rights

Law (ORS 659); and their implementing regulations.

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

- *is reasonably perceived by the receiver as unwelcome or offensive.*
- *refers in a demeaning way to a person's race, religion, color, gender, marital status,*

national origin, citizenship status, age, sexual orientation, disability, pregnancy and related conditions, family relationship, veterans status, or tobacco usage; creates a hostile or adverse work or educational environment; and/or subjects employees or students to different terms or conditions based on the characteristics listed above.

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

and occupational plans and the requirements for the program which interests you.

If you are younger than 18 and do not have a high school diploma or GED certificate, you should contact the Admissions Office in Building 2 on the Salem Campus to get information about how to be admitted.

Placement tests

503.399.6556
testing@chemeketa.edu

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

Information about tests and test waivers may be obtained from Testing Services in Building 2 on the Salem Campus or from Chemeketa's Dallas and Santiam centers or McMinnville and Woodburn campuses. To request disability-related accommodations, please call 503.399.5192.

Orientation and registration information

503.399.5120
advising@chemeketa.edu

Orientation is required for all new students. For information about registration, call 503.399.5120, drop by Counseling and Career Services in Building 2 on the Salem Campus, or visit any of the outreach campuses or centers.

Registration

503.399.5001
registrar@chemeketa.edu

For information, see "How to Enroll at Chemeketa" on page 5. Each term, the Schedule of Classes gives the specific registration dates and step-by-step procedures for registering for classes.

You will receive college credit only if you officially register for the class during the term in which it is offered.

You may not register if you owe the college money from previous terms, unless you make appropriate arrangements with Business Services on the Salem campus. Please call 503.399.5011 for more information.

Class loads

503.399.5001

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

Pol'tica de acción afirmativa y contra el acosamiento

Es la pol'tica de Chemeketa Community College que no existirá ninguna discriminación o acosamiento a base de raza, color de piel, religión, sexo, origen nacional, estado civil, edad, incapacitación o estado familiar, en ninguna área, actividad u operación del colegio, as' como requiere el T'tulo IX de las Enmiendas Educativas de 1972; la Sección 504 del Acto de Rehabilitación de 1973; los t'tulos 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 Deshabilidades de 1990; la Ley de Oregon de

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

La pol'tica del colegio también proh'be el acosamiento a base de todos los factores arriba mencionados. El acosamiento se define por cualquier comportamiento o demostración inoportuno, sea verbal, f'sico o visual, el cual se conforma con cualquiera de la siguiente criteria:

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

- *se refiere de forma ofensiva a la raza,*

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

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

Class changes

503.399.5001
registrar@chemeketa.edu

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

Enrollment limitations

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

Please apply early for all programs, especially for the career and technical education programs which limit enrollment or have special admission requirements (listed on pages 46–51).

You may still be admitted to the college even though you are not accepted in one of these programs. You may apply to enroll in a related pre-vocational program or some other program.

Many of Chemeketa's career and technical education programs have established entry requirements. If you wish to take six or more credit hours in these programs, you will need to be assessed and may need to take preparatory courses before being admitted. For details about these requirements, check with Counseling and Career Services staff at any center or campus location

Immunizations

The Oregon Department of Health requires community college students born on or after January 1, 1957, to have two doses of measles vaccine before participating in clinical experiences in allied health and nursing programs, human services, practicum experiences in education and child care programs, and intercollegiate sports. If you are enrolling in the nursing programs and in some health programs, you may also be required to be vaccinated for Hepatitis B prior to entering any clinical experiences. For details about these requirements, contact the office of the associate dean who oversees the program in which you plan to participate.

Withdrawal from college

503.399.5001
registrar@chemeketa.edu

If you decide to withdraw from Chemeketa, you may do so using the Web registration system or you may obtain an Add/Drop Form from the Enrollment Center, Counseling and Career Services, or Chemeketa's Dallas, Santiam, McMinnville or Woodburn campuses. Submit the completed form to the Enrollment Center or one of our outreach campuses as soon as possible. The last day to withdraw from classes without responsibility for grades is listed in the Academic Calendar on page 3. If you leave Chemeketa without following the withdrawal procedures mentioned above, you are responsible for the final grades you receive; they will appear on your transcript of Chemeketa credits.

If you withdraw using the Web registration system or an Add/Drop Form within the first two weeks of the term, you will receive a refund of the tuition and fees you paid. (Some exceptions apply for shorter duration classes.) Amounts owed to any department of the college will be deducted from your refund. There may also be a nominal deduction from the refund for processing the withdrawal. Refunds are not issued for amounts less than $5.

If you paid tuition with funds issued through Chemeketa's Financial Aid Office, your refund will be credited to your financial aid account. Any debts you owe the college will be deducted from those credits.

The Chemeketa Creed

The Chemeketa Creed is part of the Student Rights and Responsibilities Document which can be found on pages 211 through 213 of this catalog. The creed lists standards of behavior expected of students as they become members of our educational community.

1.0 Preamble
    Chemeketa Community College provides an environment that celebrates the freedom to learn and the freedom to teach. In that celebration of teaching and learning it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.

2.0 Code of Behavior
    As a community of people seeking education, Chemeketa students are dedicated to improving personally and academically. Choosing to join the college community obligates each member to a code of behavior.
    Chemeketa students will:
    2.1 Practice personal and educational integrity.
    2.2 Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.
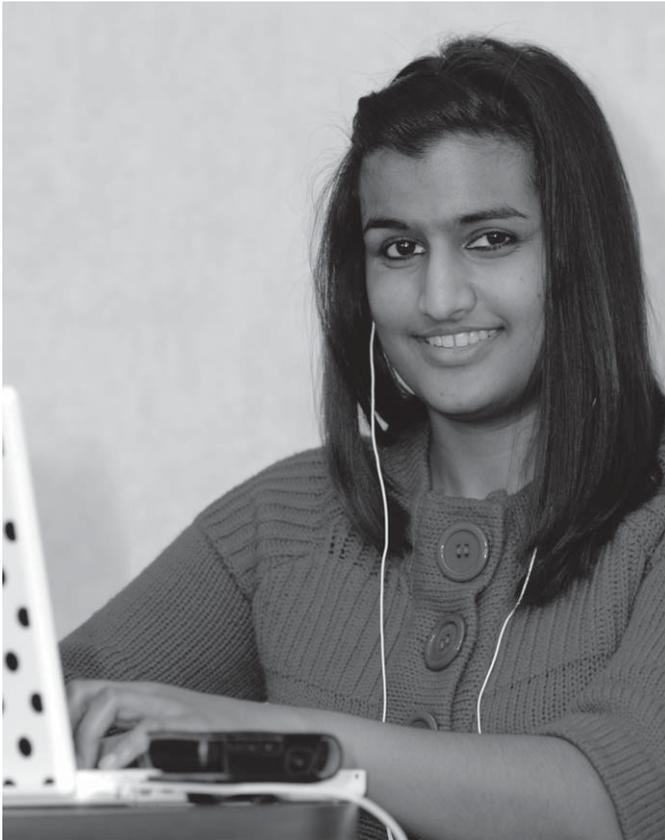
International students

503.399.5141; Fax 503.365.4768

international@chemeketa.edu

An average of about 100 international students attend Chemeketa each year. Representing a variety of cultures and ethnicities, they come from more than 20 different countries. International students may enroll in any career and technical program or college transfer program if they meet the enrollment requirements, or attend English language training.

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

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

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

Chemeketa provides a world of learning for all its students. You are invited to join others and experience Chemeketa. For more information, please contact International Programs at the phone or email address listed above.

Money Matters

Tuition

503.399.5011

bussvc@chemeketa.edu

Tuition and fees are due after you register. Late payment fees will be charged. Please refer to the current term Schedule of Classes or to the college Web site at www.chemeketa.edu/services/tuition.html for additional information.

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

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2.3 Discourage bigotry and respect the diversity and dignity of all persons.

2.4 Respect the rights and property of all persons.

2.5 Bear the ultimate responsibility for the effects of their decisions and behavior.

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

The college will:

3.1 Provide access to education and campus facilities.

3.2 Assure the protection of confidential student records and information.

3.3 Provide opportunities for association and preserve freedom of expression.

reasonable for attorney's fees and court costs. Oregon state law applies to any dispute over payment.

Credit courses

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

Non-credit courses

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

The term *Schedule of Classes* lists any charges for adult basic education, General Educational Development (GED), and non-credit English as a second language classes. There is a $100 fee to take the GED test. A one-time-only Testing/Application fee of $10 is charged to all new applicants seeking to join the ABE/GED, BSD, or ESL programs. The fee covers the costs associated with the required applicant assessments used for initial placement into the levels and classes of each program. If you are seeking re-entry into a Developmental Education program, you will not be charged.

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

Universal Fee

A Universal Fee applies to both credit and non-credit classes. The fee is $6 per credit for credit classes and 30 cents per hour for non-credit classes.

Student Services Fee

A 50 cent per credit hour student services fee applies to all credit courses.

Telecourse and Online fees

A $35 fee is charged for each telecourse in addition to tuition and any applicable course fees. A $50 fee is charged for each online course in addition to tuition and any applicable course fees.

Oregon residency

You are considered an Oregon student if you have established a permanent residence within the state at least 90 days prior to the term you begin. The college may ask you to provide information proving you meet the residency requirement.

You are considered an out-of-state student if your permanent address is outside of Oregon. If you are an international student who is required to have an I-20 immigration document, you are considered an international student for tuition purposes for as long as you are required to have that document.

Foundation scholarships
503.399.6990
info@chemeketafoundation.org

If money is standing between you and your Chemeketa education, the college's foundation has scholarships available to help overcome that barrier. The Chemeketa Community College

Cost per credit academic year 2008–2009

The following chart will help you in determining the **cost per credit, including tuition, universal fee and student services 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 Students				Out of State & International Students			
# of credits	Tuition	Student Services Fee	Universal Fee	Total Cost Per Credit	Tuition	Student Services Fee	Universal Fee	Total Cost Per Credit
1	$61	$0.50	$6	$67.50	$209	$0.50	$6	$215.50
2	$122	$1.00	$12	$135.00	$418	$1.00	$12	$431.00
3	$183	$1.50	$18	$202.50	$627	$1.50	$18	$646.50
4	$244	$2.00	$24	$270.00	$836	$2.00	$24	$862.00
5	$305	$2.50	$30	$337.50	$1,045	$2.50	$30	$1,077.50
6	$366	$3.00	$36	$405.00	$1,254	$3.00	$36	$1,293.00
7	$427	$3.50	$42	$472.50	$1,463	$3.50	$42	$1,508.50
8	$488	$4.00	$48	$540.00	$1,672	$4.00	$48	$1,724.00
9	$549	$4.50	$54	$607.50	$1,881	$4.50	$54	$1,939.50
10	$610	$5.00	$60	$675.00	$2,090	$5.00	$60	$2,155.00
11	$671	$5.50	$66	$742.50	$2,299	$5.50	$66	$2,370.50
12	$732	$6.00	$72	$810.00	$2,508	$6.00	$72	$2,586.00
13	$793	$6.50	$78	$877.50	$2,717	$6.50	$78	$2,801.50
14	$854	$7.00	$84	$945.00	$2,926	$7.00	$84	$3,017.00
15	$915	$7.50	$90	$1,012.50	$3,135	$7.50	$90	$3,232.50
16	$976	$8.00	$96	$1,080.00	$3,344	$8.00	$96	$3,448.00
17	$1,037	$8.50	$102	$1,147.50	$3,553	$8.50	$102	$3,663.50
18	$1,098	$9.00	$108	$1,215.00	$3,762	$9.00	$108	$3,879.00

* 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.

Foundation administers several scholarship programs for Chemeketa students. Working with the college Financial Aid office, the foundation has prepared a universal scholarship application form which will simplify the process for you. If you are interested, just complete one application form and you will be considered for every scholarship for which you are eligible. Perfect grades are not a requirement for the foundation's scholarships. Programs have different academic requirements, but students with 2.00 grade averages and greater generally will qualify. Selection committees place greater emphasis on financial need and prospects for success than on prior academic performance.

Other costs and fees

503.399.5011
bussvc@chemeketa.edu

The cost of books and supplies for full-time students is about $400 per term. In some of Chemeketa's programs, you will also have to provide your own tools, equipment, and uniforms. These costs are included in the descriptions of career and technical education programs on pages 68 to 139.

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

About this catalog

Chemeketa publishes this catalog to give you—our students and public—current information about the college.

We make every effort to be sure that this information is accurate at the time of publication; however, sometimes the college finds it necessary to make changes before the next catalog is printed. These changes may affect the costs, college policies and procedures, the calendar, and some curricula and courses.

Therefore, we do not consider the catalog as a hard and fast contract between you and the college; rather, we are trying to give as much relevant information as possible to those who may use our services.

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

Financial aid available at Chemeketa

Except as listed below, all financial aid programs have the following requirements:

- You must file a Free Application for Federal Student Aid (FAFSA) to apply.
- You must be a United States citizen or an eligible non-citizen.
- You must not be in default or owe a refund to any Title IV financial aid program.
- You must use the money you receive to meet the costs of attending Chemeketa.
- If you are a male over 18 years of age and born after December 31, 1959, you must be registered with the United States Selective Service, unless you are currently on active duty with the armed forces. (Membership in the reserves or national guard does not count.)
- You must be in an eligible degree or certificate program.
- You must enroll for at least six credit hours each term.
- You must maintain satisfactory academic progress.

Program and source of funding	Eligibility requirements	Available amounts	Special information
Grants and scholarships			
Federal Pell Grant	• You must not have a bachelor's degree.	• Amounts are based on federal funding. • The highest award at Chemeketa for 2008–2009 is $4,731.	• Pell Grant will send you a Student Aid Report (SAR) indicating your eligibility. • Eligibility may be transferred to any post-secondary school participating in federal programs.
Federal Supplemental Educational Opportunity Grant (SEOG)	• You must prove an exceptional financial need. • You must not have a bachelor's degree.	• Amounts range from $450 to $2,000 a year. • The highest award at Chemeketa for 2008–2009 is $600.	• The Financial Aid Office will determine and then notify you of your eligibility.
Oregon Opportunity Grant (Funded by the state of Oregon and the federal government.)	• You must enroll half-time (six credit hours or more). • You must be an Oregon resident. • You must also apply for a Pell Grant. • You must not have a bachelor's degree. • You must attend a college in Oregon.	• Amounts are based on state funding. • The award at Chemeketa for 2008–2009 is $2,600 (full-time students or $1,300 for part-time students).	• Your grant may be transferred to other Oregon colleges and universities. • Your grant may be awarded for up to 12 quarters (terms) or for eight semesters. • You must not be enrolled in a program leading to a degree in theology, divinity, or religious education.
Talent Grants (Funded by Chemeketa Community College.)	• You must show outstanding ability and achievement in selected fields. • You must enroll full-time (12 credit hours or more).	• Amounts vary up to the cost of tuition.	• No FAFSA is required. • Contact an instructor or coach directly associated with your skills or ask at the Financial Aid Office.
Scholarships (Funded by private donors.)	• Determined by donor.	• Determined by donor.	• Scholarship information is posted in the Financial Aid Office throughout the year. Many postings are made in winter and spring terms for the next academic year.
Federal Academic Competitive Grant	• U.S. Citizen • Federal Pell Grant Recipient • Full-time enrollment • Declaring an eligible two-year degree program • High school graduate after Jan. 1, 2007 • Completed specific courses in high school (see Financial Aid Office for specific details.)	• $750 for first-year students • $1,300 for second-year students	• You will be notified if you might be eligible for this grant. • You will need to have an official high school transcript sent to the Financial Aid Office for review to determine your eligibility. • The Financial Aid Office will notify you of your eligibility. • Second year recipients must have a 3.0 GPA.
Work			
Federal Work Study Program		• Amounts vary according to your financial need. • Funds usually are not more than $900 a term or $3,600 a year. • Jobs pay minimum wage or higher.	• Jobs are available both on and off campus. • You must complete the employment procedure in Job Placement.
Chemeketa part-time employment (Funded by Chemeketa Community College)	• You must enroll in six credit hours or more.	• Pay varies according to the job. • Jobs pay minimum wage or higher.	• No FAFSA is required. • Contact the Human Resources Dept.
Part-time jobs (Funded by private businesses)	• You must be willing to work. • You must meet the qualifications of the employer.	• Pay varies according to the job. • The average wage for 2008-2009 was $9.26 an hour.	• No FAFSA is required. • Apply at the Job Placement Center in Building 2 on the Salem Campus.

Programs and source of funding	Eligibility requirements	Available amounts	Special information
Loans			
Federal Perkins Student Loan Program (FPSL)		• You may borrow up to $1,800 in an academic year. • The highest award at Chemeketa for 2008–2009 is $1,800.	• You do not have to pay any interest or principal while in school. • You must begin payment six to nine months after you drop your enrollment to less than six credit hours. • The current interest rate is 5 percent. • You must repay Chemeketa. • You must complete entrance counseling online before funds are disbursed. • Interest is paid by the federal government while you are enrolled in an approved program. • You must attend an entrance and exit interview. • Contact the Financial Aid Office for information on repayment and deferments. • First-time borrowers must attend class for 30 days before the first check is issued.
Federal Subsidized Stafford Loan (Funded by commercial lenders with state or other agency guarantee and interest subsidy from the federal government.)	• School has the right to deny loan certification and/or limit amount borrowed.	• You may borrow up to $2,625 to complete pre-requisites for a program you are trying to get admitted into. • You may borrow up to $3500 to complete the first year of a program of undergraduate education. • After completing your first year of undergraduate education, you may borrow up to $4,500 to complete the remainder of a program of undergraduate study.	• Pick up the separate Stafford information packet at the Financial Aid Office. • Required fees will be deducted from your check. • You must begin payment six months after you drop your enrollment to less than six credit hours. • You may defer payment if you continue half-time or full-time study. Contact the Financial Aid Office for other possible deferments. • You must attend an entrance and an exit interview. • The variable interest rate is capped at 8.25 percent. • The federal government pays the interest while you are enrolled in an approved program. • First-time borrowers must attend class for 30 days before the first check is issued.
Federal Unsubsidized Stafford Loan (Provides for insured loans for borrowers who do not qualify for federally subsidized Stafford Loans. Terms and conditions for subsidized Stafford Loans apply to unsubsidized Stafford Loans.)	• School has the right to deny loan certification and/or limit amount borrowed.	• You may borrow the cost of attendance minus the amount of estimated financial assistance, up to annual loan limits. • Students who show need for only part of the annual subsidized Stafford Loan limit may borrow the remainder through unsubsidized loans.	• Repayment of principal begins six months after the month in which you cease to be enrolled at least half-time. • Interest during in-school, grace and deferment periods may be paid monthly or quarterly, or may be added to the principal amount of the loan not more frequently than quarterly by the lender.
Federal "PLUS" program (Funded by commercial lenders with state or other agency guarantee.)	• Some lenders will not loan money for students who are not enrolled full-time. • Lenders will perform credit checks and may deny loan certification based on adverse credit.	• Parents may borrow up to the cost of attendance minus the amount of estimated financial assistance.	• Only mothers, fathers, adoptive parents or legal guardians may borrow for dependents. • Pick up the PLUS information packet at the Financial Aid Office. • Take the completed loan application to a lending agency such as a bank or savings and loan association. • Pay the required fees. • Variable interest rate may not exceed 9 percent. • Lenders loan their own funds. • Payment begins 60 days after the date funds are disbursed.

You may rent a hall locker, located in some of the buildings on the Salem campus, for $5 a term. The physical education locker and towel fee in Building 7 of the Salem campus is $15 per term if you are not enrolled in a PE class; otherwise, it is free for you to use during the term of that class.

Student health and accident insurance

503.399.5011

Student insurance may be purchased directly from the insurance company. If you are enrolled for six or more credit hours, you may pick up insurance information at the Enrollment Center in Building 2 of the Salem campus or from staff at the other college locations. If you first enroll in Chemeketa during fall, winter, or spring terms, you may also purchase coverage to include summer term.

You are encouraged to buy insurance coverage if you are enrolled in classes involving risk and/or physical activity. In some classes and activities where good safety practices are required, you will be asked to sign a Risk Waiver Form.

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

Veterans' services

503.399.5004

veterans@chemeketa.edu

The Veterans' Services Office in Building 2 on the Salem campus provides information and assistance to veterans and eligible dependents to apply for and use all types of veterans' educational benefits.

Chemeketa staff in the Veteran's Services Office will process and submit a certification with applications and supporting documentation to the Veterans Administration for eligibility determination and benefit payment. Courses must apply toward completion of

the stated program to be eligible for VA educational benefits. The Veterans' Services Office will monitor enrollment, course and status changes, applicability toward program and grades; notifying the VA as appropriate.

You must also submit a college Application for Admission.

How to stay eligible

To continue to receive VA educational benefits, you are required to register for, complete, and maintain a 2.00 cumulative grade point average (GPA) for the following number of credit hours:

- Full-time students: 12 credit hours
- Three-quarter-time students: nine to 11 credit hours
- Half-time students: six to eight credit hours
- Less than half-time students: complete all credits

These requirements apply to each term for which you receive VA educational benefits. Your benefits also stop if you completely withdraw—officially or unofficially—from Chemeketa. You may be required to repay any VA educational benefits received.

Financial aid

503.399.5018

finaid@chemeketa.edu

If you do not have enough money to attend Chemeketa, the Financial Aid Office in Building 2 on the Salem Campus can help you apply for grants, loans, and part-time jobs.

Are you eligible?

To qualify for financial aid, you must:

- Be at least 18 years of age or have a U.S. high school diploma or a General Educational Development (GED) high school equivalency certificate, or have the ability to benefit from a college education.
- Be a United States citizen or able to provide I-94 or other documents showing you are an eligible non-citizen.
- Be registered with Selective Service if you are a male born after December 31, 1959.
- Show need for financial help.

Questions? Call for information.

Salem Campus Welcome Center
503.399.5120

advising@chemeketa.edu

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

Other Locations:
- **Dallas Area** • 503.623.5567 or 503.399.5206
- **McMinnville Area** • 503.472.9482 or 503.399.5219
- **Salem Keizer Area** • 503.399.6562
- **Santiam Area** • 503.769.7738 or 503.399.5215
- **Woodburn Area** • 503.981.8820 or 503.399.5207
- **Chemeketa-Brooks Regional Training Center** • 503.584.7344
- **Chemeketa Online** • 503.399.7873
- **Chemeketa Center for Business and Industry (CCBI)** 503.399.5181

- Enroll in an eligible degree program or a certificate program at Chemeketa.
- Enroll in six or more credit hours at Chemeketa with these restrictions:
  1) If you wish to receive aid as a full-time student, you must register for 12 or more credit hours.
  2) You may not include audited, non-credit, or challenge courses in these totals.
  3) You may not count a repeated course. An exception may be made if an instructor recommends in writing that you repeat a course in which you earned lower than a grade of "C."
  4) You may count up to 45 credit hours of developmental courses that were recommended by your advisor.
  5) Pell Grants are not restricted by any enrollment level.

What kinds of financial aid are available?

There are three kinds of financial aid available for students enrolled at Chemeketa:

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

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

When to apply

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

It takes at least eight to ten weeks from the time you file your FAFSA before money can be available to you. If you apply near the beginning of a term, you will need to be prepared to begin paying for tuition, fees, and books with your own money while your financial aid file is being processed.

Recommended application dates are posted in the Financial Aid Office and included with your FAFSA. If you apply after these dates, you may be eligible only for a Pell Grant and a Stafford Student Loan for the following term.

Financial aid applications are accepted throughout the academic year, which begins with summer term. If you do not apply before you start school and later find you need help, you may apply at any time; however, some financial aid programs have limited funds available. If you apply after these funds have been used up, the types and amounts of financial aid you can receive will be limited.

You must apply again for financial aid each school year. The forms for the next academic year are available in the Financial Aid Office each January.

How students are selected

Federal Pell Grant and Federal Stafford Loan funds are available throughout the year for qualified students who complete the required processes and enroll for the required credit hours.

The Oregon Opportunity Grant is awarded to qualifying students on an application-date basis determined by the state. Students eligible for the Federal Perkins Student Loan, Federal Supplemental Educational Opportunity Grant, and Federal Work-Study are awarded these funds on the basis of the date of completion of the student's file. Since these funds are limited,

applications with the earliest dates are given the highest priority. Not all eligible students will receive these funds.

The amount of the student's award will be determined each year by the Federal Pell Grant and State Need Grant programs and by Chemeketa for the campus-based programs.

Most funds are disbursed at the beginning of each term.

College Work-Study funds are paid on the last business day of the month.

How to stay eligible

To continue to receive financial aid, Chemeketa requires you to register for, complete, and maintain a 2.00 cumulative grade point average (GPA) for the following number of credit hours:

- Full-time students: 12 credit hours
- Three-quarter-time students: nine to 11 credit hours
- Half-time students: six to eight credit hours
- Less than half-time students: complete all credits

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

Academic progress

If you do not meet the minimum term and cumulative credit hours and 2.00 GPA requirements, the Financial Aid Office reviews your progress and may either stop your aid or place you on warning and allow you one more term to meet the requirements. If, at the end of two terms, you still do not meet the requirements, your aid stops. To regain aid eligibility,

students who are denied must file an appeal. If reinstated, you may be placed on warning.

Your aid stops if you completely withdraw officially or unofficially from Chemeketa. You may be required to repay all or a portion of any financial aid received.

How long are you eligible?

In general, you may receive financial aid at Chemeketa for 108 credit hours applied to an associate's degree or 54 credits applied to a certificate. All credits taken at Chemeketa and all transfer credits are included in this limit.

Refunds and repayments

During the first two weeks of each term, the college policy for tuition refunds applies to all students. See page 20 for details.

When a student who has received financial aid completely withdraws officially or unofficially, the Financial Aid Office will determine whether the student was entitled to all of the financial aid received. If not, the Financial Aid Office will determine what portion of the financial aid the student owes, and will notify the student. Repayments are based on the official withdrawal date. Students owing a repayment are not eligible for further financial aid funds and cannot receive any services from the college until the repayment is made. All financial aid students will receive a copy of this repayment policy. Students have 30 days from the date of the bill to repay the funds. Students who do not repay in full will have their debts turned over to the U.S. Department of Education for collection.

Help is here

The Financial Aid Office will give you information on applying for aid, your rights and responsibilities in receiving aid, loan repayment schedules, general conditions of employment, and methods used to determine or re-establish your eligibility. The Financial Aid Office will also help you with your concerns about funds and budgeting.

Academic Information
Student records and transcripts
503.399.5001
registrar@chemeketa.edu
Student academic records are maintained in the Registrar's Office for ten years. These records may include transfer credit evaluations, correspondence, curriculum substitutions, and degree evaluation toward graduation.

Transcripts of Chemeketa credit courses are kept permanently. You may request your official transcript online through My Chemeketa at my.chemeketa.edu. You may obtain an official transcript in person from the Enrollment Center in Building 2, Room 200, on the Salem campus by submitting a written request

with the appropriate fee. You can also access this service through My Chemeketa at my.chemeketa.edu for an unofficial transcript. If you owe a financial obligation to the college, your official transcript will be withheld until the debt is paid in full.

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

OAR 589.004.0400 authorizes Chemeketa Community College to ask you to provide your Social Security number. The number will be used by the college for reporting, research, and record keeping. Your number will also be provided by the college to the Oregon Community College Unified Reporting System (OCCURS), which is a group made up of all community colleges in Oregon and the State Department of Community Colleges and Workforce Development. OCCURS gathers information about students and programs to meet state and federal reporting requirements. It also helps colleges plan, research, and develop programs. This information helps the colleges to support the progress of students and their success in the workplace and other educational pursuits.

OCCURS or the college may provide your Social Security number to the following agencies or match it with records from the following systems:

- State and private universities, colleges, and vocational schools, to find out how many community college students continue with their education and to find out whether community college courses are a good basis for further education;
- The Oregon Employment Department, which gathers information, including employment and earnings, to

help state and local agencies plan education and training services to help Oregon citizens get the best jobs available;

- The Oregon Department of Education, to provide reports to local, state, and federal governments. The information is used to learn about education, training, and job market trends for planning, research, and program improvement;
- The Oregon Department of Revenue and collection agencies only for purposes of processing debts, and only if credit is extended to you by the college;
- The American College Testing Service, if you take the ASSET placement test, for educational research purposes.

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

Student records policy

503.399.5001
registrar@chemeketa.edu

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

Family Educational Rights and Privacy Act (FERPA)

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

- the right to obtain a copy of Chemeketa's current student records policy;
- the right to inspect and review your own educational records;
- the right to seek to amend your own educational records;
- the right to have some control over the disclosure of information from your own educational records (by authorizing or denying access in writing);

- the right to file complaints of alleged failures to comply with the requirements of FERPA (with the U.S. Department of Education).

Solomon Amendment Disclosure

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

Grading system

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

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

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

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

Grade/Points

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

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

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

Student's check list

1. If you are a new student, have you:
- ☐ *taken mathematics, reading and writing placement tests? Contact Counseling and Career Services, Salem Campus, Building 2, 503.399.5120. Bring ID and K#.*
- ☐ *submitted an Admission Application? You can submit an application via the Web at: applyonline.chemeketa.edu*
- ☐ *attended a new student orientation session?*
- ☐ *checked to find out if there are special requirements for the program you want to enter? Contact the Admissions Office, Salem Campus, Building 2, Room 200, 503.399.5006.*

2. Do you know the costs of:
- ☐ *tuition and fees?*
- ☐ *special tools, equipment, uniforms, etc. required by your program?*

These costs are listed in this catalog in the description of your career and technical education program.

3. Have you arranged for:
- ☐ *transportation?*
- ☐ *child care?*

4. Have you asked about financial aid?
- ☐ *Contact the Financial Aid Office, Salem Campus, Building 2, Room 200, 503.399.5018, or Chemeketa's Dallas or Santiam Center or McMinnville or Woodburn campuses.*

5. Have you checked on your eligibility for Veterans Administration educational benefits?
- ☐ *Contact the Veterans Office, Salem Campus, Building 2, Room 200, 503.399.5004.*

6. Have you read the term **Schedule of Classes** *for registration information and class listings?*
- ☐ *A copy of the schedule should be delivered to you by mail before each term begins if you live in the college district. Schedules are also available online at www.chemeketa.edu, at Counseling and Career Services, Salem Campus, Building 2, Room 115, at the Chemeketa campus in your community, or by calling 503.399.5006.*

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

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

I/0 **Incomplete.** An indication that the quality of work is satisfactory, but some essential requirement of the course has not been completed, and additional time is granted for completion of coursework. An "I" does not entitle a student to satisfy a prerequisite requirement for another course.

N/0 **No Grade Assigned.** The "N" grade is used when student participation in the course is minimal and does not warrant a grade. It may be used when the student's name is still on the final grade report and no other grade is possible. An "N" grade may not be assigned as a withdrawal or substitute for a failing grade.

P/0 **Pass. Acceptable Performance.** A grade of "P" represents satisfactory achievement which would have been graded "C" or better on the regular grading scale, but is given instead of a letter grade. A maximum of 8 "P" credits are allowed toward a one-year certificate. A maximum of 16 "P" credits are allowed toward an associate's degree.

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

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

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

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

Mark Meaning

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

R **Course Repeated.** The "R" mark is used upon student request when a course taken at Chemeketa has been repeated and the student receives a higher grade in the repeated course. If a course is repeated more than once, only the original grade can be changed to an "R". This mark cannot be used to change "N" or "I" grades.
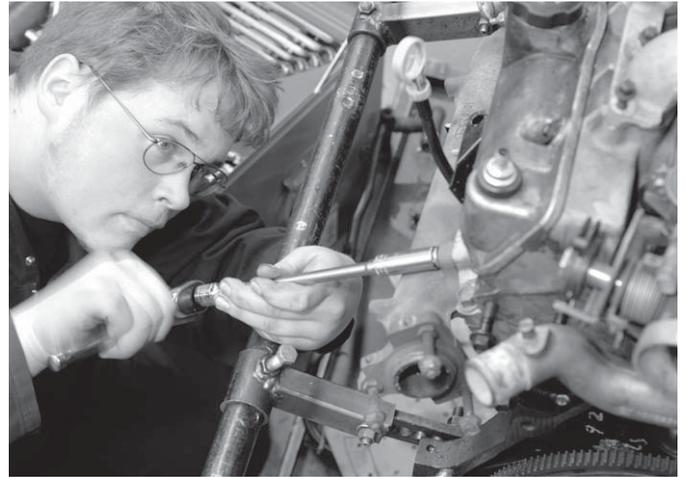
M **Missing Grade.** This mark appears when an instructor neglects to enter a grade for the course. Students receiving an "M" should contact the instructor as soon as possible so that a grade change can be submitted to correct the omitted grade.

Incomplete

You may remove an "Incomplete" from your record by completing course requirements. Your instructor will provide you with a Notice of Incomplete Status in a Course Form, which states what you must do and sets a date for you to complete the assignments. The deadline may be any time up to one year from the end of the term in which you received the "Incomplete" grade. When you have met the requirements, your instructor will change the "Incomplete" to a new grade and inform the Registrar. The Registrar's Office will officially notify you of the change.

Auditing courses

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

Refund policy

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

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

If you decide to drop a class, you may do so on My Chemeketa or by submitting an Add/Drop Form to the Enrollment Center on the Salem campus or other college locations during regular business hours. If you drop a class that meets for the entire term (a full term class) within the first two weeks of the term, you will receive a refund of tuition and fees as long as you have no outstanding debts. Less than full term classes have a shorter refund period.

You will not receive a refund or credit toward another class for any classes dropped after the end of the refund period. Refunds for classes paid by Visa or MasterCard will be credited back to the credit card. Refunds are not issued for amounts under $5. Changes in the number of hours for which you are registered may affect your financial aid, agency, or veterans' benefits.

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

Grade Changes

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

Pass/No pass

A pass (P) grade indicates satisfactory completion of the course (equivalent to a C or better). A no pass (NP) grade means the course was not satisfactorily completed and no credit was granted. Some courses offer the option to choose between P/NP and a letter grade and some courses may be taken for a letter grade only. A pass grade satisfies the prerequisite of "C" or better required for entry into some courses. Each student is limited to receiving no more than 16 P/NP credits for an associate's degree, and 8 P/NP credits for the Oregon Transfer Module or a certificate. Transfer students should be aware that four-year institutions limit the number of P/NP credits that may be applied to a degree. If you'd like to be graded P/NP, and the course qualifies, you must complete the P/NP Request Form, obtain your instructor's approval by way of his/her signature and submit

the request form to the Enrollment Center by the end of the fourth week of the term. P/NP grades cannot be changed back to a standard letter grade.

Continuing Education classes

A continuing education unit (CEU) course is one that provides general or technical information which is applicable to the professional or technical field and will be of value wherever the individual is employed. CEUs are not equivalent to credit hours and therefore cannot be used toward Chemeketa certificates or degrees. Some programs offering CEU classes offer CEU certificates. One CEU is awarded for each ten hours or their equivalent. Chemeketa transcript records are available for CEU hours.

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

P Pass 0.0

U Unsatisfactory 0.0

N No Grade 0.0

I Incomplete... 0.0

Repeating a course

503.399.5001

registrar@chemeketa.edu

Please confer with your academic advisor before you repeat a course. If you do repeat a course and receive a higher grade, and want your original grade changed in your record, pick up and turn in a Student Grade Repeat Request from the Enroll-

ment Center on the Salem campus or at any college location to change your grade to an "R" (Repeated). Please note that both the original course and the repeated course must have been taken at a Chemeketa Community College campus to request the original grade be changed to an "R." If you repeat a course more than once, only your original grade can be changed to an "R." If you repeat a course and receive a lower grade, both grades will remain on the transcript. If the original grade is an "N" or "I," it may not be changed no matter how many times you repeat the course. The Registrar does not include an "R" in computing your grade point average and does not count courses with an "R" grade in determining the total number of credit hours you have earned.

If you are receiving veterans' educational benefits, requesting an "R" grade could have an effect on the benefits you were paid in the term you originally took the course. In some instances an overpayment obligation may be created by the VA. Please contact Chemeketa Veterans' Services before submitting the Student Grade Repeat Request.

Transfer credits

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

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

In general, Chemeketa accepts college-level credits earned at a regionally-accredited college or university. Work from non-accredited schools is evaluated in accordance with the institutions and policies listed in Transfer Credit Practices, published by the American Association of Collegiate Registrars and Admissions

Officers. Credit given for a particular course will not exceed credit given for the equivalent corresponding Chemeketa course.

If you have taken the College Level Examination Program (CLEP) or the Advanced Placement (AP) Test, request that your scores be forwarded to the Admissions Office. Then contact the Admissions Office and request, in writing, an evaluation of your transcripts and scores. For more CLEP and Advanced Placement (AP) information, see page 23.

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

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

Auditing courses

If you enroll in credit courses but do not wish to receive grades or credits, you may register as an auditor. See Auditing courses under Money Matters on page 9.

Transfer credit, prior learning, and credit by exam

Transfer credit and prior learning accepted by Chemeketa

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

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

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.

Academic recognition

recognition@chemeketa.edu

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

Academic progress/review program

503.399.5076

Chemeketa wants to help students reach their academic goals. To accomplish this, the college has initiated an academic progress/review program which provides for intervention with students at certain points throughout their enrollment at Chemeketa. These intervention points are determined by either grade point average and/or course completion rate. Listed below are the criteria used for determining intervention by the Academic Progress/ Review Program:

Academic warning status

- A first-term student taking six or more credit hours who falls below a 2.00 GPA, or
- A continuing student who falls below a 2.00 cumulative GPA with more than 36 credit hours of coursework.

Academic probation status

- A student who is below a 2.00 GPA for a second consecutive term, or
- A student who falls below a 2.00 cumulative GPA, with 36 credit hours or more, for a second consecutive term.

Academic suspension status

- A student who was, during the preceding enrolled term, on academic probation and during the current term earns below a 2.00 GPA. The student will be suspended from further enrollment at Chemeketa until reinstated. The student may appeal the suspension through the Dean of Students.

Academic reinstatement

- Once suspended, a student will not be allowed to register for credit classes for a period of one academic year. After the one-year period, a student may file an appeal with the Academic Review Committee for reinstatement.

Course prerequisites

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

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

Credit by Advanced Placement examination

503.399.6556
advising@chemeketa.edu

If you enrolled in an Advanced Placement course in high school and earned an acceptable score on the Advanced Placement Test, you may receive credit from Chemeketa for the course. Inquire at Counseling and Career Services on the Salem campus about what courses and scores are accepted at Chemeketa.

Credit by College Level Examination Program (CLEP)

503.399.6556

testing@chemeketa.edu

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

Credit by challenge examination

503.399.6556

testing@chemeketa.edu

Another way to earn credit for some courses is to demonstrate your college-level ability by successfully passing challenge examinations, which are available for a limited number of courses. These examinations are prepared by the college department directly responsible for the instruction of the courses. There is a non-refundable fee of $25 for each exam. If you successfully complete the examination(s), you must pay tuition and fees for the course(s) before the grade(s) are recorded on your transcript.

Contact Testing Services on the Salem campus for more information about earning college credits by challenge examinations.

Credit by International Baccalaureate (IB) Certificate or Diploma

503.399.5120

Chemeketa Community College recognizes IB achievement by awarding credit to students who score 5 or above on Higher Level IB exams. The official International Baccalaureate Certificate is required in order to receive credit. If you are an enrolled student and want to receive this credit, you need to contact your former high school and indicate that you would like the official IB test scores to be sent to Chemeketa's Enrollment Services Office on the Salem campus. You can find out what courses are accepted by Chemeketa through the Salem campus Counseling and Career Services center.

Credit for prior learning

503.399.5120

In certain career and technical education programs and transfer areas, Chemeketa may award you up to 24 credit hours for documented knowledge and skills that apply to the program in which you enroll. These may be skills you acquired through working, on-the-job training, volunteer service, non-credit courses or workshops, individual study, homemaking, and travel. There is a fee for each course assessed.

To learn how to gain such credits, enroll in CPL120 Prior Learning Résumé, a three-credit-hour course, or contact the Counseling and Career Services staff on the Salem campus.

Credit for professional certification

503.399.5120

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

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

Independent study

503.399.5120

You may receive credit for an independent study of topics not included in the college's curriculum. If you are ready to learn on your own and are interested in studying a topic, contact your academic advisor or an instructor who teaches that subject. With that person, you can explore the possibility of an independent study project.

Distance education

http://online.chemeketa.edu/

503.399.7873 or online@chemeketa.edu

Distance education courses are available to students as an alternative to attendance in on-campus classes. Many students complete a degree with a mix of traditional and distance education courses.

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

Offerings, information, and registration procedures about distance education courses are available at http://online.chemeketa.edu and are also published each term in the *Schedule of Classes.*

Chemeketa television (CTV) broadcasts live Salem Campus classes to the McMinnville, Santiam, and Woodburn campuses, and to the Grand Ronde Education Center. One-way video and two-way audio communication allows students at the distance sites to participate in the classes.

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

Online courses allow you to take classes at your convenience. You will need access to a computer with required hardware and software. You must have an email address, access to Internet service, and be able to operate a browser such as Mozilla Firefox or Internet Explorer to participate in online classes. A technical orientation and information regarding minimum requirements for your computer browser and software needs is available on the Chemeketa Online web site at http://online.chemeketa.edu/orientations.htm. You will have a current email address listed in your MyChemeketa account. This is the email address the instructor will use to contact you. A $50 fee is charged for each online class in addition to tuition and applicable course fees. Some online courses include viewing of videotapes or streaming video as a course requirement. Contact Chemeketa Online at 503.399.7873 or email online @chemeketa.edu.

Evening and Weekend Transfer Express Programs

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

The Transfer Express program allows students to complete the first year of the Oregon transfer degree with guaranteed admission and specialized advising to ensure student success. For more information, contact Karen Stevens at 502.399.6561.

Student-instructor conferences

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

Study abroad

503.399.6145

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

Current programs include: fall quarter in Florence, Italy; spring quarter in Paris, France; and summer quarter in San Miguel de Allende, Mexico, and Costa Rica

For questions about Study Abroad, contact Maureen McGlynn, 503.399.6145.

Student Development Services

Tours of campus

503.399.3995

ambassadors@chemeketa.edu

Tours of the Salem Campus are conducted by Chemeketa's Student Ambassadors. You may call or e-mail to schedule a student-guided tour. College staff at the outreach centers and campuses can provide maps and information about those locations.

Student e-mail accounts

503.399.7899

tac@chemeketa.edu

Every Chemeketa student automatically gets a free student e-mail account through My Chemeketa (my.chemeketa.edu), the college's Web portal for students. My Chemeketa e-mail accounts are 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 your e-mail account for personal correspondence. You can

even take your e-mail account with you. It's there forever and you can continue to use it even after you finish your program of study at Chemeketa.

Use of computer technology

503.399.7899

tac@chemeketa.edu, newterra.chemeketa.edu/labs

Chemeketa classes routinely require the use of computers and the Internet. Class material (such as syllabi, lecture notes, and tests) may be made available to you via the Internet; sometimes that will be the only means for you to access those materials. Classes may also make use of the teaching tools available in My Chemeketa (such as file sharing, chats, and discussions). You'll find that, in more and more classes, ready access to the Internet will be assumed.

If you don't have a computer or Internet access at home, you can make use of Chemeketa's computer labs at most college center and campus locations, the lab within Chemeketa's library on the Salem campus, or a public-access computer at your local library.

Student Computer Lab

503.399.5237

Enrolled students are welcome to use this open computer lab for Chemeketa-related coursework. Computers run the Windows operating system and many common software applications used in Chemeketa courses. Instructional technicians are available to help students with the software applications. Printing and photo copying is available for a small charge. The lab is located on the Salem campus in Building 6, Room 218 and is open extended hours Mondays through Saturdays during the term.

Tutoring services

503.399.5190

tutor@chemeketa.edu

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

Literacy Volunteer program

503.399.2557

Volunteers offer basic skills and English as a Second Language tutoring on a one-to-one and small group basis in Salem and throughout the Chemeketa district. Contact the literacy volunteer program coordinator in Building 22, Room 100, on the Salem campus for more information.

Disability Services

503.399.5192 voice/TTY

disability@chemeketa.edu

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

Services for Deaf and hard of hearing students include sign language interpreting and adaptive equipment. Appointments are

necessary for all services. Early contact is advised, as late requests may result in a delay of service.

If you have a documented disability, including learning, psychiatric, sensory, orthopedic, or otherwise, please know that support services are available for you. The Disability Services office is available to help you assess your needs, coordinate access to facilities and processes, and plan academic accommodations that will make classes accessible.

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

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

TRiO projects

503.315.4293

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

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

Talent Search provides students in sixth through twelfth grade an opportunity to explore the benefits of a college education. You can participate in the program by being a mentor for a student in the program. Mentors develop goals and plan for their academic future.

Upward Bound is a college preparatory program for high school students. The program provides services year-round such as tutoring, after-school activities and Saturday workshops. During the summer, the program provides a six-week academy where students earn high school credits.

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

Migrant education programs

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

College Assistance Migrant Program (CAMP), based in Salem, offers first-year scholarships and academic and personal support for students planning to transfer to a four-year college or university. If you would like more information about CAMP, call 503.589.7778.

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

Writing Center

503.399.7179
cwc@chemeketa.edu
www.chemeketa.edu/services/writingcenter

If you need writing assistance, help is available in the college Writing Center where you may consult with writing instructors or use the computers. You can receive assistance in building writing skills, composing academic essays, and how to review and edit their work. In addition to stopping by the Center for assistance, please watch the quarterly *Schedule of Classes* for a listing of classes offered at the Center. For more information or to make an appointment, call or stop by the Writing Center in Building 9, within the library, on the Salem campus. The Center's homepage is www.chemeketa.edu/services/writingcenter.

Student Services

Alcohol and drug support groups

503.399.5116
stlife@chemeketa.edu

Support groups for substance dependency are coordinated through the Alcohol and Other Drugs Committee and staffed by volunteers. Times and locations of meetings vary each term. Contact the Student Life Office in Building 2 on the Salem campus for more information.

The Book Closet

503.399.5117

The Book Closet is a non-profit service, run by the Office of Student Retention and College Life, which provides an opportunity for you to buy or sell books at a reduced cost. Books sold must be currently in use at the college.

The Office of Student Retention and College Life receives books during finals week of fall term and winter term and sells books during the first week of winter term and spring term. The Book Closet is housed in Building 2, Room 176G, on the Salem campus. For more information, contact the Office of Student Retention and College Life at 503.399.5117.

Bookstore

503.399.5131
bookstore.chemeketa.edu

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

Refunds—You may receive full refunds for books the first two weeks of each term for which they were purchased. All books must be returned in their original condition. You must have the sales receipt for the books, personal identification and credit card, (if applicable) in order to receive a refund.

Book buy-back—Each term during finals week, the Salem and McMinnville Campus bookstores pay cash (up to 50 percent of the purchase price) for used textbooks that are needed for the next term. At any time, the bookstore buys books at prices established by used book wholesalers. Online students may call 503.399.5130 for buyback information.

Computers and software—Chemeketa students are eligible to purchase computer software at special prices. Some restrictions may apply. Contact the Salem Campus Bookstore for details.

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

Child care

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

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

The Financial Aid Office has a list of other child care centers in the Salem area, or you may call Salem's Child Care Information Service, 503.585.2491. Local child care providers advertise their services on a bulletin board located in the Student Center in Building 2 on the Salem campus, and local information may also be available at other campus locations.

First aid

503.399.5023
pub_safety@chemeketa.edu

For first aid services on the Salem Campus, call Public Safety at 503.399.5023. If you are at another college location and need assistance, please contact one of their staff. There are also emergency red phones located throughout the Salem campus which will connect you directly with the college's Public Safety Office. As the college has no physician or campus health facilities, you must rely upon your personal physician, dentist or clinic to meet your medical needs.

Housing information

503.399.5116

Chemeketa does not provide housing; however, the Office of Student Retention and College Life on the Salem campus maintains a bulletin board listing available housing, including

apartments for rent, rooms for rent in homes, homes for rent, and roommates wanted. You may post a notice and also check this bulletin board for housing. Other Chemeketa campuses and centers may have similar information available.

Library services

503.399.5043

library.chemeketa.edu

The library is located on the second floor of Building 9 on the Salem campus. The print, multimedia, and online collections located there support teaching and learning at Chemeketa. You have access to a local collection of approximately 65,000 books plus thousands of print and electronic magazines and journals. In addition, Chemeketa's Library is a member of the Chemeketa Cooperative Regional Library Service and the Orbis Cascade Alliance. Materials from regional libraries can be requested through the online catalog system. Other materials can be acquired through interlibrary loan. You can use the Internet-accessible computers with word processing software to conduct research, access course material, use e-mail, and complete assignments.

Within the library are group study rooms and group media viewing rooms that you can schedule in advance, and an open media view area for use at any time. Other equipment available includes typewriters, calculators, and photocopiers. The library also houses an art collection, a small collection of materials in Spanish, adult literacy information, and children's books.

Chemeketa students and employees may check out most materials. As a member of the Chemeketa Cooperative Regional Library Service (CCRLS—see page 34), the library also allows anyone with a valid CCRLS library card to borrow materials. The catalog can be accessed from the Internet at catalog.ccrls.org.

Lost and found

503.399.5023

pub_safety@chemeketa.edu

Lost and found items are housed in the Public Safety Office on the Salem campus and at the information desk at most other college centers and campuses. If you have lost or found an item, please check at one of these locations.

Parking on the Salem Campus

503.399.5023

pub_safety@chemeketa.edu

If you park a vehicle on the Salem Campus from 8 a.m.–10 p.m., Monday through Friday, the college requires a parking permit on the vehicle. Permits are not required at any other college location. Parking permits for the Salem campus are available at the Public Safety Office. Students and employees may purchase an annual parking permit (fall term through summer term) for $25. After initial purchase of an annual permit, additional annual permits may be purchased for a reduced fee of $5 for any vehicle registered to the original annual permit purchaser. Individual term permits may be purchased for $10. Permits are assigned to a specific vehicle and must be attached to the exterior of the

vehicle, either on the rear bumper or rear window. Visitors may obtain free parking permits at the Information Booth or Public Safety Office. Employees of the college and students are not allowed to use visitor permits.

Along with the permit, you will receive a copy of Chemeketa's Traffic Code. The college expects employees and students to know and follow the rules for operating and parking a vehicle on campus.

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

Public bus services

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

For more information on all routes and schedules in the Salem area, contact the Salem Area Transit Information Office (Cherriots) at 503-588-BUSS (TTY for hearing impaired: 503.370.8691) or visit their Web site: www.cherriots.org.

Information about Carts and Wheels bus service is available by calling 503.585.5187 (TTY 503.364.7869).

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

Smoking on the Salem Campus
503.399.5023
pub_safety@chemeketa.edu
College policy prohibits the use of tobacco products inside all college buildings, or within 20 feet of any building entrance at any college location. In addition, there are certain areas outside of buildings on the Salem campus that have been designated as non-smoking areas. Salem non-smoking areas are: the covered area near the entrance to Building 2 facing the old quad, the curved brick area adjacent to the south side of Building 2 facing the new quad, the Art Gallery entrance to Building 3 and all exterior stairwells leading to upper floors of buildings (for example, Buildings 6 and 8).

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

Student Leadership Opportunities

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

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

Student Center Assistants
503.399.5116
stlife@chemeketa.edu
The Student Center Assistants serve as the main reception and information agents for Student Life's front counter. Student Center Assistants maintain display cases, bulletin boards, and public areas of the Student Center. They also manage services such as the free speech area and board, the Conversation Partner program, sign-ups for special programs, and complete projects that support the department. Assistants are selected through an application and interview process to determine their interests, abilities, and experience working with people. Student Center Assistants are paid an hourly rate and may be eligible for tuition grants and college credit.

Associated Students of Chemeketa (ASC)
503.399.5185
strep@chemeketa.edu
The ASC Executive Board represents the Chemeketa student voice on the Chemeketa Board of Education, Oregon Community College Student Association (OCCSA), College Council, and various college standing committees. They coordinate the ASC Student Council, student forums and other tools for student representation.

The Chemeketa Courier
503.399.5134
The Chemeketa Courier, Chemeketa's student newspaper, is published weekly during fall, winter, and spring terms. It is written and prepared by journalism students and has won several awards from the Oregon Newspaper Publishers' Association.

If you are interested in joining The Chemeketa Courier staff as a reporter or photographer, apply for a staff position by contacting the newspaper advisor. Students can also enroll in the class, JNL215, and work on a number of assignments, including page design, distribution, copy editing, headline writing, cartooning, column/editorial writing, etc.

Literary publication—A humanities faculty group solicits student literary efforts throughout the year. Works are reviewed, and selected entries are published in Visions, a literary supplement to The Chemeketa Courier.

College committees

503.399.5185

strep@chemeketa.edu

Student representatives serve on the following campus-wide committees along with Chemeketa employees: Academic Standards, Alcohol and Other Drugs, Curriculum, and Multicultural.

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

Cultural Forum student work team

503.315.4262

The Cultural Forum student work team's mission is to increase the college community's cultural awareness by supporting the many cultures on campus. This diverse student team researches and plans events that increase the college community's cultural awareness, supports the many cultures on campus, and increases the development of cultural competency to the community with the assistance of Chemeketa employees.

Multicultural Center—The mission of the Multicultural Center is to foster dialogue and learning that celebrates diversity and respects humanity among individuals and groups. Brown bag lecture series includes some of the following activities: intercultural student social hour, intercultural movie night, student speakouts and poetry readings, and more.

Intercollegiate athletics

503.399.5082

Chemeketa is a member of the Northwest Athletic Association of Community Colleges (NWAACC), which includes all community colleges in Oregon and Washington. This highly-organized program affords quality, competitive opportunities for students. In keeping with the standards of the program, emphasis is put on academic progress as well as athletic opportunity.

Chemeketa fields teams in men's baseball, men's and women's basketball and soccer, and women's volleyball and softball.

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

Mentor program

503.315.4293

The TRiO Talent Search Mentor Program gives you an opportunity to take part in a community service-learning project. Student mentors are trained to assist middle and high school students—one-on-one—in developing positive self-esteem and encouraging them to continue their education. Mentors attend a seminar course for academic credit, which combines large-group study/training with small-group consultations. Each mentor meets weekly at the middle or high school to assist in-class assignments and other group or one-to-one situations.

Peer Assistants

503.399.8748

peers@chemeketa.edu

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

Student Ambassadors

503.589.7644

ambassadors@chemeketa.edu

This program gives you the opportunity to work as a student leader in a variety of college settings. Student Ambassadors conduct campus tours and provide assistance to prospective students through personal contact and correspondence. You can also be involved in recruitment, promotional and special events, high school visitations, and working with international and multi-cultural students. Ambassadors are selected through a competitive application and interview process. As an ambassador, you may be paid at an hourly rate, a tuition grant, or a combination of both.

The International Student Ambassadors have the opportunity to work with students from different parts of the world. They also assist international admissions and the language institute staff.

Student Leadership Team

503.399.5117

st-leadership@chemeketa.edu

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

Student clubs and organizations

503.399.5118

st-leadership@chemeketa.edu

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

Where to eat on the Salem campus

Food Central, Building 2. Open Monday through Friday, this location offers a seven-station food court featuring wraps, grill, grab-n-go, soup express, hot entrees, salad toss and a pastry/dessert station.

Food Court Espresso, Building 2. Serves espresso, gourmet coffees, pastries, and smoothies.

Summit Subs and Barrel Head Pizza, Building 2. Provides sub sandwiches made to order and pizza.

Crossroads Café, Building 4. Offers espresso, gourmet coffees, pastries, soup, sandwiches, and salads.

Winema Market & Deli, Building 48. A self-service operation offering gourmet sandwiches, salads, soups, pastries, snack items, sundries, assorted beverages, and a full espresso bar.

Catering, Northwest Hospitality Services, 503.399.3906. On-campus delivery, coffee services, lunches, and dinners.

There are also a number of snack and beverage vending machines located in many buildings on all Chemeketa campuses and centers.

Counseling and Career Services

Counseling services

503.399.5120

advising@chemeketa.edu

If you are interested in educational, career, or personal counseling, contact our Counseling and Career Services Center in Building 2 on the Salem campus. Chemeketa's Dallas and Santiam centers and McMinnville and Woodburn campuses also provide counseling by appointment. Counseling and Career Services are available to both current and prospective students.

Individual assistance

Counselors offer individual help for academic course and program planning, including transfer to four-year colleges and universities, career decision making, and personal issues. For assistance, call Counseling and Career Services for current hours of operation.

Career planning classes

Career planning classes are conducted by counseling staff to assist you in choosing or changing careers. In these workshops you may:

- gain a better understanding of your interests, values, and skills;

- relate those characteristics to a wide variety of careers;

- find accurate information about occupations and labor market trends;

- develop a personal plan of action.

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

New Student Orientation

New student orientation is available each term, and is required of all new credit students. It can help you learn how to register, choose classes, and learn about college resources. For more information, contact Counseling and Career Services.

Career Information System

A computerized Career Information System (CIS) is available for current and prospective students to use in career decision making. In using this statewide database, you respond to questions concerning your interests, abilities, and preferences. The computer analyzes your responses and prints a list of occupations which may suit you.

In addition, you may:

- obtain descriptions of occupations;

- learn how to prepare and train for specific careers and find out which schools offer such training;

- gather information about the availability of jobs;

- obtain salary information for occupations in Oregon.

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

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

Academic advising

Chemeketa offers academic advising to all students. If you are enrolling in a career and technical education program of study, you are assisted by a faculty advisor in your program. If you are a full-time "undecided" student who has not chosen a specific program of study or if you plan to transfer to a four-year school, please see a counselor in Counseling and Career Services on the Salem campus. You may also consult with a counselor at the Dallas and Santiam Centers or McMinnville and Woodburn campuses.

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

Job Search and Placement

Job placement services

503.399.5026

jobplacement@chemeketa.edu

If you are looking for a job or just need help with the job search process, check out the free services and resources available at Job Placement Services, located in Building 2 on the Salem campus. There are also a variety of jobs available on My Chemeketa that relate to specific career programs at Chemeketa, as well as other part-time and full-time positions.

Job search assistance and resources

Job Placement offers assistance and information with job search techniques. Resource material ranges from résumé writing to interviewing techniques. You can also take advantage of equipment such as computers, printers, and fax machines available to assist you in your job search. Appointments may be scheduled for individual résumé consultation and assistance.

On-campus recruiting

Employers contact the college daily looking for applicants for jobs requiring a wide range of experience and skills. Job Placement works with employers who wish to come to the Salem Campus to recruit and interview students. These visits are announced through My Chemeketa, job postings at the center, and announcements in classes.

Cooperative Work Experience

503.399.5029

cwe@chemeketa.edu

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

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

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

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

> **Career Management classes**—Career management classes are offered for those in the process of finding, keeping or changing jobs. These classes include résumé and Job Search Correspondence, Interviewing for Success, and Preparing for the Changing Workplace.
>
> **Preparing for the Changing Workplace**—Three credit class focusing on current diversity workplace issues, the skills needed for today's workplace, and identifying personal skills and identify teambuilding strategies required by most employers. Experience working as part of a team on a service-learning project.

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

Services to the Community

Campus Art Gallery

503.399.2533

Chemeketa's art gallery is located in Building 3 on the Salem campus. It presents exhibits of professional artists from the region and around the country. Several shows a year, featuring a wide variety of media, are open for viewing by students, staff and the public. A special exhibit of student work is on display at the end of every academic year. To learn about the current exhibit, check gallery hours or see the upcoming season, go to the gallery Web site: www.chemeketa.edu/collegelife/arts/gallery.

The Chemeketa Center for Business & Industry

503.399.5181

ccbi.chemeketa.edu

The Chemeketa Center for Business & Industry (CCBI), currently located at 365 Ferry St. SE. in downtown Salem, trains and counsels over 9,000 employees and business owners each year. Ongoing professional development pays dividends through improved performance on the job. You can choose from regularly-scheduled workshops or employers can arrange for a workshop to be delivered at the workplace. Computer and wireless Internet connections are available, with a conference room that seats 35 and is available to rent for employee development needs. Some of the specific services available to the local community include:

Small Business Assistance—CCBI assists regional economic development efforts by providing business assistance from the Small Business Development Center. The Resource Center

includes access to business publications, books, videotapes, and computers for researching business needs. The Small Business Management Program works with a cohort of 30 business owners over a full year.

Online Delivery—A full range of Internet-based workshops offered with three starting times per term. Take classes from home or work on your computer; instructors interact via e-mail. Over 200 topics including: small business management, accounting software, MS Office, project management, Spanish and media design. Personal assessments with related instruction are also available via WorkKeys and KeyTrain.

Core Workplace Skills—A wide variety of employee and organizational assessments are available for individuals or groups, including math, reading, writing, communication, problem solving, and English as a second language. Skill development courses are provided for any of these subject areas. Course delivery methods range from traditional classroom to computer-based instruction.

Command Spanish—Participants learn one-way communication in Spanish. Short, outcome-based workshops and classes for dentists, nurses, law enforcement officers, bank tellers, teachers, firefighters and many other professionals yield immediate benefits for patients, employees, and customers. No prior knowledge of Spanish is required.

Customized Training—Specific trainings are tailored and customized for your employees and delivered at the worksite at convenient days and times. Clients include entire industries, businesses, organizations, and government agencies. Through statewide and regional networks, the Chemeketa Center for Business & Industry has access to hundreds of trainers. Services include:

Computer Training—Located on the Salem campus, a state-of-the-art computer lab provides technical skills, and certification preparation training for individuals and organizations. It is available for rent. Classes are designed to increase work-related skills and productivity and can be customized to meet your needs.

Portable laptops are available for rent.

Chemeketa Cooperative Regional Library Service

503.399.5165
www.ccrls.org
The college library is part of the Chemeketa Cooperative Regional Library Service (CCRLS), along with 17 public libraries in the college district. This cooperative, tax-supported effort provides library service to district residents who have no access to a local library. Member libraries share their resources

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

An automated, online catalog listing over 500,000 titles found in CCRLS libraries is available in each library. Patrons can search by author, title or subject to find materials in any member libraries. The catalog can be accessed from the Internet at catalog.ccrls.org.

Community Agriculture classes

503.399.5139 or 503.589.7946
Chemeketa offers non-credit classes to meet the continuing educational needs of persons involved in agriculture. Classes are offered in each of the following areas:

- The use of plants for environmental sustainability
- Landscaping
- Gardening fundamentals for K–8 teachers
- Pesticide license examination preparation and recertification
- Spanish in agriculture
- Agricultural leadership development in English and Spanish
- Ethanol/biodiesel production
- Farm equipment safety and maintenance in English and Spanish
- Agricultural math in Spanish

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

Agribusiness Management—Chemeketa's three-year Agribusiness Management program prepares farm businesses who are program participants to understand sound business management principles and practices through a focus on effective farm record keeping, analysis, and interpretation. For more information, see page 67.

Community Education classes

503.399.6562
Chemeketa offers a variety of community education classes throughout the district. These non-credit, personal enrichment classes vary in length from two hours to ten weeks. Classes start throughout the term and are offered during daytime, evening, and weekend hours. Topics include art, computer skills, cooking, dance, driver's education, English language for non-native speakers, fitness, foreign language, health, home projects, music, continuing technical education, travel, welding, and writing.

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

The Community Education Program is always interested in ideas for new classes and potential instructors who have teaching experience, enthusiasm, and a desire to share knowledge. Please call 503.399.6562.

Outreach programs

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

Chemeketa's campuses and centers in McMinnville, Dallas, Santiam, and Woodburn also provide Adult Basic Education, General Educational Development (GED) test preparation, English as a Second Language, and High School Completion programs. Each campus has a mathematics lab for individualized, self-paced instruction and business skills classes that include training on computers and word processors.

In addition to classes, all these campuses and centers provide these services:

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

Planetarium

503.399.5200 or 503.399.5246

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

Chemeketa usually presents one to two different sky shows each fall, winter, and spring term. Showings are scheduled Friday nights when classes are in session. There is an admission fee with a special rate for students. Call to arrange group showings for schools, clubs, and organizations.
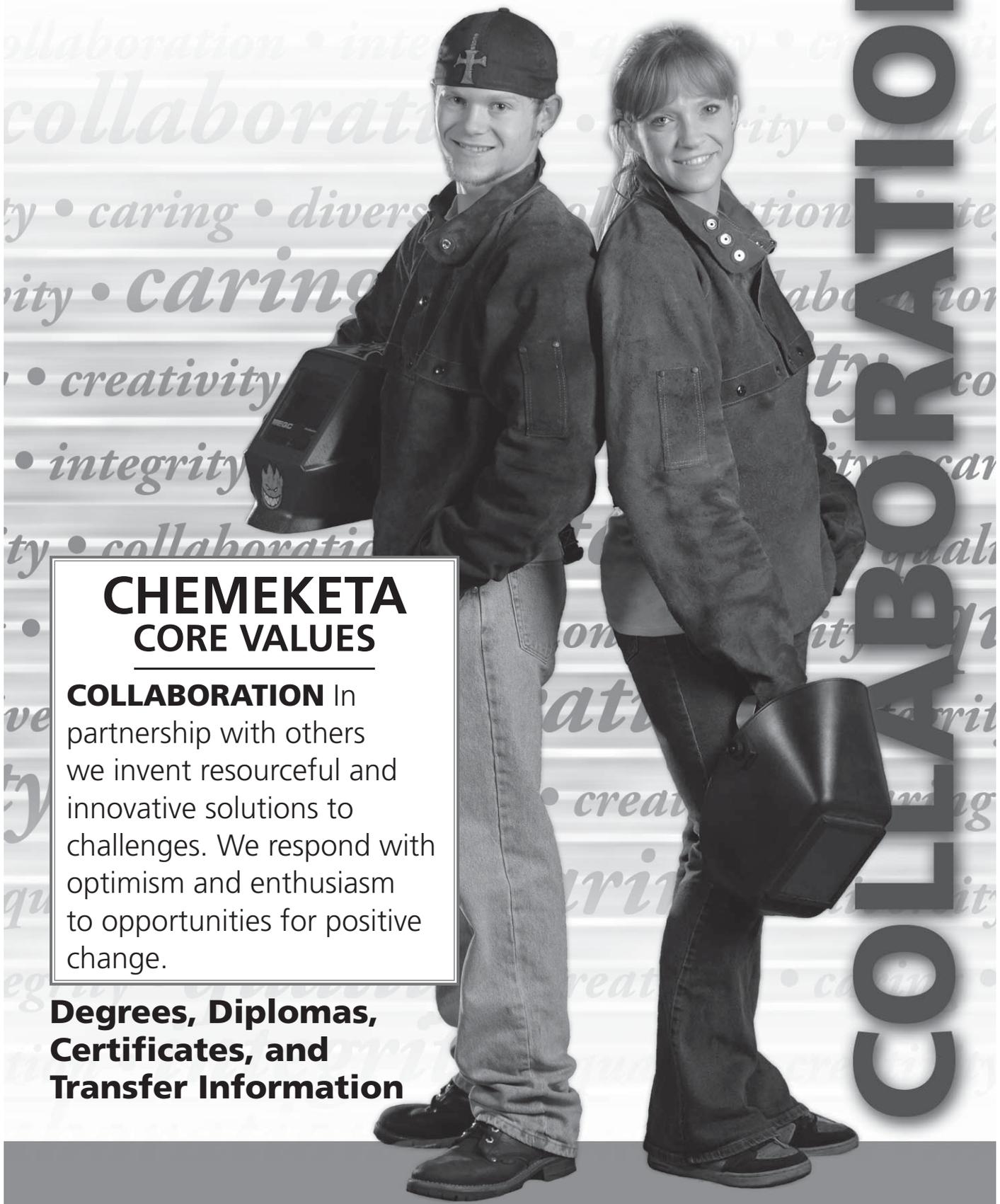
COLLABORATION

CHEMEKETA
CORE VALUES

COLLABORATION In partnership with others we invent resourceful and innovative solutions to challenges. We respond with optimism and enthusiasm to opportunities for positive change.

Degrees, Diplomas, Certificates, and Transfer Information

Degrees, diplomas, certificates, and transfer information

Associate Transfer Degrees and Oregon Transfer Module

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

Oregon Transfer Module

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

To earn the module, which is equivalent to three academic quarters or 45 credits, you must select from a list of approved courses listed on page 53. 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 encompasses the core curriculum of a liberal arts education. This core includes coursework in the areas of communication, humanities, social sciences, mathematics, sciences, computer science, and physical education or health. In addition, you are encouraged to explore a broad range of subjects through elective coursework.

Students who earn an Associate of Arts Oregon Transfer degree from Chemeketa will have fulfilled the lower division general education requirements at any of the schools in the Oregon University System. If you enroll full time, it usually takes two years to meet the AAOT requirements listed on page 54.

See the Program Guide on pages 46 to 51 for a complete list of our transfer programs. Information and curriculum guidelines of these programs begin on page 68.

Associate of Science/Oregon Transfer Business degree

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

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

Associate Degrees and Certificates

Associate of Science degree

The Associate of Science (AS) degree is designed for students who plan to transfer and complete a Bachelor of Science degree at a four-year college or university. The degree includes a core of general education courses and electives that allow you to tailor your course of studies to meet particular college transfer requirements. It does not guarantee that you will have completed all lower division general education requirements for the baccalaureate degree, nor does it ensure junior-level status at a four-year state university.

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

To qualify for the degree, you must meet the requirements listed on page 57.

Associate of Applied Science degree

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

In most of these programs, you may earn an Associate of Applied Science (AAS) degree. If you enroll full time, it usually takes about two years to meet the Associate of Applied Science degree requirements. In some programs of study, there are prerequisites to enter the program. See the Program Guide on pages 46 to 51 for a complete list of Associate of Applied Science degree programs. Information and curriculum outlines of these programs begin on page 68 along with college transfer curricula.

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

Associate of General Studies degree

The Associate of General Studies (AGS) degree addresses the needs of students who are not seeking an Associate of Arts Oregon Transfer degree or the specific program requirements of an Associate of Applied Science degree. This degree allows you to combine a broad core of basic courses with a program of study that may be tailored to your academic or professional goals.

You may wish to use this degree to enhance your employment or to fulfill the requirements of a specific four-year college program or special program of study.

To qualify for the Associate of General Studies degree, you must meet the requirements listed on page 58.

Certificate of Completion

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

See the Program Guide on pages 46 to 51 for a complete list of Certificate of Completion programs. Information and curriculum outlines of these programs begin on page 68 along with college transfer curricula.

You may earn a Certificate of Completion by meeting these requirements:

- satisfactorily complete the required courses or credit hours listed for each program;
- earn a cumulative grade point average of 2.00 or above for all coursework which applies to the certificate;
- complete a minimum of 15 credit hours at Chemeketa, and;
- apply courses numbered 050 or higher toward a certificate.

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

Second degree

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

Graduation

e-mail: 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 Degree or Certificate form. Return the form to the Enrollment Center in Building 2, Room 200, on the Salem campus by the fourth week of the academic term before the term in which you will complete the program requirements. Dates for when applications for graduation are due are listed on page 3 and in the calendar published each term in the *Schedule of Classes.*

Degrees and certificates become official when graduation information is recorded on your transcript.

If you plan to complete the requirements for your degree during summer term, you may request to participate in graduation exercises held the preceding June. To do this, contact Graduation Services on the Salem campus.

If your studies are interrupted by two years or more, you may find upon your return to Chemeketa that some of the requirements for graduation have been changed. You may have to complete the new requirements in order to earn your certificate or degree.

You may be allowed to make substitutions in the curriculum and still meet graduation requirements by contacting your program advisor.

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

Chemeketa awards adult high school diplomas through its High School Completion program. The Oregon Department of Education issues General Educational Development (GED) certificates. Students receive these diplomas and certificates at a graduation ceremony in June. For details on the High School Completion and GED programs, see page 41.

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

Occupational Skills Training

503.399.5028

You can earn college credit and a Certificate of Completion for work-based training at approved community training sites throughout the state. Instruction is based on a personalized curriculum created for you by the Skills Training coordinator, site supervisor, and/or sponsoring vocational consultant if a sponsoring agency is involved. Occupational Skills Training is eligible for financial aid if you qualify. Relevant classes may also be part of the training if those classes are essential to developing the skills being sought. Workers' compensation coverage is included. For further information about the program, see page 127 in the Programs of Study.

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

Office of High School Programs

Chemeketa has several programs to help you earn the credits you need to receive a high school diploma or its equivalent. The college also offers special classes to help you improve the basic skills that are important when you enroll in college-level courses.

Alternative High School Programs

GED Options—Chemeketa Campuses

Special GED programs for high school students are available at many of Chemeketa's campuses. If you are currently a high school student, this program allows you to remain enrolled in your local high school while attending Chemeketa GED Options programs. Referral through local high schools is required for this program, and specific attendance and reporting requirements apply.

For more information, contact the program at 503.399.6036 or 503.589.7650.

Winema High School

If you are enrolled in a local high school and in need of alternative high school services, you may want to find out more about Winema High School on the Salem campus and other alternative high school programs at the Woodburn and Santiam campuses. These students are selected and referred by local school district personnel. Special programs are developed to meet high school graduation requirements and are tailored to serve at-risk students to develop college success and academic skills. You must be enrolled in the program full time and must be 16-18 years old.

For more information contact the program at 503.399.6036 or 503.589.7650.

ESL Transitions to College

English Language Learner Credit Recovery and GED Options

Chemeketa's Salem campus is offering a program designed to support high school students, aged 16–21, who are English Language Learners enrolled in local high schools. This program involves language development, math skill development with second language support, and GED instruction. If you participate in this program, you will receive 25 hours per week of instruction and will remain on the rolls of the high school.

For more information contact the program at 503.399.6036 or 503.399.5115.

Early College High School Programs

Early College High School

In partnership with various school districts, Chemeketa has developed early college opportunities for high school students. In this program you work with your school district counselor to get approval to take college courses at one of Chemeketa's many campuses. College credit applies for both college and high school requirements. For information contact 503.399.6036 or 503.399.5115.

Expanded Options

This program allows you to take college classes while still enrolled in your local high school. You can take college courses based on high school graduation requirement recommendations from local counselors and on placement test scores. You may enroll in one or more courses for which you meet college prerequisites and requirements. School districts approve all applications for this special program. You are required to attend pre-college orientations prior to enrollment and work with the High School Programs staff and advising specialists on the logistics of enrollment. High school district approval is required.

For more information, contact the program at 399-6036 or 503.399.5115.

Adult high school diploma program
503.399.5115

In Chemeketa's adult high school diploma program, you may earn the credits you need to receive a high school diploma.

To enroll in the adult high school diploma program, take copies of your high school and college transcripts to the Winema School Office in Building 50 on the Salem Campus or to Chemeketa's Santiam Center or McMinnville or Woodburn campuses. To participate, you must take the college placement tests and meet the minimum entry scores.

At Chemeketa, you may earn credits toward a high school diploma in three ways:

- Enroll in high school completion classes offered at the Santiam Center or on the Salem, McMinnville, or Woodburn campuses.
- Earn high school credit for most Chemeketa classes. All Chemeketa high school-level courses must be completed with a grade of "C" or higher for high school credit to be awarded.
- Receive credit for some of your life experiences. These may be skills and knowledge you learned on a job, doing volunteer work, managing a home, or serving in a branch of the military. Chemeketa employees will evaluate your experiences to award you credit.

Twenty-two high school credits and assessment scores at the minimum level or above are required to complete the high school diploma program. (At least two of these credits must have

been earned at Chemeketa Community College.) To be in the program, you must be 16 years or older. Students who have met state minimum required courses/credits must complete residency as well as other requirements. You must have a release from your high school to participate in this option if you are under 18 years old.

Skills Development and College Transition Programs

General Educational Development (GED)
503.399.6556

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

Chemeketa offers classes throughout the college district to help you prepare for these tests. You may enroll during the term (depending on space in classes) and progress at your own pace. Classes are held at the Dallas and Santiam centers and at the McMinnville, Woodburn and Salem campuses. Generally, you must be 18 years or older, but if you are 16 or 17 years old, you may enroll if you have a release from your high school. Fees may apply.

GED tests are given in Salem, McMinnville, and Woodburn. The fee is $100. To request disability related accommodations, please call 503.399.5192.

Adult Basic Education (ABE) and General Educational Development (GED) Classes
503.399.5224

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

- Pre-GED and GED-level reading
- Math fundamentals and math review
- Spelling and grammar
- Social Studies and Science
- Developing Writing and Essay Writing
- Computer Basics

Classes are held on the Salem, Woodburn, and McMinnville campuses and at the Dallas and Santiam centers.

Basic Skills Development

503.399.5224

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

English as a Second Language (ESL)—non-credit and English for Non-Native Language (ENL) Speakers—credit program.
503.399.6298

The ESL/ENL Program provides instruction designed to improve non-native English-speaking students' ability to read, write, listen, and speak in English with additional classes in pronunciation, grammar, and basic computer skills for students from the beginning level to advanced (college-transition) level. You can take classes as non-credit or for college credit. They are offered in the day and evening on Salem, McMinnville, and Woodburn campuses. If you want to learn more about ESOL or ENL classes, contact the ESOL program to find out about language assessment and enrolling in classes. The program also offers language assessment and description of language abilities to employers and individuals for a small fee.

Chemeketa Language and Culture Institute
503.315.4290

The Language and Culture Institute provides English instruction to meet the needs of international students planning to enter American colleges and universities. It also serves students who want to experience American culture and improve their English for personal or professional reasons. The institute offers instruction at several levels from beginning to advanced. The intermediate and advanced levels may be taken for college credit. The institute also customizes short programs for small groups.

Reading and Study Skills Program
503.399.5162

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

College-level Reading and Effective Learning courses (Study Skills) and English as a Non-Native Language (ENL)

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

College transfer

General information

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

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

- Contact the four-year university you plan to attend to check entrance requirements and the suggested freshman and sophomore classes required in your chosen field.
- Confer with a Chemeketa counselor or an academic advisor before you register.
- Check with the college or university a term or two before completing your work at Chemeketa to make sure you are meeting all requirements.
- Apply for admission as a college transfer student and transfer your credits to the four-year institution.

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

Collaborative bachelor's degrees

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

Portland State University
Amy Nelson Green, Academic Advisor
503.399.5262, psusalem@chemeketa.edu
Bachelor's degree programs in Liberal Arts and Social Science.

Linfield College
Ann Sukalac, Advisor
503.399.5121, asukalac@linfield.edu
Bachelor's degree programs in Arts and Humanities, Accounting, Business Information Systems, International Business, Management, Nursing (RN to BSN only), and Social and Behavioral sciences. Certificate programs in Accounting (post-baccalaureate only), Computer Information Systems, Human Resource Management, and Marketing

Oregon State University
Mary Coy, coordinator
503.589.7678, ecampus@oregonstate.edu
Bachelor's degree programs through distance education in Environmental Science, General Agriculture, Liberal Studies, and Natural Resources. Other minors are available.

George Fox University
Kathy Grant, admissions counselor
888.888.0178, kgrant@georgefox.edu
Bachelor's degree programs in Management and Organizational Leadership, and Social and Behavioral Studies.

Corban College
Shannon Glaser, advisor, Business & Organizational Leadership
Kathy Benitez, advisor, Family Studies
503.375.7590, sglaser@corban.ed, kbenitez@corban.edu
Bachelor's degree programs in Family Studies Management and Communication.

Western Oregon University
JoNan LeRoy, Director
503.838.8483, leroyj@wou.edu
Master of Science in Education program available.

Eastern Oregon University
Terry Walters, advisor
866.724.2815, twalters@eou.edu
Bachelor's degree programs through Distance Education in Business Administration, Business Economics, English (Literature/Film), Fire Service Administration, Liberal Studies, Philosophy/Politics/Economics, Physical Education/Health, and Psychology. Minors also available.

University of Phoenix Salem Learning Center
Tiffany Murray Darwich, Corporate Education Liaison
503.495.2895, Tiffany.Murray@phoenix,edu
Bachelor's and master's degree programs in Business (e-business, Administration, Accounting, Finance, Management), Human Services, Criminal Justice, Information Technology, and Management in a convenient and flexible online and classroom format via evening and weekend classes in Salem and Portland or distance education.

Capella University 888.227.2736
Online bachelor degree programs in Business, Information Technology, and Education.

Curriculum requirements

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

General education requirements for Oregon's four-year colleges and universities are listed on pages 59–65. Counseling and Career Services also has advising sheets specific to these institutions, which include Eastern Oregon University, Oregon Institute of Technology, Oregon State University, Portland State University, Southern Oregon University, University of Oregon

and Western Oregon University. Additionally, the center has advising sheets for programs offered at Bassist College, Concordia College, George Fox University, Lewis and Clark College, Linfield College, Marylhurst University, Oregon Health Sciences University, Pacific Northwest College of Art, Pacific University, University of Portland, Corban College, Western States Chiropractic College, Willamette University, and the University of Phoenix.

Military Science (Army ROTC)

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

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

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

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

General education

Philosophy

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

General education courses offer students a coherent core of studies, including but not limited to, the humanities and fine arts, communication, the social sciences, mathematics, the natural sciences, technological literacy, and health and wellness. Overall, general education provides opportunities for lifelong learning and the ability to integrate concepts and ideas across disciplines.

Outcomes

At Chemeketa, outcomes in general education communicate the knowledge, skills, and abilities required to equip students to make responsible contributions to their society. Through regular and systematic assessment, the college ensures that students who complete their program of study have achieved the outcomes outlined in the next section.

At Chemeketa Community College, students successfully completing a course of study with a grade of "C" or better will be able to:

- Write effectively, purposefully, and ethically in addressing complex issues to a variety of audiences, using reliable sources and proper documentation.
- Analyze and evaluate texts in the service of learning, discovery, reflection, and self-expression.

- Engage in critical analysis and ethical communication processes that allow people to accomplish goals; respond to the needs of diverse audiences and contexts; and build and manage personal, community, and global relationships.
- Use social science principles to interpret human events, social and cultural systems, and/or environmental phenomena.
- Engage in self-expression using discipline-specific skills.
- Analyze self-expression, creations, visual images, personal values or ethics within the stream of human experience, and explore ideas and belief systems other than one's own.
- Use mathematics, including algorithmic techniques, to solve problems and recognize which concepts apply to a scenario; apply appropriate mathematical or algorithmic thinking in its solution and accurately interpret and communicate results.
- Use scientific modes of inquiry, individually or collaboratively, to critically evaluate and communicate diverse ideas, solve problems, and make evidence-based decisions for self, family, community and the world.
- Identify and practice health-enhancing behaviors and reduce health risks to live safer, healthier, more productive lives.
- Independently apply essential knowledge of common, current technology and applications to organize information, solve and avoid problems, adapt to new situations, and effectively communicate with other technology users. Recognize information needs; find, evaluate, effectively utilize, and present information.

Related instruction

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

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

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

Certificates of Completion* and Short-term Training Awards

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

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

Certificates of Completion

Certificate	Contact	Duration	Page
Activity Director Training	Peggy Soliday, 503.399.6159	1 term	189
Addiction Counselor Certification Preparation	Wanda Urban, 503.399.6154	4 terms	116
Advanced Technology Endorsement	Charles Sekafetz, 503.399.6254	3 terms	103
Architectural Drafting	Julie Peters, 503.399.6531	3 terms	96
Automotive Body Repair	Steve Agee, 503.399.6521	2–3 terms	76
Automotive Entry-Level Technician	Steve Agee, 503.399.6521	2 terms	76
Automotive Machining	Steve Agee, 503.399.6521	3–4 terms	77
Basic Corrections	Elaine Premo, 503.589.7768	2 terms	92
Basic Law Enforcement	Elaine Premo, 503.589.7768	2–3 terms	93
Basic Nursing Assistant	Karen Haury, 503.399.5058	11 weeks	126
Business Software	Patti Sessions, 503.399.6094	3–4 terms	81
Business Technology	Patti Sessions, 503.399.6094	3–4 terms	80
Career and Technical Teacher Preparation	Malia Stevens, 503.399.2694	3 terms	85
CNC Operator	Sheldon Schnider, 503.589.7875	3 terms	120
Computer Programming	James Finholt, 503.589.7813	2–3 terms	90
Computer Security & Forensics	James Finholt, 503.589.7813	2–3 terms	90
Computer Systems Administrator	James Finholt, 503.589.7813	2–3 terms	91
Computer Systems Support	James Finholt, 503.589.7813	2–3 terms	91
Computer-Aided Manufacturing (CAM) Fundamentals	Sheldon Schnider, 503.589.7875	2–3 terms	120
Computer-Assisted Drafting (CAD)	Julie Peters, 503.399.6531	3 terms	121
Database Developer	James Finholt, 503.589.7813	2–3 terms	91
Dental Assisting	Joyce Vaughan, 503.399.5269	3 terms	94
Destination Marketing	Kris Powers, 503.584.7958	3–4 terms	133
Early Childhood Education	Randy Fishfader, 503.399.6072	3 terms	98
Employment Skills Training	Chuck Skirvin, 503.399.6549	varies	105
Event Management	Kris Powers, 503.584.7598	3–4 terms	114
Fire Service Supervision & Management	Bill Klein, 503.399.6240	3 terms	108
Health Information Technology	Emily Wieczorek, 503.399.5275	3 terms	110
Hospitality Management	Kris Powers, 503.584.7598	4 terms	113
Integrated Circuit Mask Design	Charles Sekafetz, 503.399.6254	3 terms	117
Juvenile Corrections	Elaine Premo, 503.589.7768	3 terms	118
Manual Machine Operator	Sheldon Schnider, 503.589.7875	3 terms	120
Mechanical Drafting	Julie Peters, 503.399.6531	3 terms	97
Medical Office Assisting	Joyce Park, 503.399.3994	3 terms	122
Microelectromechanical (MEMS) Systems Design	Charles Sekafetz, 503.399.6254	3 terms	104
Networking Essentials	Charles Sekafetz, 503.399.6254	3 terms	124
Occupational Skills Training	Karleen Booth, 503.399.6542	3–12 months	127
Office Fundamentals	Barbara Holler, 503.399.3524	2–3 terms	80
Paraeducator	Malia Stevens, 503.399.2694	3 terms	127
Pharmacy Technician	Cheryl Buckholz, 503.365.4696	3 terms	128
Private Security	Elaine Premo, 503.589.7768	3 terms	93
Retail Management	Laney Furr, 503.399.6163	2–3 terms	130
Speech-Language Pathology Assistant	Ashley Northam, 503.589.7815	2–3 terms	131
Survey Technology	Julie Peters, 503.399.6531	3 terms	87
Tax Preparation	Lana Tuss, 503.399.6152	1 term	68
Tourism and Travel Management	Kris Powers, 503.584.7598	3 terms	132
Vineyard Operations	Al MacDonald, 503.584.7254	4 terms	134
Web Developer	James Finholt, 503.589.7813	2–3 terms	91
Welding Technology	Mike Pintler, 503.399.6059	3 terms	137

Short-Term Training Awards

Training	Contact	Duration
DEQ Maintenance Provider	CCBI, 503.399.5181	16 hours
DEQ Onsite Wastewater Installer	CCBI, 503.399.5181	8 hours
International Trade	CCBI, 503.399.5181	9 months
Leadership Institute	CCBI, 503.399.5181	1 term
Microsoft Certified Systems Administrator	CCBI, 503.399.5181	varies
Microsoft Certified Systems Engineer	CCBI, 503.399.5181	varies
ODOT Flagger Training	CCBI, 503.399.5181	4 hours
Small Business Management (see page 131)	CCBI, 503.399.5181	9 months

Certificates, two-year degrees and transfer guide

Below is a quick-reference listing of the programs of study and courses available at Chemeketa. If you don't find the program or course you are looking for, check the Index in the back of this catalog. For more information about any of the programs listed in this guide, check the page referenced in the program section of the catalog, or call Counseling and Career Services at 503.399.5120.

Certificate—Certificate of Completion

AAS—Associate of Applied Science degree

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

Other—Special programs

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

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

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

Arts and Communication

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Art			✔				75
Design			✔				95
Drafting Technology - CAD							95
• Architectual Drafting	✔						96
• Computer-Assisted Drafting (CAD)	✔	✔					96
• Mechanical Drafting	✔						97
• Mechanical Design		✔					97
English			✔				105
Film Arts			✔				179?
Foreign Languages			✔				108
General Studies			✔				109
Humanities			✔				193?
Journalism			✔				117
Music			✔				196?
Philosophy			✔				129
Pre-Law			✔				130
Religion			✔				204
Speech			✔				131
Speech Language Pathology Assistant	✔	✔					131
Theater Arts			✔				207
Visual Communications		✔			✔		136
Writing			✔				212

Business and Management

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Accounting	✔	✔					68
• Tax Preparation	✔						68
Agribusiness Management				✔			69
Business Administration			✔				78
Business Technology							79
• Accounting Administrative Assistant		✔					82
• Administrative Assistant		✔					82
• Business Software	✔						81
• Business Support Specialist		✔					83
• Business Technology	✔						80
• Medical Administrative Assistant		✔					84
• Office Fundamentals	✔						80
Health Services Management		✔					109
Hospitality Management	✔	✔					113
• Event Management	✔						114
Management		✔					122
Medical Office Assisting	✔				✔		122
Retail Management	✔						130
Small Business Management				✔			131
Tourism and Travel Management	✔	✔					132
• Destination Marketing	✔						133
Vineyard Management		✔					134
Wine Marketing		✔					138

Health Sciences

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Business Techology: Medical Administrative Assistant		✔					84
Chiropractic			✔				86
Dental Assisting	✔				✔	✔	94
Dental Hygiene			✔				95
Emergency Medical Technology—Paramedic		✔			✔	✔	104
Health, Health Education			✔				109
Health Services Management		✔				✔	109
Health Information Technology	✔					✔	110
Medical Transcription		✔				✔	111
Medical Office Assisting	✔				✔	✔	122
Nursing	✔	✔	✔		✔	✔	125
Nutrition and Food Management: Dietetics			✔				127
Pharmacy Technician/Pharmacology	✔	✔			✔	✔	128
Physical Education/Human Movement Studies			✔				129
Pre-Professional Study (Medicine, Dentistry, Pharmacy, Veterinary Medicine)			✔				130
Speech Language Pathology Assistant	✔	✔			✔	✔	131

Human Resources and Social Sciences

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Anthropology			✔				70
Career and Technical Education Teacher Preparation	✔	✔				✔	85
Chicano/Latino Studies			✔				165
Criminal Justice		✔	✔			✔	92, 94
• Basic Corrections	✔					✔	92
• Basic Law Enforcement	✔					✔	93
• Private Security	✔					✔	93
Early Childhood Education	✔	✔				✔	98
Economics			✔				100
Education: Elementary			✔				100
Education: Secondary			✔				100
Fire Protection Technology							106
• Fire Prevention		✔					107
• Fire Suppression		✔	✔		✔	✔	106
• Fire Service Supervision and Management	✔				✔	✔	108
General Studies			✔				109
Geography			✔				109
History			✔				112
Hospitality Management	✔	✔					113
• Event Management	✔						114
Human Development and Family Studies			✔				184
Human Services							115
• Addiction Counselor Certification Preparation	✔				✔	✔	116
• Addiction Studies		✔			✔	✔	115
• Social Services		✔			✔	✔	116
Juvenile Corrections	✔					✔	118
Juvenile Justice		✔				✔	118
Management		✔					122
Retail Management	✔						130
Small Business Management				✔			131
Paraeducator	✔					✔	127
Political Science			✔				130
Psychology			✔				130
Social Science			✔				206
Sociology			✔				131
Tourism and Travel Management	✔	✔					132
• Destination Marketing	✔						133
Women's Studies			✔				212

Industrial and Engineering Technology

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Apprenticeship							70
• Construction Trades, General: HVAC/R	✔	✔	✔			✔	72
• Construction Trades, General: Plumber	✔	✔	✔			✔	72
• Construction Trades, General: Sheet Metal	✔	✔	✔			✔	73
• Electrician Apprenticeship Technologies: Inside Electrician	✔	✔	✔			✔	71
Automotive Technology		✔			✔		75
• Body Repair	✔				✔		76
• Entry Level Technician	✔						76
• Machining	✔				✔		76
Building Inspection Technology		✔			✔		77
Civil Technology		✔					87
• Survey Technology	✔						87
Computer Science			✔				88
Computer Information Systems							88
• Computer Systems & Information Technology		✔					89
• Computer Programming	✔						90
• Computer Security and Forensics	✔						90
• Computer Support Specialist	✔						91
• Computer Systems Administration	✔						91
• Database Developer	✔						91
• Web Developer	✔						91
Drafting Technology - CAD							95
Architectural Drafting	✔						96
Computer-Assisted Drafting (CAD)	✔	✔					96
Mechanical Drafting	✔						97
Mechanical Design		✔					97
Electronics Technologies							100
• Advanced Technology Endorsement	✔				✔		103
• Computer Electronics		✔					101
• Electronic Engineering Technician		✔					102
• Industrial Electronics		✔					102
• Microelectromechanical Systems (MEMS) Design	✔						104
Engineering			✔				105
Integrated Circuit Mask Design	✔				✔		117
Machining Technology							119
• Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM)		✔					121
• Computer-Aided Manufacturing (CAM) Fundamentals	✔						120
• Computer Numerically Controlled (CNC) Operator	✔						120
• Manual Machine Operator	✔						120
Network Technology		✔					123
• Networking Essentials	✔						124
Welding	✔	✔					137

Mathematics, Science, Computer Science and Natural Resources

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Agribusiness Management				✔			69
Agriculture			✔				70
Aquarium Science	✔	✔					74
Biology			✔				77
Botany			✔				77
Chemistry			✔				86
Computer Science			✔				88
Computer Information Systems							88
Computer Systems and Information Technology		✔					89
• Computer Programming	✔						90
• Computer Security and Forensics	✔						90
• Computer Support Specialist	✔						91
• Computer Systems Administration	✔						91
• Database Developer	✔						91
• Web Developer	✔						91
Drafting Technology: Computer-Assisted Drafting (CAD)	✔	✔					96
Forestry			✔				109
General Science			✔				109
Geology			✔				109
Horticulture		✔					112
Mathematics			✔				122
Mechanical Design		✔					97
Mechanical Drafting	✔						97
Network Technology		✔					123
• Networking Essentials	✔						124
Physics			✔				130
Vineyard Management		✔					134
Vineyard Operations	✔						134
Wine Marketing		✔					138
Winemaking		✔					138
Zoology			✔				77, 109

General Degrees

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Oregon Transfer Module (OTM)			✔				53
Associate of Arts Oregon Transfer (AAOT)			✔				54
Associate of Science / Oregon Transfer (ASOT) in Business			✔				55
Associate of Applied Science (AAS)		✔					56
Associate of Science (AS)			✔				57
Associate of General Studies (AGS)			✔				58

Skills Development

	Certificate	AAS	Transfer	Other	Limited	Addl Qual	Page
Adult Basic Education				✔			42
Adult High School Diploma				✔			41
College Assistance Migrant Program (CAMP)				✔	✔		26
Early College High School				✔			41
Employment Skills Training	✔						105
English as a Non-Native Language				✔			42, 105
English for Speakers of Other Languages				✔			42
General Educational Development (GED)				✔			42
High School Equivalency Program (HEP)				✔	✔		26
Occupational Skills Training	✔						127

Business and Industry Certification

Certification is a recognized approach to demonstrate your proficiencies in any one of a wide range of technical and administrative areas. Whether you are seeking a position with a new organization or looking to advance in your present organization, certification demonstrates that you have the skills you need to take the next step. At Chemeketa Community College, our mission is to provide high-quality, affordable career education that meets the needs of professionals and employers. You will be working with experienced faculty, using today's technology, paying a fraction of the cost of private training companies. The course material is developed to help you prepare for the certification test and succeed on the job.

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

Preparation for Industry Certification

Certification	Contact	Telephone
Adobe Certified Expert (ACE)	Paul Erdeman Center for Business & Industry (CCBI)	503.399.5181
Operating System Core Hardware* (A+), *****	James Finholt Center for Business & Industry (CCBI)	503.589.7813 503.399.5181
Cisco Certified Network Associate *(CCNA) ***	Roger White Center for Business & Industry (CCBI)	503.399.5068 503.399.5181
Cisco Certified Network Professional *(CCNP)	Roger White	503.399.5068
Cisco Certified Security Professional *(CCSP)	Roger White	503.399.5068
Certified Wireless Network Administrator *(CWNA)	Rodney Harris	503.399.6507
Network + *, **, ***	Roger White Center for Business & Industry (CCBI)	503.399.5068 503.399.5181
Microsoft Certified Professional(MCP) *	James Finholt	503.589.7813
Linux + *	James Finholt	503.589.7813
Microsoft Certified System Engineer (MCSE) **, ***	Center for Business & Industry (CCBI)	503.315.4266
Microsoft Certified Systems Administrator (MCSA) **	Center for Business & Industry (CCBI)	503.315.4266
Flagger Training, State of Oregon Certificate **	Center for Business & Industry (CCBI)	503.399.5181
Custodial Technician **	Center for Business & Industry (CCBI)	503.399.5181
Structural Welding Certification *	Mike Pintler	503.399.6059
Pipe Welding Certification *	Mike Pintler	503.399.6059

*credit
**non-credit
***available online, non-credit

Oregon Transfer Module

General Education Requirements

Requirements	Min. Credit Hours	Courses that satisfy requirements
Writing Two courses of college transfer composition.	6	**WR**121, **WR**122, **WR**123 or **WR**227
Oral Communication One course of a fundamentals of speech or communication course	3	**SP**100, **SP**111, **SP**112, **SP**115, **SP**130, **SP**218, **SP**219, or **SP**229
Mathematics One course of college-level mathematics, for which at least Intermediate Algebra (MTH095) is a prerequisite.	4	**MTH**105 or above
Arts and Letters Three courses. **Note:** In Arts and Letters, the second year of a foreign language may be included, but not the first year. American Sign Language (ASL) is considered a foreign language. The course taken to meet the Oral Communication requirement above may not be used to meet the Arts and Letters requirement.	9	**ART**101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 225, 230, 233, 234, 235, 236, 237, 238, 239, 240, 244, 245, 246, 247, 247B, 247C, 248, 248B, 250, 250B, 250C, 251, 254, 256, 261, 262, 263, 265, 266, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 282, 284, 285, 286, 291, 292, 293; **ASL**211, 212, 213; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 221, 222, 232, 250, 253, 254, 255, 256, 257, 258, 260, 261, 263, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**106, 220, 230, 251, 252, 259; **JNL**216, 217, 224, 225, 226, 227, 228; **JPN**201, 202, 203; **MUS**105, 161, 201, 202, 203, 205; **PHL**201, 202, 203, 204, 205; 206 **REL**201, 202, 203; **RUS**201, 202, 203; **SP**100, 111, 112, 115, 130, 218, 219, 229; **SPN**201, 202, 203; **TA**110, 121, 122, 123, 130C, 140C, 190C, 230C, 240C, 286; **WR**240, 241, 242, 243, 244, 245, 262
Social Sciences Three courses.	9	**ATH**101, 102, 103, 153, 180, 212, 214, 215, 231, 232, 233; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**105, 106, 107, 140, 190, 201, 202, 206, 207, 220, 282; **HST**110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 277, 278, 279; **PS**201, 202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239; 282; **SOC**204, 205, 206, 210, 213, 221, 235 **SSC**100, 150; **WS**101, 102, 103
Science/Math/Computer Science Three courses, including at least one biological or physical science with a lab. **Note:** When choosing courses in science and mathematics, students and advisors should check the specific requirements at receiving schools. Courses that include a laboratory component, or that deal with specific subjects, may be required for majors or degrees. Computer Science courses used in the Math/Science/Computer Science area must meet Oregon Council of Computer Chairs criteria for a science course.	9	**BI**101, 102, 103, 131, 132, 133, 143, 200, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 141, 142, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203. **CIS**101, 102A, 105, 120, 121, 122, 125A, 125E, 125G, 133C, 133CS, 133J, 133JS, 133VB, 135AC, 140A, 140B, 140S, 140U, 145, 178I, 178W, 179, 186, 178I, 178W, 179, 234J, 240, 240U, 244, 246, 276A, 276B, 276C, 277A, 277B, 277C, 278, 279, 285, 286, 288, 289, 295; **CS**133U, 160, 161, 162, 233U, 260, 275, 271

Electives
As required to bring the total credits to 45. Course must be from the Arts & Letters, Social Science, or Science/Math/Computer Science subject areas.

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

1. Courses that are designed to prepare students for college-level work are not applicable to the transfer module.

2. All Oregon community colleges and Oregon University System institutions will offer students the opportunity to complete an Oregon Transfer Module and the OTM designation will be posted on the transcript by the issuing institution upon request. Regionally accredited private colleges and universities within the state are also welcome to offer and issue Transfer Modules, which will be accepted at any Oregon public college or university.

3. Oregon Transfer Module credits may not match program requirements in the receiving school. The OTM supplements, but does not supplant existing articulation agreements and does not replace effective advising.

The Oregon Transfer Module can lead to an AA/OT or AS/OT-Bus transfer degree from Chemeketa or to a baccalaureate degree from any public Oregon college or university in the Oregon University System and will result in sophomore standing.

Associate of Arts Oregon Transfer Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		

General Education Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Writing (Minimum of 8 credits with grade "C" or better)	9	**WR**121, **WR**122, and **WR**123, or **WR**227
Math (Minimum of 4 credits with grade "C" or better)	4	**MTH**105 or above
Oral Communication/Rhetoric (Minimum of 3 credits with grade "C" or better)	3	**SP**100, **SP**111, **SP**112, **SP**115, **SP**130, **SP**218, **SP**219, or **SP**229
Physical Education or Health	3	Any **PE**185 course (1 credit each); any **HE** and **HPE** course (3 credits each). A maximum of 12 credits of **PE**185 may be applied toward the degree.

Distribution Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Arts and Letters Complete a minimum of 12 credits; choose from at least two disciplines, with no more than 9 credits from one discipline. (All foreign languages are considered one discipline.) Each course must be a minimum 3 credits. Note: The course taken to meet the Oral Communication/Rhetoric requirement above may not be used to meet this requirement.	12	**ART**101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 225, 230, 234, 235, 236, 237, 238, 239, 240, 244, 245, 246, 247, 247B, 247C, 248, 248B, 250, 250B, 250C, 251, 254, 256, 261, 262, 263, 265, 266, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 282, 284, 285, 286, 291, 292, 293; **ASL**211, 212, 213; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 221, 222, 232, 250, 253, 254, 255, 256, 257, 258, 260, 261, 262, 263, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**106, 220, 230, 251, 252, 259; **JNL**216, 217, 224, 225, 226, 227, 228; **JPN**201, 202, 203; **MUS**105, 161, 201, 202, 203, 205; **PHL**201, 202, 203, 204, 205, 206; **REL**201, 202, 203; **RUS**201, 202, 203; **SP**100, 111, 112, 115, 130, 218, 219, 229; **SPN**201, 202, 203; **TA**110, 121, 122, 123, 130C, 140C, 190C, 230C, 240C, 286; **WR**240, 241, 242, 243, 244, 245, 262
Social Sciences Complete a minimum of 15 credits; choose from at least two disciplines, with no more than 9 credits from one discipline. Each course must be a minimum of 3 credits.	15	**ATH**101, 102, 103, 153, 180, 212, 214, 215, 231, 232, 233; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**105, 106, 107, 140, 190, 201, 202, 206, 207, 220, 282; **HST**110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 277, 278, 279; **PS**201, 202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239, 282; **SOC**204, 205, 206, 210, 213, 221, 235; **SSC**100, 150; **WS**101, 102, 103
Sciences/Math/Computer Science Complete a minimum of 15 credits. Choose a minimum of three laboratory courses of at least 12 credits in the biological or physical sciences. Each course must be a minimum of 4 credits. And Choose 3 credits in Computer Information Science or Computer Science (CS101 or higher).	15	Choose 12 credits from: **BI**101, 102, 103, 131, 132, 133, 143, 200, 230, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 141, 142, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203. Choose 3 credits from: **CIS**101, 102A, 105, 120, 121, 122, 125A, 125E, 125G, 133C, 133CS, 133J, 133JS, 133VB, 135AC, 140A, 140B, 140S, 140U, 145, 178I, 178W, 179, 186, 178I, 178W, 179, 234J, 240, 240U, 244, 246, 276A, 276B, 276C, 277A, 277B, 277C, 278, 279, 285, 286, 288, 289, 295; **CS**133U, 160, 161, 162, 233U, 260, 271, 275
Electives Complete additional courses to bring the total number of credits to 90.		All lower division collegiate courses numbered 100 and above. Courses numbered 198/298 and 199/299 will only apply toward this degree as electives. A maximum of 12 credit hours in career and technical education courses may be included, with the exception of the following: **BT**084, 085; **COM**051, 052, 053; **MTH**052 through 095; **RD**080, 090; **SSP**050ABC; **SSP**051; **WR**090, 091. A maximum of 12 credit hours of cooperative work experience may be applied toward an Associate of Arts degree.

Earn a cumulative grade point average (GPA) of 2.00 or above in all work to be applied toward the degree.

Complete a minimum of 30 credit hours at Chemeketa.

Notes: Two terms of the same college-level foreign language, with a grade of "C" or higher, are required for admission to Oregon University System universities. This requirement applies only to students graduating from high school in 1997 or later. This requirement may also be met by completing two years of the same foreign language at the high school level. This is not a requirement for earning the Associate of Arts degree.

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

Associate of Science/Oregon Transfer Degree in Business

Requirements	Credits Hours	Courses that satisfy requirements
General Requirements		
Note: Each course in this section must be completed with a grade of "C" or better.		
Writing: A minimum of 8 credits of college-transfer writing courses.	9	Designated courses are: **WR**121, **WR**122, **WR**227
Oral Communications/Rhetoric: A minimum of 3 credits of a fundamentals of speech or communication course	3	**SP**111, **SP**112, **SP**115, **SP**130, **SP**218, **SP**219, or **SP**229
Mathematics: A minimum of 12 credits, MTH111 or above, four credits of which must be statistics	12	**MTH**111 or above, **MTH**243, **MTH**244 for PSU *MTH243, 244 or 241 for EOU, SOU *MTH243, 241 or OSU, WOU, U of O
Computer Applications: A minimum of 3 credits. Proficiency in word-processing, spreadsheet, database, and presentation software as demonstrated by successful completion of applicable courses	3-6	Computer Science: **CS**101, **CS**125A, **CS**125E Computer Applications: **CA**208
Distribution Requirements		
Note: Courses used to meet these requirements must be at least 3 credits each. In "Arts and Letters" the second year of a foreign language may be included, but not the first year. ASL is considered a foreign language.		
Arts and Letters: A minimum of 12 credits, chosen from at least two disciplines. Each course must be a minimum of 3 credits.	12	**ART**101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 225, 230, 234, 235, 236, 237, 238, 239, 240, 244, 245, 246, 247, 247B, 247C, 248, 248B, 250, 250B, 250C, 251, 254, 256, 261, 262, 263, 265, 266, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 282, 284, 285, 286, 291, 292, 293; **ASL**211, 212, 213; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 221, 222, 232, 250, 253, 254, 255, 256, 257, 258, 260, 261, 262, 263, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**106, 220, 230, 251, 252, 259; **JNL**216, 217, 224, 225, 226, 227, 228; **JPN**201, 202, 203; **MUS**105, 161, 201, 202, 203, 205; **PHL**201, 202, 203, 204, 205; 206 **REL**201, 202, 203; **RUS**201, 202, 203; **SP**100, 111, 112, 115, 130, 218, 219, 229; **SPN**201, 202, 203; **TA**110, 121, 122, 123, 130C, 140C, 190C, 230C, 240C, 286; **WR**123, 240, 241, 242, 243, 244, 245, 262
Social Sciences: A minimum of 12 credits, with a minimum of 8 credits of "principles of economics" (**EC**201, **EC**202 to include microeconomics and macroeconomics) at the 200 level. The courses in economics must be completed with a grade of "C" or better. Each course must be a minimum of 3 credits.	12	**ATH**101, 102, 103, 153, 180, 212, 214, 215, 231, 232, 233; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**105, 106, 107, 140, 190, 201, 202, 206, 207, 220, 282; **HST**110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 277, 278, 279; **PS**201, 202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239, 282; **SOC**204, 205, 206, 210, 213, 221, 235; **SSC**100, 150; **WS**101, 102, 103
Science: A minimum of 12 credits of laboratory courses in the biological or physical sciences. Each course must be a minimum of 4 credits.	12	**BI**101, 102, 103, 131, 132, 133, 143, 200, 230, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 141, 142, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203.
Subtotal of General and Distribution Requirements	63-66	
Business-Specific Requirements		
Note: Each course in this section must be completed with a grade of "C" or better.		
BA101 Introduction to Business *A minimum of 3 credits.*	4	**BA**101
BA211 Fundamentals of Financial Accounting and **BA**213 Decision Making with Accounting Information (or **BA**211, **BA**212 Financial Accounting 1, 2, and **BA**213 Managerial Accounting) *A minimum of 8 credits.*	12	**BA**211, **BA**212, and **BA**213
BA226 Business Law 1 (or other advisor-approved Business elective) *A minimum of 3 credits.*		**BA**226
Electives and/or University-Specific Prerequisites	8-14	Depends on choice of transfer institution. See an advisor. A maximum of 12 credit hours in career and technical education courses may be included, with the exception of the following: **BT**084, 085; **COM**051, 052, 053; **MTH**052 through 095; **RD**080, 090; **SSP**050A,B, C; **SSP**051; **WR**090, 091. OIT-**BA**206; **PSY**201 PSU-**BA**214; **CIS**121 OSU-**BA**271; 275
Grand Total Credits	90+	

Electives should be taken to meet the requirements of your transfer institution. See your advisor for assistance. For the most up-to-date information on the requirements of transfer, see the Oregon University System, Joint Boards Articulation Commission Web site at: www.ous.edu/aca/jbac

Notes: For transfer students graduating from high school in 1997 and thereafter, the Oregon University System has a second language admission requirement: two terms of a college-level second language with an average grade of "C-" or above, OR two years of the same high school-level second language with an average grade of "C-" or above, OR satisfactory performance on an approved second language assessment of proficiency. American Sign Language meets this second language admission requirement.

Associate of Applied Science Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Satisfactorily complete the required courses and credit hours listed for each career and technical education program in the Programs of Study section of this catalog.		
You will meet the degree requirements if you follow the career and technical courses listed for your program. The courses listed below meet the college's degree requirements.		
Related Instruction Requirements		
Communication/Writing	3	One course of **WR**115, **WR**121, **COM**051 or higher writing course or approved program substitute.
Computation/Math	3	One course of **MTH**052 or any higher numbered math course.
Human Relation/Psychology/Sociology	3	**PSY**101, **PSY**104, **PSY**201, **PSY**202, **PSY**203, **PSY**206, **PSY**237, **PSY**239, **SOC**204, **SOC**205, **SOC**206, **SOC**210, **SOC**213, or approved program substitute.
Computer Literacy	3	The following program-approved list of courses allows a student to meet the college's computer literacy competency requirement. Check with your program advisor if you have any questions related to this requirement.
		CIS101* Intro to Microcomputer Applications 3 cr
		CIS120* Computer Information Science I 4 cr
		DRF165* CAD System Administration 3 cr
		CAM160* Programming CNC Mills 4 cr
		*Indicates a course prerequisite or requirement related to the course. For further information contact your program advisor or college advisor.
Three credits from one of the three following areas:	3	
Social Science		Anthropology, Chicano/Latino Studies, Economics, Geography, History, Human Development and Family Studies, Political Science, Psychology, Social Science, Sociology, Women's Studies
Humanities/Fine Arts		American Sign Language, Art, English, Film Arts, Foreign Language, Humanities, Journalism, Music, Music Performance, Philosophy, Religion, Speech, Theater Arts
Sciences/Applied Science		Approved program-related instruction may satisfy this requirement, or courses in Biology, Botany, Chemistry, Computer Science, General Engineering, General Science, Geology, Horticulture, Nutrition and Food Management, Oceanography, Physics, Zoology
Three additional credits from any of these areas:	3	Health/Physical Education, Humanities/Fine Arts, Math, Science/Applied Science, Social Science, Writing**, English as a Non-Native Language**, Reading**, Study Skill**
		**Course must be 100 level or higher
Career and Technical Courses See specific career and technical program.		
Complete a minimum of 30 credit hours at Chemeketa.		
Earn a cumulative grade point average (GPA) of 2.00 or above for all course credits that apply toward the degree. Only courses numbered 050 or higher—unless otherwise indicated—apply toward the degree.		

Notes:

1. We recommend that you see an advisor for guidance before you enroll.
2. At the end of a program or course of study, any student receiving a three-term Certificate of Completion or two-year Associate of Applied Science degree will meet related instruction requirements in communications, computation, and human relations. See page 44.
3. Some of Oregon's four-year institutions accept certain courses in career and technical education programs as college transfer courses. If you are interested in continuing your education after completing a Chemeketa program, check with the institution you plan to attend.
4. For information on the Industrial Technology and Apprenticeship degree, see page 70.

Associate of Science Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		
General Education Requirements		
Writing (A minimum of 6 credits with a grade of "C" or better)	6	**WR**121 and one additional writing course for which **WR**121 is a prerequisite.
Math (A minimum of 4 credits with a grade of "C" or better)	4-5	**MTH**111* or higher
Speech (A minimum of 3 credits with a grade of "C" or better)	3	**SP**100, **SP**111, **SP**112, **SP**115, **SP**130, **SP**218, **SP**219 or **SP**229
Physical Education or Health (A minimum of 3 credits with a grade of "C" or better)	3	Any **PE**185 course (1 credit each); any HE and HPE course (3 credits each). A maximum of 3 credits of **PE**185 may be applied toward the degree.
Computer Literacy (A minimum of 3 credits with a grade of "C" or better)	3	Choose 3 credits from: **CIS**101, 102A, 105, 120, 120A, 121, 122, 125A, 125E, 125G, 133C, 133CS, 133J, 133JS, 133SC, 133VB, 135AC, 140A, 140B, 140S, 140U, 145, 178I, 178W, 179, 186, 195, 233J, 234J, 240, 240U, 244, 244A, 246, 276A, 276B, 276C, 277A, 277B, 277C, 278, 279, 285, 286, 288, 289, 295; **CS**133U, 160, 161, 162, 233U, 260, 271, 275.
Arts and Letters/Humanities (A minimum of 9 credits with a grade of "C" or better, chosen from at least two disciplines).	9	**ART**101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 225, 230, 234, 235, 236, 237, 238, 239, 240, 244, 245, 246, 247, 247B, 247C, 248, 248B, 250, 250B, 250C, 251, 254, 256, 261, 262, 263, 265, 266, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 282, 284, 285, 286, 291, 292, 293; **ASL**211, 212, 213; ENG104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 221, 222, 232, 250, 253, 254, 255, 256, 257, 258, 260, 261, 262, 263, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**106, 220, 230, 251, 252, 253, 259; **JNL**216, 217, 224, 225, 226, 227, 228; **JPN**201, 202, 203; **MUS**105, 161, 201, 202, 203, 205; **PHL**201, 202, 203, 204, 205, 206; **REL**201, 202, 203; **RUS**201, 202, 203; **SP**100, 111, 112, 115, 130, 218, 219, 229; **SPN**201, 202, 203; **TA**110, 121, 122, 123, 130C, 140C, 190C, 230C, 240C, 286; **WR**240, 241, 242, 243, 244, 245, 262
Social Science (A minimum of 9 credits with a grade of "C" or better, chosen from at least two disciplines).	9	**ATH**101, 102, 103, 153, 180, 212, 214, 215, 231, 232, 233; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**105, 106, 107, 140, 190, 201, 202, 206, 207, 220, 282; **HST**110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 277, 278, 279; **PS**201, 202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239, 282; **SOC**204, 205, 206, 210, 213, 221, 235; **SSC**100, 150; **WS**101, 102, 103
Science (A minimum of 12 credits with a grade of "C" or better. Courses must include a laboratory.	12	**BI**101, 102, 103, 131, 132, 133, 143, 200, 230, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 203, 221, 222, 223, 241 and 241B, 242 and 242B, 243 and 243B; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 141, 142, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203
Subtotal	49	
Electives		Complete additional courses to bring the total number of credits to **90**. All elective credits must be numbered 100 or above and be lower division collegiate courses.
Complete a minimum of 30 credit hours at Chemeketa.		

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

Notes: Two terms of the same college-level foreign language, with a grade of "C" or higher, are required for admission to Oregon University System universities. This requirement applies only to students graduating from high school in 1997 or later. This requirement may also be met by completing two years of the same foreign language at the high school level. This is not a requirement for earning the Associate of Science degree.

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

Associate of General Studies Degree Requirements

Requirements	Credit Hours	Courses that satisfy requirements
Complete a minimum of 90 credit hours. These must include the following:		A maximum of 36 credit hours in career and technical education courses may be applied toward the 90 credit hours required for the degree. See page 142 for how courses are numbered. All collegiate courses must be numbered 100 or above.
Writing (Minimum of 6 credits with a grade "C" or better)	6	**WR**121 and one additional course from **WR**122, 123, 227, 240, 241, 242, 243, 244, 245, 262 or **BA**214
Math (Minimum of 4 credits with a grade "C" or better)	4	**MTH**095 or above
Speech (Minimum of 3 credits with a grade "C" or better)	3	**SP**100 or above
Computer Studies	3	The following program-approved list of courses allows a student to meet the college's computer literacy competency requirement. Check with your program advisor if you have any questions related to this requirement.
		CIS101* Introduction to Microcomputer Applications 3 cr
		CIS120* Computer Information Science I 4 cr
		DRF165* CAD System Administration 3 cr
		CAM160* Programming CNC Mills 4 cr
		*Indicates a course prerequisite or requirement related to the course.
Physical Education or Health** **A maximum of 12 credit hours of physical education (PE185) may be applied toward the degree.	3	Any **PE**185 course (1 credit each); any **HE** and **HPE** course (3 credits each); or three terms of **PE**180, **PE**185, or higher course (1 credit each).
Arts and Letters/Humanities Each course must be a minimum of 3 credits.	9	Choose courses from Art, American Sign Language, English, Film Arts, French, Humanities, Journalism, Japanese, Music Performance, Music, Philosophy, Religion, Russian, Speech, Spanish, Theater Arts, Writing.
Social Science Each course must be a minimum of 3 credits. (Courses must be chosen from at least two disciplines.)	12	Choose courses from Anthropology, Chicano/Latino Studies, Economics, Geography, History, Political Science, Psychology, Sociology, Social Science, Women's Studies.
Science Each course must be a minimum of 4 credits. (Courses must include a laboratory.)	8	Choose courses from Biology, Botany, Chemistry, Geology, General Science, Physics, Zoology.

Electives: Additional courses to bring the total number of credits to 90.		
Earn a cumulative grade point average (GPA) of 2.00 or above in all work to be applied toward the degree.		
Complete a minimum of 30 credit hours at Chemeketa.		

Note: A maximum of 12 credit hours of cooperative work experience may be applied toward the degree.

Eastern Oregon University

General Education Requirements
(Core Curriculum)

Requirements	Credit hours	Chemeketa courses that satisfy requirements
Communication and Critical Thinking (Choose a minimum of one course in each subcategory) In the entire **Communication and Critical Thinking Area** a student must complete at least one course with a different prefix than the prefix(es) of the student's major.	Minimum 15 hours	**Communication: SP**111, 112, 130, 219; **WR**121*, 122*, 123*, 227* **Critical Thinking and Problem Solving: CH**104*, 105*, 106*; **PHL**204* **Quantitative Reasoning: MTH**105*, 212, 213, 241, 244, 251, 252 **Communication: JNL**22L, SP100
General Knowledge (Choose courses from all five of the subcategories with a minimum of 9 credit hours in each of the five) Within *each category* under General Knowledge, a student must complete at least one course with a different prefix than the prefix(es) of the student's major.	Minimum 45 hours	**Aesthetics and Humanities: ART**101, 204, 205*; 206 **ENG**104*, 105*, 106*, 107, 108, 109*, 201, 202, 203, 204, 205, 206, 214, 222, 253*, 254*, 255*, 256, 257, 258*, 260, 261, 263, 269; **FA**255, 256, 257; **HUM**251, 252, 253; **JNL**224; **MUS**105*, 161*, 201, 202, 203, 205; **PHL**201*, 202*, 203*, 205, 206; **REL**201, 202*, 203* **Human Behavior: ATH**102*, 103*; 153, **EC**200,201*, 202*, 203*; **GEG**107, 190, 201*, 202*, 206, 207*; **HST**110*, 111*, 112*, 157, 158, 159*, 201*, 202*, 203*; **PS**201*, 202*, 203*, 204, 205; **PSY**100*, 101, 201*, 202*, 203*, 206, 237*; **SOC**204*, 205*, 206*; **WS**101*, 102, 103 **Natural World: ATH**101*; **BI**100, 101*, 102*, 103*, 131, 132, 133, 143, 200; **BOT**201, 202, 203; **CH**110*, 111, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; **GEO**142, 143, 144, 201, 202, 203; **GEG**105; **GS**104*, 105*, 106*, 107*, 120, 141, 142*, 143*; **OC**133; **PH**111, 201, 202, 203, 207, 208, 209, 211, 212, 213; **PSY**201; **ZOO**201, 202, 203 **Arts and the Creative Process: ART**115, 116, 117, 131, 132, 133, 154, 155, 156, 221, 222, 223, 234, 235, 236, 238, 239, 244, 245, 246, 254, 261, 262, 263, 270, 271, 272, 273, 274, 275, 281, 284, 285, 286, 291, 292, 293; **MUP**100, 105; **MUS**197; **TA**110, 121, 122, 123; **WR**241, 242, 243 **Logic, Language and Culture: ASL**111, 112, 113, 211, 212, 213; **ATH**180, 212*, 214, 231, 232, 233; **CLA** 201, 202, 203; **CIS**120*, 121, 122*; **CS**140B*, 140U*; **FR**101, 102, 103, 201, 202, 203; **GEG**106; **HST**257, 258*, 259; **HUM**106; **JPN**101, 102, 103, 201, 202, 203; **MTH**211; **RUS**101, 102, 103, 201, 202, 203; **SP**115; **SPN**101, 102, 103, 150, 151, 201, 202, 203; **SSC**101,150

*Indicates courses offered through distance education.

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

Notes:

1. A maximum of 120 credit hours of lower division course work may be applied toward a baccalaureate degree.
2. Students with an AAOT from an accredited Oregon community college will be considered as having met the general education distribution requirements at Eastern.
3. Students must demonstrate functional computer literacy in the major field.
4. For the Bachelor of Science degree (B.S.): In addition to completing the General Education Distribution Requirements, students are required to demonstrate the application of mathematics at the college level. Means for satisfying this requirement are described in each major at Eastern.
5. For the Bachelor of Arts Degree (B.A.): In addition to completing the General Education Distribution Requirements, students are required to demonstrate proficiency in a single foreign language (two years or completion of a second year foreign language course sequence or equivalency).
6. Courses in which "D" grades have been earned will transfer to Eastern, but will not count towards the general education requirements.
7. EOU may accept up to 45 credits of vocational-technical work from an accredited community college if the course work is deemed to be appropriate to EOU's academic programs. If vocational-technical courses are not deemed to be appropriate to a specific EOU program, or equivalent to a specific EOU course, up to 24 hours of credit may still be awarded.
8. Up to 12 credit hours in Physical Education Activity and Music Activity courses may be applied toward degree requirements. Music majors may exceed the MUS limitation.
9. This guide is subject to change without notice and should not be regarded as a contract between Eastern and students attending Chemeketa.
10. Two years of high school or two terms of college-level foreign language (same language) required for students graduating from high school in spring 1997 or later.

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

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

www.eou.edu • 541.962.3393

Oregon Institute of Technology General Education Requirements

Requirements	Credit hours	Chemeketa courses that satisfy requirements
Communication		
Fundamentals of Speech	3	**SP**111
English Composition	6	**WR**121 and 122
Nine additional credits from speech/writing courses having **WR**122 or **SP**111 as a prerequisite; specified by the major department from the following:	9	**WR**123; **BA**214; **WR**227; **SP**113; No equivalent courses for **WR**321, 322, 323, 327, 328
Humanities Nine credits selected by student or specified by a major department from the following: **ART**—Art; **ENG**—Literature; **HUM**—Humanities; **MUS**—Music; **PHL**—Philosophy; Language (second year) Other transfer courses defined as "Humanities" by the Registrar's Office may be used in this category. No more than three credits of studio based, activity or performance-based courses may be used in this category.	9	**Choose from: ART**101, 115, 116, 117, 131, 132, 133, 154, 155, 156, 204, 205, 206, 210, 221, 222, 223, 224, 234, 235, 236, 238, 239, 244, 245, 246, 254, 261, 262, 263, 266, 270, 271, 272, 273, 274, 275, 281, 281B, 281C, 284, 285, 286, 291, 292, 293, 299; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 222, 250, 253, 254, 255, 260, 261, 263; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**251, 252, 253, 259; **JPN**201, 202, 203; **MUP**100, 105, 174; **MUS**105, 197, 201, 202, 203; **PHL**201, 202, 203, 204, 205; **REL**201, 202, 203; **RUS**201, 202, 203; **SPN**201, 202, 203; **TA**110, 121, 122, 123, 240 A,B,C
Social Sciences Twelve credits selected by student or specified by major department from the following: **ATH**—Anthropology; **ECO**—Economics; **GEG**—Geography; **HST**—History; **PS**—Political Science; **PSY**—Psychology; **SOC**—Sociology. Other transfer courses defined as "Social Science" by the Registrar's Office may be used in this category.	12	**Twelve credits selected by student or specified by major department from the following: ATH**101, 102, 103, 231, 232, 233; **CLA**203; **CJ**101, 110, 131, 200, 206, 220, 226; **EC**200, 201, 202, 203; **GEG**105, 106, 107, 201, 202, 206; **HST**110, 111, 112, 157, 158, 159, 199A, 201, 202, 203, 228, 293, 257, 258, 259; PS 201, 202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239; **SOC**204, 205, 206, 210, 221, 235; **SSC**150; **WS**101, 102, 103
Technology Twelve credits selected by student or specified major department from technical electives offered by a major department. Computer proficiency required.	12	**Technical electives offered: EGR**211, 212, 213 **Select computer course from: CIS**120, 121, 122; **CS**101, 125A1,A2,A3, 133A, 133B, 133C, 133E, 133F, 133U, 133VB, 140B, 140U, 160, 171, 178I, 233U, 234C, 234J, 240, 244, 246, 260, 285
Science/Mathematics		
College Algebra	4	**MTH**111
Plus 12 credits selected by student or specified by major department from biological sciences, mathematics, or physical sciences.	12	**Plus 12 hours selected from: BI**101, 102, 103, 131. 132, 133, 200, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107; **MTH**105, 112, 231, 243, 251, 252, 253, 254, 255, 256; **OC**133; **PH**121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203

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

Notes:

1. Courses in which "D" grades have been earned will transfer to OIT. Some sequence courses require a "C" grade or better in a prerequisite course in order to continue in the sequence.
2. This guide is subject to change without notice and should not be regarded as a contract between OIT and students attending Chemeketa.
3. Two years of high school or two terms of college-level foreign language (same language) required for all students graduating from high school spring 1997 or later.

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

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

www.oit.edu 541.885.1000 or 800.422.2017

Oregon State University General Education Requirements *(Core Curriculum)*

Requirements	Credit hours	Chemeketa courses that satisfy requirements
Writing I	3	**WR**121 (must be completed with a "C" grade or better before transferring)
Writing II	3	**BA**214; **JN**L216; **WR**122, 123, 227, 240, 241, 242, 243, 244, 245, 262
Writing III/Speech	3	Any courses listed to meet Writing II requirements not taken to meet the Writing II requirements or **SP**111, 112, 218, 219
Mathematics	3	**MTH**105, 111 or higher math (must be completed before transferring)
Fitness	3	**HPE**295 Health and Fitness for Life
Writing Intensive Course		(Must be taken at OSU as upper division in the major)
Physical Science* (Including Lab)	4-5	**CH**104, 105, 106, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223; **GEG**105; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 141, 142, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213
Biological Science* (Including Lab)	4	**BI**101, 102, 103, 131, 132, 133, 143, 200, 230, 234; **BOT**201, 202, 203; **ZOO**201, 202, 203
One additional Physical Science or Biological Science course*	4-5	Any courses listed for Physical or Biological Science above.
Western Culture*	3	**ART**204, 205, 206; **ENG**107, 108, 109, 201, 202, 203, 204, 205, 206, 253, 254, 255; **FA**255; **GEG**106, 207; **HST**201, 202, 203, 228; **PHL**201, 202, 203; **REL**202, 203
Cultural Diversity*	3	**ATH**201, 202, 203, 212, 214, 231, 232, 233; **CLA**201, 202, 203; **ENG**257; **GEG**201, 202, 206; **HST**110, 111, 112, 157, 158, 159, 257, 258, 259, 293; **HUM**220, **REL**201, 202
Literature and the Arts*	3	**ART**101, 204, 205, 206; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 250, 253, 254, 255, 256, 257, 258, 260, 269, 299, 299B, 299C; **FA**255; **MUS**105, 161, 201, 202, 203, 205
Social Processes and Institutions*	3	**ATH**103; **EC**201, 202; **HE**209; **PS**201, 202; **PSY**100, 201, 202, 203; **SOC**204, 205, 213
Difference, Power and Discrimination*	3	**HST**201, 202, 203; **SOC**206
Global Issues	3	(Upper division course; must be taken at OSU.)
Science, Technology and Society	3	(Upper division course; must be taken at OSU.)

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

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

Notes:

1. A maximum of 124 credit hours earned at a community college may be applied toward a baccalaureate degree.

2. Only courses with letter prefixes and numbers above 100 are accepted at OSU. Some professional/technical courses numbered 100 or higher are not accepted as transferable courses. Please contact the office of admissions and orientation at OSU regarding specific courses. Professional/Technical courses include those with prefixes of: **AH, AQS, AUM, BLD, BT, CA, CAM, CJ, COM, CPL, CVL, DEN, DRF, ECE, ED, ELT, EMT, ENL, ES, FE, FRP, FT, HD, HDF, HM, HOR, HS, HTM, MED, MFG, MT, NET, NUR, PHM, QS, RD, SLP, SSP, ST, VC, VMW, WFB, WLD.**

3. Students with professional/technical credits (including courses numbered 50-99) should contact the assistant registrar at OSU for assistance in determining transferability of these courses to an OSU major.

4. Departments, schools, or colleges at OSU may restrict the courses used by their major students to satisfy each general educational component.

5. OSU will accept "D" grades. Some departments, schools, or colleges may not accept "D" grades in required courses.

6. This guide is subject to change without notice and should not be regarded as a contract between OSU and students attending Chemeketa Community College.

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

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

www.oregonstate.edu 541.737.4411 or 800.291.4192

Portland State University General Education Requirements

Requirements	Credit hours	Chemeketa courses that satisfy requirements
Freshman Inquiry Three five-credit courses This sequence is required of all transfer students who have earned less than 30 quarter hours at the time of transfer.	15	Complete 45 credit hours from courses listed for Associate of Arts (AA) Oregon Transfer degree. Courses should include writing, speech and computer science. It is also important to learn appropriate uses of information technology resources of the library.
Electives or Major Requirements	30	
Sophomore Level (Three four-credit courses selected from different interdisciplinary programs or general education clusters.) Students who have earned 30 to 89 quarter hours at the time of transfer must complete sophomore inquiry at PSU	12	Complete 45 credit hours from courses listed for AA Oregon Transfer degree and courses required for major. ***Students planning on attending Chemeketa for two years should complete AA Oregon Transfer degree.***
Electives or major requirements	33	

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

Notes:

1. Students must have achieved a 2.25 cumulative GPA (starting Fall 2007) with 30 transferable credit hours to be considered as a transfer student for admissions purpose. Non-residents must have a 2.25 GPA. International students must have a 2.50 GPA.

2. Courses with letter prefixes and numbers below 100 are generally not accepted by PSU.

3. PSU will accept up to 12 credit hours of career and technical education courses as electives.

4. A maximum of 124 credit hours earned at community colleges may be applied toward a baccalaureate degree.

5. This guide is subject to change without notice and should not be regarded as a contract between PSU and students attending Chemeketa Community College.

6. Two years of high school or two terms of college-level foreign language (same language) required for all students graduating from high school spring 1997 or later. Students may complete this requirement at PSU prior to graduation.

7. Students planning to earn a BA must complete two years of foreign language and 4 credits in the Fine and Performing Arts.

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

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

www.pdx.edu 503.725.3511 or 800.547.8887

Southern Oregon University *General Education Requirements (Core Curriculum)*

SOU requirements	Credit hours	Chemeketa courses that satisfy requirements
Writing Complete all 3 classes	9	**WR**121, 122 and **SP**111, 218, or 219 ("C-" or better in each class at SOU.)
Mathematics	4–5	**MTH**105, 112, 211, 212, 241, 243, 251
Arts and Letters	9–12	**Complete at least 3 courses from the following:** **ART**101, 204, 205, 206; **ASL**211, 212, 213; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 221, 222, 232, 250, 253, 254, 255, 256, 257, 258, 260, 261, 263, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**106, 251,252, 259; **JNL**224; **JPN**201, 202, 203; **MUS**105, 161, 201,202, 203, 205; **PHL**201, 202, 203, 204, 205, 206; **REL**201, 202, 203; **RUS**201, 202, 203; **SP**100, 115; **SPN**122, 123, 201, 202, 203; **TA**110; **WR**241
Social Science	9–12	**Complete at least 3 courses from the following:** **ATH**101, 102, 103, 180, 212, 214, 215, 231, 232, 233; **BA**101; **CJ**100, 101; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**106, 107, 201, 202, 206, 207, 220; **HE**250; **HPE**295; **HST**110, 111,112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 269, 277, 278, 279; **PS**201,202, 203, 205; **PSY**100, 101, 104, 201, 202, 203, 206, 237, 239; **SOC**204, 205, 206, 210, 213, 221, 235; **SSC**150; **WS**101, 102, 103
Science	9–12	**Complete at least 3 courses from the following. At least 2 courses must have labs:** **BI**101, 102, 103; **BI**131 132; **CH**104, 105; 115, 116, 121, 122, 201,202, 221, 222; **GEO**201, 202; **GS**104, 105; 106,107; **PH**201, 202; **PH**207, 208, 209

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

General education notes:

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

Other notes:

1. A maximum of 124 hours taken at community colleges can be transferred to SOU. A total of 180 credits is required for a Bachelor of Arts or Sciences degree.
2. Only courses with a letter prefix and a number of 100 or higher are considered transferable.
3. A maximum of 24 credit hours of professional/technical courses are accepted as electives towards the 124 credit transfer limit.
4. Courses in which "D-" grades have been earned (except WR and SP) are accepted by SOU.
5. This guide is subject to change without notice and should not be regarded as a contract between SOU and Chemeketa Community College.
6. Two years of high school or two terms of college-level second language (same language) required for all students graduating from high school Spring 1997 or later.

Upper Division Integration University Studies Requirements:

Students must complete 3 upper division integration courses at SOU; one from each of the following areas:

- Science, Technology & Society
- Citizenship & Social Responsibility
- Diversity & Global Awareness

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

www.sou.edu 541.552.6411 or 800.482.7672

University of Oregon

Requirements	Credit hours	Chemeketa courses which satisfy requirements
Written English	6	**WR**121 and **WR**122 or **WR**123 (with a "C-" grade or better); **WR**121 must be completed before transferring.
Arts and Letters* These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject.	15	Choose from the following: **ART**204, 205, 206; **ASL**211, 212, 213; **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 222, 250, 253, 254, 255, 256, 257, 258, 260, 269; **FA**255, 256, 257; **FR**201, 202, 203; **HUM**251, 252, 253; **JPN**201, 202, 203; **MUS**105, 201, 202, 203, 205; **PHL**201, 202, 203, 204; **REL**202; **RUS**201, 202, 203; **SP**111; **SPN**201, 202, 203; **TA**110
Social Science* These courses must be completed in at least two subjects (prefixes), and a minimum of two courses must be completed in one subject.	15	Choose from the following: **ATH**102, 103, 180, 212, 214, 215, 231, 232, 233; **BA**101; **CLA**201, 202, 203; **EC**200, 201, 202, 203; **GEG**106, 107, 201, 202, 206, 207, 220; **HST**110, 111, 112, 157, 158, 159, 201, 202, 203, 228, 257, 258, 259, 262, 269, 277, 278, 279; **JNL**224; **PS**201, 202, 203, 205; **PSY**202, 206, 237, 239; **REL**201, 203; **SOC**204, 205, 206, 210, 213, 221, 235; **SSC**150; **WS**101, 102, 103
Science* These courses must be completed in at least two subjects (pre-fixes), and a minimum of two courses must be completed in one subject. **MTH**105 or 111 must be completed before transferring or be granted a waiver	15	Choose from the following: **ATH**101; **BI**100, 101, 102, 103, 131, 132, 133, 143, 171, 172, 200, 230, 231, 232, 233, 234; **BOT**201, 202, 203; **CH**104, 105, 106, 110, 111, 115, 116, 117, 121, 122, 123, 201, 202, 221, 222, 223, 241, 242, 243; **CS**161, 162, 244, 246, 260, 261; **EGR**214; **GEO**142, 143, 144, 201, 202, 203; **GEG**105, 190; **GS**104, 105, 106, 107, 120, 141, 142, 143; **MTH**105, 111, 112, 211, 212, 213, 231, 232, 241, 243, 244, 251, 252, 253, 254; **OC**133; **PH**121, 122, 201, 202, 203, 207, 208, 209, 211, 212, 213; **PSY**201; **ZOO**201, 202, 203

Multicultural Studies

You must complete two courses chosen from two of the following three areas:

	Credit	
Area 1—American Culture (AC)	2 courses, at least 3 credits each.	Area 1–**ATH**231, 232, 233; **CLA**201, 202, 203; **ENG**257; **GEG**207; **HST**257, 258, 259; **MUS**105, 205; **SSC**100, 150; **SOC**205, 206
Area 2—Identity, Pluralism and Tolerance (IP)		Area 2–**ENG**222, 250, 256, 260; **HE**213; **HS**213; **HST**262; **REL**202; **SOC**213; **WS**101, 102, 103
Area 3—International Cultures (IC) (Some courses may be chosen to meet this requirement and one of the requirements listed above.)		Area 3–**ATH**103, 212, 214, 215; **ENG**107, 108, 109, 258; **GEG**106, 201, 202, 220; **HST**110, 111, 112, 157, 158, 159, 277, 278, 279; **HUM**220; **REL**201

*No more than 3 courses from any one department may be used to satisfy the total 45-48 credit group requirements. Courses in the major may be used to satisfy group requirements. Effective Fall 2002, only one course in the major may be used to satisfy group requirements.

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

Notes:

1. Students who have completed 36 quarter hours of transferable work with a 2.25 GPA may be considered for admission based solely on college work.

2. Only courses with letter prefixes and numbers above 100 are accepted at U of O (see exceptions below).

3. A maximum of 12 credit hours of vocational/technical courses are accepted as electives.

4. The following courses will not be granted credit at U of O: **RD**115.

5. A maximum of 124 credit hours earned at a community college may be applied toward a baccalaureate degree.

6. BA degree requires equivalent of two years of college foreign language. Students who have not earned an Associate of Arts-Oregon Transfer (AAOT) degree cannot use the same foreign language courses to meet both the Arts and Letters and BA requirement.

7. BS degree requires **MTH**111, 211, 212, 213; or one of the following options: **MTH**105, 111, 243; or **MTH**111 and two of **MTH**112, 241, or 243; or one course from: **MTH**251, 252, 253, 254, 255, or 256. All courses must be completed with a grade of C- or higher. Students who have not earned an Associate of Arts-Oregon Transfer (AAOT) cannot use the same courses to meet the BS degree Math/Computer course proficiency requirement and the Science requirement.

8. Courses in which "D" grades have been earned will transfer to U of O, but will not satisfy degree requirements in writing, mathematics, or foreign language, and may not be acceptable for major requirements.

9. Students must complete **WR**121 and **MTH**105 or 111 before transferring with a "C-" or better; may request waiver of math requirement for admissions.

10. This guide is subject to change without notice and should not be regarded as a contract between U of O and students attending Chemeketa Community College.

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

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

Institutional Requirement	Required Hours/Courses	Chemeketa Courses That Satisfy Requirements
1. Written English	6 credit hours	**WR**121 & **WR**122 or **WR**123 (with a grade of "C" or better)

2. Twelve credits in approved group satisfying courses in each of three areas: Arts and Letters, Social Sciences, Sciences. In two of the groups, there must be at least two courses from one subject, and in all three groups there must be courses from two different subjects.

3. Approved courses are listed on reverse side.

4. No more than three courses from any one subject may be counted toward the total 36 credit requirement.

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

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

www.uoregon.edu 541.346.3243 or 800.232.3825

Western Oregon University

General Education Requirements
(Core Curriculum)

Requirements	Credit hours	Chemeketa courses that satisfy requirements
English Composition	4	**WR**121 or **WR**122 or **WR**123
Speech	3	**SP**111, 112, 218, 219, 229. (**SP**111 preferred.)
Physical Education	4	Activity courses selected from **PE**180, 185, 190 and **HPE**295, 296. Classes should include different activities. (Prefer **HPE**295 and 1 hr activity class.)
Creative Arts (Art, Dance, Music, Theater Arts)	9	Choose from **ART**101, 115, 116, 117, 131, 154, 155, 156, 204, 205, 206, 221, 234, 235, 236, 244, 245, 246, 247, 250, 261, 262, 263, 265, 270, 291; **MUP**105, 174; **MUS**105, 161, 197, 201, 202, 203; **TA**110, 121, 122, 123, 130. In addition, dance courses at WOU meet requirement. **Note:** A maximum of 3 hours of music performance courses is allowed. Prefer 9 hours in a combination of 3 different areas.**
Humanities (Literature, Philosophy or Religion)	12	A sequence of at least 6 hours in literature is required and one philosophy or religion course. Choose literature courses from **ENG**104, 105, 106, 107, 108, 109, 201, 202, 203, 204, 205, 206, 214, 222, 250, 253, 254, 255, 256, 260, 261, and one philosophy or religion course: **PHL**201, 202, 203, or 204, 206 or **REL**201, 202, 203. Doctrinally oriented course in religion, scripture study or theology not accepted. *
Laboratory Science	12	At least 8 hours in the same discipline is required. Choose lab science courses from **BI**101, 102, 103, 131, 230, 231, 232, 233, 234; **CH**104, 105, 106, 110, 121, 122, 123, 221, 222, 223; **GEO**142, 143, 144, 201, 202, 203; **GS**104, 105, 106, 107, 143; **PH**201, 202, 203, 207, 208, 209, 211, 212, 213; **ZOO**201, 202, 203. Early Childhood/Elementary/Middle level education majors should take **BI**101 and **GS**104 and 106.
Social Science GEOG = 4 credits HST = 4 credits EC = 4 credits ANTH = 4 credits	11–12	A sequence of at least 8 hours in the same discipline is required. Choose **ATH**101, 102, 103, 153, 212, 214, 215, 231; **GEG**105, 106, 107, 190, 206, 207; **HST**110, 111, 112, 157, 159, 201, 202, 203, 262; **PS**201, 202, 203, 205; **SOC**204, 205, 206, 210, 213; **EC**201, 202, 203. The remaining three hours may be in any social science, area, including psychology and criminal justice. **Note:** U.S History and Geography are recommended for Early Childhood/Elementary/Middle level education majors; **PSY**201 and 202 is recommended for Early Childhood/Elementary/Middle level education majors.
Degree Requirements		
Bachelor of Arts (B.A.)	4	(1) **MTH**105 or higher math. (Early Childhood/Elementary/Middle level education majors should take **MTH**211, 212, 213 Foundation of Elementary Mathematics) and
or	3	(2) **CS**101; and
	4	(3) Third term of a second-year foreign language
Bachelor of Science (B.S)	12	(1) A combined total of 12 credit hours in Mathematics, Computer Science, or designated statistics courses. A minimum of one math class and one computer science (**MTH**105 and **CS**101 [at WOU] do not meet this requirement). Early Childhood/Elementary/Middle level Ed majors should take **MTH**211,212,213.

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

Students transferring without the AA degree must have completed 24 transferable credits. Students who graduated from high school spring 1997 or later must have completed two years of high school foreign language (same language) or two terms of college-level foreign language to be admitted to WOU. Contact the Admissions Office for further information.

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

**PE 185J,A,B,C—Dance, Jazz

Notes:
1. A maximum of 124 hours taken at a community college can be transferred to WOU.
2. In general, only courses at the baccalaureate level with a letter prefix and a number of 100 or higher are considered transferable. WOU does not award credit for **CPL**120.
3. Up to 24 hours of voc/tech credits can be transferred as free electives.
4. Courses in which "D" grades have been earned are accepted by WOU but may not be allowed in the major or minor. Writing courses used to satisfy WR135 must be passed with a C- or better.
5. Students who have not completed all of the LACC requirements (or AAOT) at the time they transfer will be expected to complete them with courses among those specifically required of freshmen beginning their work at WOU.
6. Courses numbered 199, 299, and 280 (CWE) transfer to Western Oregon as unrestricted elective credit, and are not applied to the major/minor or LACC requirements. Up to 12 hours of CWE (College Work Experience) can be accepted.
7. Criminal Justice, Business, Health, Psychology, Education, ASL, and Fire Services Administration programs require completion of prerequisite curriculums and an additional application to the specific program.
8. This guide is subject to change without notice and should not be regarded as a contract between Western Oregon University and students attending Chemeketa Community College.

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

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

www.wou.edu 877.838.8211 or 877.877.1593

Career Choices and Programs of Study

As you begin at Chemeketa, you may have already decided on a career you want to pursue or a program area you want to enter. Many students, however, are still figuring that out when they start at the college. If you are still exploring career options, the career information here may be helpful to you. Below is a list of the fastest-growing occupations in the United States. Chemeketa has programs of study for most of these top-18 careers. In some cases there is more than one choice of a program to get you started in the career. For some of the careers you may need to get training at another community college. In all cases, you will see where you can find more information about the program or whom you need to contact.

Fastest Growing Occupations in the United States

Occupation	Program or Information	Page or Telephone
1. Computer Software Engineer, Applications	See Computer Science (Transfer)	page 88
2. Computer Support Specialist	See Computer Systems Specialist	page 91
3. Computer Software Engineer, Systems software	See Computer Science (Transfer)	page 88
4. Network and Computer Systems Administrator	See Network Technology	page 123
5. Network Systems and Data Communications Analyst	See Network Technology	page 123
6. Desktop Publisher	See Visual Communications	page 135
7. Database Administrator	See Computer Systems and Information Technology	page 91
8. Computer Systems Analyst	See Computer Science	page 91
9. Medical Assistant	See Medical Office Assisting	page 122
10. Social and Human Service Assistant	See Human Services Program	page 115
11. Physician Assistant	See Associate of Arts 0regon Transfer/Biology Major	page 54
12. Medical Records and Health Information Technician	See Medical Transcription	page 111
13. Computer and Information Systems Manager	See Computer Systems and Information Technology	page 88
14. Physical Therapist	See Associate of Arts 0regon Transfer	page 54
15. Occupational Therapist	See Associate of Arts 0regon Transfer	page 5 4
16. Physical Therapist Assistant	Contact Mt. Hood Community College	503.491.6422
17. Audiologist	See Associate of Arts 0regon Transfer/Speech Major	page 54
18. Fitness Trainers and Aerobics Instructor	See Physical Education	page 129

Source: U.S. Department of Labor Statistics

Here is a list of the fastest-growing jobs in Marion, Polk, and Yamhill counties. As you look at these jobs, keep in mind that some of these jobs require a degree or certificate, but others may just require a few courses. In each of these areas, Chemeketa has the training available to prepare you for work. The contact and program information will help you find the classes or program you need.

Occupation	Contact	Telephone	Programs and Courses
1. General Office Clerk	Patricia Sessions	503.399.6094	See Business Technology Certificate, page 80
2. Clerical Supervisor	Patricia Sessions	503.399.6094	See Administrative Assistant Options, page 82
3. Food Preparation Worker	Nancy Duncan	503.399.5296	Food Handler Certification, Food Manager Training
4. Hospitality Management	Nancy Duncan	503.399.5296	See Hospitality Management, page 113
5. Gardeners/Groundskeeper	Craig Anderson	503.399.6565	Landscaper/Groundskeeper Training
6. Registered Nurse	Kay Carnegie	503.399.5058	See Nursing, page 125
7. Receptionists/Information Clerk	Patricia Sessions	503.399.6094	See Office Fundamentals, page 79
8. Post-Secondary Teacher	Malia Stevens	503.399.2694	See Career-Tech Teacher Prep, page 85
9. Computer Support Specialist	James Finholt	503.589.7813	See Computer Systems Specialist, page 91
10. Computer Network and Internet Specialist	Charles Sekafetz	503.399.6254	See Network Technology, page 123

CHEMEKETA
CORE VALUES

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

Career Choices and Programs of Study

CREATIVITY

Accounting

accounting.chemeketa.edu

See also Business Administration and Management.

Are you interested in becoming a bookkeeper, accounting clerk, or junior accountant? The accounting program offers you the training to qualify for entry-level positions requiring accounting in business, industry, and government agencies.

The program includes a core of accounting, business, and general education courses and emphasizes acquiring specialized business knowledge. You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree. You may take some or most of your classes at night or 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 certificates will:

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

Students completing the AAS will:

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

Getting started

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

BA115	Introduction to Accounting (if less than RD090 and MTH060)	4
BT061A	Electronic Calculators A (if less than 80 strikes/minute)	1
BT120	Professional Communication Skills (grade of C or better)	3
CA121	Keyboarding	4
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3

If you have questions about the requirements, call Chemeketa's Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. With the approval of the CWE instructor, you may enroll in 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.

One-Year Accounting Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,063; class fees, $82; student services fee, $21.50; and universal fee, $258. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 43 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business	4
BA211	Financial Accounting 1	4
CIS125E	Excel—Workbooks	4
MTH062	Business Applications Using Mathematics	4
Term 2		
BA177	Payroll	4
BA212	Financial Accounting 2	4
WR121	English Composition—Exposition	3
or		
BA214	Business Communications	4
BA226	Business Law 1	3
Term 3		
BA213	Managerial Accounting	4
BA228	Computer Accounting Applications	3
BA240	Governmental/Non-Profit Accounting	3
or		
BA215	Cost Accounting	3
Term 4		
BA280C	Cooperative Work Experience	3

Tax Preparation Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $422; class fees, $25; student services fee, $8; and universal fee, $96. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

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

Accounting Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,200; class fees, $464; student services fee, $23.50; universal fee, $588; 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 97 credit hours with a grade of "C" or better in all Business Administration (BA) courses.

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business	4
BA211	Financial Accounting 1	4
CIS125E	Excel—Workbooks	4
MTH062	Business Applications Using Mathematics+	4
Term 2		
BA202	Personal Effectiveness	3
BA212	Financial Accounting 2	4
BA214	Business Communications+	3
CIS125A	Micro Database Software—Access	3
MTH070	Elementary Algebra (or higher)	4
Term 3		
BA213	Managerial Accounting	4
BA256	Income Tax Accounting 1	4
EC200	Introduction to Economics (or higher)	3
WR227	Technical Writing	3
Term 4		
BA226	Business Law 1	3
BA240	Governmental/Non-Profit Accounting 1*	3
or		
BA215	Cost Accounting	3
BA257	Income Tax Accounting 2	4
BA266	Intermediate Financial Accounting 1	4
SP111	Fundamentals of Public Speaking (or higher)	3
Term 5		
BA203	Organizational Behavior	3
BA206	Business Management Principles	3
BA222	Financial Management	3
BA228	Computer Accounting Applications	3
BA267	Intermediate Financial Accounting 2	4

Course	Title	Credit Hours
Term 6		
BA177	Payroll	4
BA268	Intermediate Financial Accounting 3	4
BA280C	Cooperative Work Experience	3
	or	
	Business elective**	3
	Humanities/Fine Arts elective	3
	Psychology/Sociology elective+***	3

+Meets related instruction requirement, see page 44.

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

**Business elective: Choose BA or EC courses at the 200 level or above, or BA259, BA271A, CA208, CIS135AC, CIS178I, CIS178W.

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

Agribusiness Management

naturalresources.chemeketa.edu

The Agribusiness Management programs teach farmers the basic principles of record keeping and financial management. The major emphasis is on the development and maintenance of a complete set of records and the skills necessary to interpret the records and use the information to make sound management decisions. The program is designed for a minimum commitment of three years and includes all active members of the farm business. Various delivery systems are used, including classroom instruction and individualized farm visits. Upon completion of the annual farm records, a computerized business analysis is provided to eligible farms. For more information, call 503.399.5089 or 503.589.7759.

XAGR9800C,D,E Agribusiness Management 1
Emphasizes setting farm business goals; developing a complete set of farm financial records; and analyzing those records for management decision making.

XAGR9800F,G,H Agribusiness Management 2
Monitors and assesses financial position of the farm business based upon records and analysis obtained in Farm Business Management 1. Explores computerized farm accounting and income tax management.

XAGR9800J,K,L Agribusiness Management 3
Focuses on reorganizing the farm business based on accumulated financial data. Further develops estate, retirement and labor management plans.

XAGR9800M,N,P Agribusiness Management 4
Applies recordkeeping skills and three years of analysis data to farm reorganization and financial management decisions. Uses year-end analysis in evaluating effectiveness of reorganization and management practices implemented during the first three years.

XAGR9800Q,R,S Agribusiness Management 5
Applies recordkeeping skills to individual farm businesses. Uses records in business dealings with off-campus agencies and individuals.

XAGR9800T Farm Tour
Demonstrates agricultural production and marketing outside of Oregon via tours. Provides participants with an opportunity to learn from local managers, extension agents, and business people at both on- and off-farm sites.

XAGR9801T Agribusiness Management Workshop
Examines a selected topic of current importance to farm business management.

Agriculture

(transfer course guideline)

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

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

Anthropology

(transfer course guideline)

Oregon State University, Portland State University, and University of Oregon offer Bachelor of Arts and/or Bachelor of Science degrees in Anthropology. Eastern Oregon University and Southern Oregon University both offer a combined major in anthropology and sociology.

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

Apprenticeship

apprenticeship.chemeketa.edu

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

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

Chemeketa's Apprenticeship program offers Associate of Applied Science degrees and Certificates of Completion for professionals in the areas of Electrician; Heating, Ventilation, Air-Conditioning, and Refrigeration (HVAC/R); Plumbing; and Sheet Metal as part of Oregon's community college general apprenticeship pathway. The program provides statewide transfer opportunities, certificates of completion, and an optional transfer path into a Bachelor of Science degree in Operations Management at the Oregon Institute of Technology. The related training courses are based on Oregon State Apprenticeship Training Council and local Joint Apprenticeship Training Committee approved related training developed to meet industry standards. They are approved for Bureau of Labor and Industries (BOLI)-registered apprentices and not available to the general student population.

 If you are interested in becoming registered in an Oregon State Apprenticeship program, please contact the Oregon State Bureau of Labor and Industries Apprenticeship Training Division at 971.673.0761 or **www.boli.state.or.us** for program and entrance requirements. For more information on Chemeketa's apprenticeship certificates and degrees, please call Marilyn Hart Reed at 503.399.5255.

Program outcomes

Students completing the Electrician Apprenticeship Technologies—General Electrician Option Certificate will:
- Complete 6000-8000 hours of State of Oregon-approved on-the-job training.
- Apply theory to electrical wiring.
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OESC standards for Inside Electrician, Limited Energy Technician-License A, Limited Manufacturing Plant Electrician, Sign Assembler/Fabricator, Sign Maker/Erector, and Stationary Engineer.

Students completing the Electrician Apprenticeship Technologies—General Electrician Option AAS will:
- Complete 8000 hours of State of Oregon-approved on-the-job training.
- Apply theory to electrical wiring.
- Repair and install electrical wire devices according to licensure regulations to meet NEC and OESC standards for Inside Electrician.

Students completing the Construction Trades General Apprenticeship—HVAC/R Option Certificate will:
- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Students completing the Construction Trades General Apprenticeship—HVAC/R Option AAS will:
- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Students completing the Construction Trades General Apprenticeship—Plumbers Apprenticeship Option Certificate will:
- Complete a minimum of 7700 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Students completing the Construction Trades General Apprenticeship—Plumbers Apprenticeship Option AAS will:
- Complete a minimum of 7700 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Students completing the Construction Trades General Apprenticeship—Sheet Metal Apprenticeship Option Certificate will:
- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Students completing the Construction Trades General Apprenticeship—Sheet Metal Apprenticeship Option AAS will:
- Complete a minimum of 8000 hours of State of Oregon-approved on-the-job training.
- Repair, install, and maintain a variety of building construction projects using trade-specific tools and techniques in compliance with building codes and OSHA regulations.

Getting started

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

Electrician Apprenticeship entry requirements:
- Minimum of 18 years old.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or higher or
- Completion of MTH060 and MTH070 at Chemeketa, pass Chemeketa's Math Placement Test, and be placed into MTH070 or higher.

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

HVAC/R Apprenticeship Option entry requirements:
- Minimum of 18 years old.
- High School Diploma or GED.
- One year of high school algebra with grade "C" or higher or
- Completion of MTH060 or MTH070 at Chemeketa.

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

Plumber Apprenticeship Option entry requirements:
- Minimum of 18 years old.
- High School Diploma or GED.

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

Sheet Metal Apprenticeship Option entry requirements:
- Minimum of 18 years old.
- High School Diploma or GED.

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

Electrician Apprenticeship Technologies— General Electrician Option Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $280; apprenticeship fees, $80; student services fee, $31; universal fee, $372. 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 62 credit hours.

Course	Title	Credit Hours
Term 1		
APR153A	Electrician Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4

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

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Electrician Apprenticeship Technologies— General Electrician Option Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $280; apprenticeship fees, $80; student services fee, $36; universal fee, $432. 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 72 credit hours.

Course	Title	Credit Hours
Term 1		
APR153A	Electrician Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR153B	Electrician Apprenticeship AC/DC Circuits	5
WR121	English Composition--Exposition+ (or higher)	3
Term 3		
APR153C	Electrician Apprenticeship Measurements	3
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR153D	Electrician Apprenticeship Theory	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 5		
APR153E	Electrician Apprenticeship Wiring/Print Reading	5
SP111	Fundamentals of Public Speaking	3
Term 6		
APR153F	Electrician Apprenticeship Residential Installation	3
EC202	Introduction to Macroeconomics	4
Term 7		
APR253G	Electrician Apprenticeship Safety and Code	5

Term 8
APR253H Electrician Apprenticeship Motors and Controls 5

Term 9
APR253I Electrician Apprenticeship Fiber Optics 3

Term 10
APR253J Electrician Apprenticeship Math/Test
Equipment 5

Term 11
APR253K Electrician Apprenticeship Voltage 5

Term 12
APR253L Electrician Apprenticeship Code and
Exam Prep 3

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—HVAC/R Option Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $420; student services fee, $35; universal fee, $420. 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 70 credit hours.

Course	Title	Credit Hours
Term 1		
APR155A	HVAC/R Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR155B	HVAC/R Apprenticeship Soldering and Brazing	5
WR115	Introduction to Composition+ (or higher)	3
Term 3		
APR155C	HVAC/R Apprenticeship Introduction to Code	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 4		
APR155D	HVAC/R Apprenticeship Trade Math	5
Term 5		
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration	5
Term 6		
APR155F	HVAC/R Apprenticeship Electricity and Magnetism	5
Term 7		
APR255G	HVAC/R Apprenticeship Fuels	5
Term 8		
APR255H	HVAC/R Apprenticeship Residential Air Distribution	5
Term 9		
APR255I	HVAC/R Apprenticeship Welding	5
Term 10		
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals	5
Term 11		
APR255K	HVAC/R Apprenticeship Troubleshooting	5
Term 12		
APR255L	HVAC/R Apprenticeship Equipment and Room Layout	5

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits will be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—HVAC/R Option Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $350; program fees, $420; apprenticeship fees, $80; student services fee, $40; universal fee, $480. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 80 credit hours.

Course	Title	Credit Hours
Term 1		
APR155A	HVAC/R Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR155B	HVAC/R Apprenticeship Soldering and Brazing	5
WR121	English Composition--Exposition+ (or higher)	3
Term 3		
APR155C	HVAC/R Apprenticeship Introduction to Code	5
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR155D	HVAC/R Apprenticeship Trade Math	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 5		
APR155E	HVAC/R Apprenticeship Introduction to Refrigeration	5
SP111	Fundamentals of Public Speaking	3
Term 6		
APR155F	HVAC/R Apprenticeship Electricity and Magnetism	5
EC202	Introduction to Macroeconomics	4
Term 7		
APR255G	HVAC/R Apprenticeship Fuels	5
Term 8		
APR255H	HVAC/R Apprenticeship Residential Air Distribution	5
Term 9		
APR255I	HVAC/R Apprenticeship Welding	5
Term 10		
APR255J	HVAC/R Apprenticeship Refrigeration Fundamentals	5
Term 11		
APR255K	HVAC/R Apprenticeship Troubleshooting	5
Term 12		
APR255L	HVAC/R Apprenticeship Equipment and Room Layout	5

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—Plumber Option Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $280; apprenticeship fees, $80; student services fee, $31; universal fee, $372. 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 62 credit hours.

Course	Title	Credit Hours
Term 1		
APR158A	Plumber Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4

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

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—Plumber Option Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $280; apprenticeship fees, $80; student services fee, $36; universal fee, $432. 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 72 credit hours.

Course	Title	Credit Hours
Term 1		
APR158A	Plumber Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR158B	Plumber Apprenticeship Math and Print Reading	5
WR121	English Composition--Exposition+ (or higher)	3
Term 3		
APR158C	Plumber Apprenticeship Pipe Sizing	3
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR158D	Plumber Apprenticeship Basic Installation	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 5		
APR158E	Plumber Apprenticeship Occupancy	5
SP111	Fundamentals of Public Speaking	3
Term 6		
APR158F	Plumber Apprenticeship Advanced Waste Water Systems	3
EC202	Introduction to Macroeconomics	3
Term 7		
APR258G	Plumber Apprenticeship Residential Installation	5

Term 8
APR258H   Plumber Apprenticeship Commercial Installation 5
Term 9
APR258I   Plumber Apprenticeship Code 3
Term 10
APR258J   Plumber Apprenticeship Industrial Installation 5
Term 11
APR258K   Plumber Apprenticeship Basic Waste Water System 5
Term 12
APR258L   Plumber Apprenticeship Code and Test Prep 3

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—Sheet Metal Technician Option Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $420; student services fee, $34.50; universal fee, $414. 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 69 credit hours.

Course	Title	Credit Hours
Term 1		
APR166A	Sheet Metal Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawing	5
WR115	Introduction to Composition+ (or higher)	3
Term 3		
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 4		
APR166D	Sheet Metal Apprenticeship Basic Installation	5
Term 5		
WLD077	Welding Processes	4
Term 6		
APR166E	Sheet Metal Apprenticeship Architectural Systems	5
Term 7		
APR266F	Sheet Metal Applied Math	5
Term 8		
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass	5
Term 9		
APR266H	Sheet Metal Calculator Layout	5
Term 10		
APR266I	Sheet Metal Apprenticeship Radial Line Development	5
Term 11		
APR266J	Sheet Metal Apprenticeship Duct Sizing	5
Term 12		
APR266K	Sheet Metal Apprenticeship Job Site Management	5

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Construction Trades, General Apprenticeship—Sheet Metal Technician Option Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are program fees, $420; student services fee, $39.50; universal fee, $474. 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 79 credit hours.

Course	Title	Credit Hours
Term 1		
APR166A	Sheet Metal Apprenticeship Fundamentals	5
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
APR166B	Sheet Metal Apprenticeship Fundamentals of Drawing	5
WR121	English Composition--Exposition+ (or higher)	3
Term 3		
APR166C	Sheet Metal Apprenticeship Fundamentals of Layout	5
CIS101	Introduction to Microcomputer Applications	3
Term 4		
APR166D	Sheet Metal Apprenticeship Basic Installation	5
PSY101	Psychology of Human Relations+ (or higher)	3
Term 5		
WLD077	Welding Processes	4
SP111	Fundamentals of Public Speaking	3
Term 6		
APR166E	Sheet Metal Apprenticeship Architectural Systems	5
EC202	Introduction to Macroeconomics	4
Term 7		
APR266F	Sheet Metal Applied Math	5
Term 8		
APR266G	Sheet Metal Apprenticeship Triangulation and Fiberglass	5
Term 9		
APR266H	Sheet Metal Calculator Layout	5
Term 10		
APR266I	Sheet Metal Apprenticeship Radial Line Development	5
Term 11		
APR266J	Sheet Metal Apprenticeship Duct Sizing	5
Term 12		
APR266K	Sheet Metal Apprenticeship Job Site Management	5

+Meets related instruction requirement, see page 44.

Note: An additional 22 credits can be awarded for the journey-level card, when achieved.

Aquarium Science

aquarium.chemeketa.edu

The Aquarium Science program offers a comprehensive two-year Associated of Applied Science (AAS) degree and a one-year certificate that is open only to individuals who already possess a bachelor's degree in a life science area. Both the certificate and the AAS provide theory and practical experience designed to prepare students for a career in aquatic animal husbandry.

This program is taught at Oregon Coast Community College, and enrollment is limited. For additional information, contact Bruce Koike,

the Aquarium Science program director, at 541.574.7130 or visit www.occc.cc.or.us/aquarium or www.aquarium.chemeketa.edu.

Students who successfully earn a degree or certificate will be qualified to work in the aquatic animal husbandry profession. They may be eligible for positions as aquarist, aquatic biologists, or keeper. Potential employment opportunities include public zoos and aquariums, ornamental fish retailers and wholesalers, aquaculture businesses, fish hatcheries, research programs, marine educational centers, state and federal natural resource agencies, as well as self-employment.

Program outcomes

Students completing the certificate will:

- Accurately communicate, verbally and in writing, scientific concepts, research findings and ideas to professionals and the general public.
- Maintain, analyze, diagnose, and repair life support systems and their components.
- Perform basic water quality analysis using standard testing equipment.
- Maintain healthy animal populations by applying industry standards and practices to aquarium set-up, monitoring, and animal care.
- Identify healthy, physically compromised animals and abnormal animal behaviors.
- Work as a member of a team to conceptualize, plan, construct, and manage environments that promote healthy fishes and invertebrates.
- Work as a team member to conduct research with animal husbandry or life support systems.

Students completing the AAS will:

- Accurately communicate, verbally and in writing, scientific concepts, research findings, and ideas to professionals and the general public.
- Maintain, analyze, diagnose, and repair life support systems and their components.
- Perform basic water quality analysis using standard testing equipment.
- Maintain healthy animal populations by applying industry standards and practices to aquarium set-up, monitoring, and animal care.
- Identify healthy, physically compromised animals and abnormal animal behaviors.
- Work as a member of a team to conceptualize, plan, construct, and manage environments that promote healthy fishes and invertebrates.

Aquarium Science Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $950; class fees, $442; equipment and supplies, $400; and travel and living expenses during the internship. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion in Aquarium Science by successfully completing the required 51 credit hours with a grade of "C" or better in all courses. This program is only open to individuals who possess a bachelor's degree or higher in a life science area. You will need to complete 132 hours of practicum and 400 hours of field internship.

Course	Title	Credit Hours
Term 1		
AQS100	Introduction to Aquarium Science	3
AQS215	Biology of Captive Fish	4
AQS240	Life Support System Design and Operation	4
AQS245	Animal Husbandry in a Research Capacity	2
PE185SA	Scuba Diving—Beginning	1

Term 2
AQS110   Aquarium Science Practicum 1 2
AQS226   Biology of Diverse Captive Species..................................2
AQS232   Reproduction and Nutrition of Aquatic Animals 4
AQS252   Exhibits and Interpretation 4
AQS270   Fish and Invertebrate Health Management 4

Term 3
AQS111   Aquarium Science Practicum 2 2
AQS165   Current Issues in Aquarium Science..................................1
AQS216   Elasmobranch Husbandry..2
AQS220   Biology of Captive Invertebrates 4

Term 4
AQS275   Aquarium Science Internship 12

Aquarium Science Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,500; class fees, $692; equipment and supplies, $400; and travel and living expenses during the internship. 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 in Aquarium Science by successfully completing the required 90 credit hours with a grade of "C" or better in all courses. You will need to complete 132 hours of practicum and 400 hours of field internship.

Course	Title	Credit Hours
Term 1		
AQS100	Introduction to Aquarium Science	3
BI101	General Biology (or higher)	4
CA118F1	PowerPoint Basics 1	1
MTH095	Intermediate Algebra+ (or higher)	4
PSY104	Psychology in the Workplace+	3
Term 2		
AQS110	Aquarium Science Practicum 1	2
BI102	General Biology (or higher)	4
CA118B1	Excel Basics 1	1
CH110	Foundations of General, Organic and Biochemistry (or higher)	5
PE185SA	Scuba Diving-Beginning	1
WR121	English Composition—Exposition+ (or higher)	3
Term 3		
AQS111	Aquarium Science Practicum 2	2
AQS165	Current Issues in Aquarium Science	1
AQS216	Elasmobranch Husbandry	2
AQS220	Biology of Captive Invertebrates	4
BI103	General Biology (or higher)	4
WR227	Technical Writing	3
Term 4		
AQS215	Biology of Captive Fish	4
AQS240	Life Support System Design and Operation	4
AQS245	Animal Husbandry in a Research Capacity	2
CA118C1	Access Basics 1	1
SP111	Fundamentals of Public Speaking (or higher)	3
Term 5		
AQS226	Biology of Diverse Captive Species	2
AQS232	Reproduction and Nutrition of Aquatic Animals	4
AQS252	Exhibits and Interpretation	4
AQS270	Fish and Invertebrate Health Management	4
	Aquarium Science Elective*	3
Term 6		
AQS275	Aquarium Science Internship	12

+Meets related instruction requirement, see page 44.

*Aquarium Science electives:
AQS151A   Special Projects in Aquarium Science 1
AQS151B   Special Projects in Aquarium Science 2
AQS151C   Special Projects in Aquarium Science 3
AQS187   Scientific Diving 1
BI100   Orientation to Marine Life of the Oregon Coast..............3

Art

(transfer course guideline)
See also Visual Communications

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Art are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU has majors in Art, Art History, Fine Arts, Graphic Design, and Photography, and U of O has majors in Art History, and Fine and Applied Arts.

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

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

Automotive Technology

automotive.chemeketa.edu

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

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

To help you work effectively with people, the program also includes written and oral communications classes and general education electives. The curriculum emphasizes related scientific, mathematical, and general mechanical principles.

Program outcomes

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

Getting started

This program 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 Counseling and Career Services staff, 503.399.5120. There are entry-level expectations for skill levels in reading, writing, and mathematics. Your advisor will help you develop an individualized program of study, which may include one or more of the following:

MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3
WR049	Basic Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5210. Failure to be assessed may delay your entry into program classes.

For admission to the program, an application is required. This is a separate step from the testing and assessment steps. Applications are available in Counseling and Career Services, Admissions, and program offices. Enrollment in the 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 Counseling and Career Services at 503.399.5120, or the Automotive Technology program chair at 503.399.6521 for details if you are considering the Automotive Technology, Auto Body Repair, or Automotive Machining Certificate programs. To enroll, you must have a high school diploma or GED certificate.

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

Automotive Body Repair Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $305; class fees, $162; student services fee, $23; universal fee, $276; equipment and supplies, $1,800. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 46 credit hours with a grade of "C" or better in AUM courses.

General Education requirements (12 credit hours):

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

Automotive Body core requirements (19 credit hours):

Course	Title	Credit Hours
AUM168	Automotive Electrical Systems 1	4
AUM184	Automotive Materials and Resources	1
AUM280L	Cooperative Work Experience	12
WLD097	Welding	2
	or	
WLD061	Basic Gas Metal Arc Welding (MIG)	3

Automotive Body Repair electives (select 15 credit hours):

Course	Title	Credit Hours
AUM151	Basic Automotive Engines	5
AUM157	Automotive Brake Systems	5
AUM158	Automotive Steering and Suspension	5
AUM286	Automotive Heating and Air Conditioning	5

Automotive Entry Level Technician Certificate of Completion

This certificate provides students with basic skills in key high-demand automotive repair and maintenance systems, including brakes, electrical, suspension, steering, and climate control. The program is designed to allow students with full-time employment or other daytime commitments the ability to attend classes and obtain a certificate in a one-year period.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $352; class fees, $98; student services fee, $14; universal fee, $168. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

General Education requirements (9 credit hours):

Course	Title	Credit Hours
COM051	Communications Skills 1+	3
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
PSY104	Psychology In the Workplace+	3

Automotive Entry Level Technician core requirements (19 credit hours):

Course	Title	Credit Hours
AUM159	Automotive Chassis Systems	5
AUM168	Automotive Electrical Systems 1	4
AUM286	Automotive Heating and Air Conditioning	5
AUM280E	Cooperative Work Experience	5

Automotive Machining Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $290; class fees, $240; student services fee, $27.50; universal fee, $330; equipment and supplies, $1,800. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 55 credit hours with a grade of "C" or better in AUM courses.

Course	Title	Credit Hours
General Education requirements (12 credit hours):		
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
PSY101	Psychology of Human Relations+ (or higher)	3

Course	Title	Credit Hours
Automotive Machining core requirements (43 credit hours):		
AUM151	Basic Automotive Engines	5
AUM184	Automotive Materials and Resources	1
AUM185A	Automotive Machining Fundamentals	3
AUM186A	Automotive Lathe Fundamentals	3
AUM187A	Automotive Milling Machine Processes	3
AUM188	Auto Machine Shop—Upper Engine	3
AUM189	Auto Machine Shop—Lower Engine	3
AUM190	Auto Machine Shop—Engine Assembly	3
AUM253	Automotive Engines 2	3
AUM280L	Cooperative Work Experience	12
WLD077	Welding Processes	4

+ Meets related instruction requirement, see page 44.

Automotive Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $900; class fees, $618; student services fee, $52; universal fee, $624; equipment and supplies, $1,800. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing these 104 required 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	5
	or	
AUM159	Automotive Chassis Systems	5
AUM184	Automotive Materials and Resources	1
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
PH060	Applied Physical Science (or higher)	3
Term 2		
AUM152	Automotive Machine Shop	4
AUM158	Automotive Steering and Suspension	5
COM052	Communication Skills 2	3
	or	
WR122	English Composition—Logic and Style	3
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
Term 3		
AUM161	Manual Drive Trains and Axles 1	5
AUM168	Automotive Electrical Systems 1	4
AUM192	Automotive Diesel Engines	3
PSY101	Psychology of Human Relations+ (or higher)	3
	or	
PSY104	Psychology in the Workplace	3
Term 4		
AUM262	Manual Drive Trains and Axles 2	3
AUM263	Automatic Transmissions and Transaxles 1	5
AUM266	Basic Fuel Systems	4
AUM276	Automotive Electrical Systems 2	4
Term 5		
AUM267	Advanced Fuel Systems	5
AUM277	Automotive Electrical Systems 3	5
AUM282	Electronic Vehicle Controls 1	5
AUM286	Automotive Heating and Air Conditioning	5
Term 6		
AUM253	Automotive Engines 2	3
	or	
AUM280C	Cooperative Work Experience	3
AUM273	Automatic Transmissions and Transaxles 2	3
	or	
AUM280C	Cooperative Work Experience	3
AUM281	Advanced Driveability and Emissions	6
AUM283	Electronic Vehicle Controls 2	4
WLD097	Welding	2
	or	
WLD077	Welding Processes	4

+Meets related instruction requirement, see page 44.

Biology, Botany, General Science, Zoology

(transfer course guideline)

Oregon state colleges and universities offering Bachelor of Arts and/or Bachelor of Science degrees in Biology are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

Building Inspection Technology

buildinginspection.chemeketa.edu

The Building Inspection Technology Associate of Applied Science (AAS) program has a two-year (seven-term) program for those new to and experienced in the field. As a graduate, you may qualify for State

of Oregon and international certification as a building inspector or plans examiner at the residential and/or commercial level, depending upon your experience and tests taken. The certification tests are all an additional cost.

There is a need for certified building inspectors and plans examiners working for public and private agencies. If you have some experience in the field, you may qualify after you graduate as a construction manager or clerk-of-the-works, or perform similar functions in other jobs.

The curriculum covers technical and general education courses. Classes on various codes, plan review, inspection techniques, and construction materials are complemented by courses in mathematics, communication skills, and public relations. At the end of winter term each year, students are encouraged to attend an educational conference at an additional cost. You may work toward an Associate of Applied Science degree.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the program chair, you may enroll in BLD280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index. Cooperative work experience is a requirement of this degree.

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

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

Program outcomes

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

Building Inspection Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,345; class fees, $258; student services fee, $52.50; universal fee, $630; 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 105 required credit hours with a grade of "C" or better in all courses.

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

+Meets related instruction requirement, see page 44.

Business Administration

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

Oregon's state universities offering a Bachelor of Arts and/or Bachelor of Science degrees in Business Administration are Oregon State University,

Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Eastern Oregon University offers a combined degree in Business and Economics.

Many colleges have specific requirements for admission to their Business Administration programs. These include specified GPA, completion of specific courses, and deadlines for admission. As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. Consult with Chemeketa's Counseling and Career Services or a Chemeketa advisor. Also, you should make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Business Technology

bt.chemeketa.edu

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

The Office Fundamentals certificate is offered for people who want to develop or refresh their clerical skills in order to qualify for entry-level office work. You may select individual courses to meet your needs, or you may work toward a Certificate of Completion.

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

The two-year program is designed for people who want to become administrative assistants, secretaries, office assistants, and support specialists. There are four two-year programs: Administrative Assistant, Accounting Administrative Assistant, Business Support Specialist, and Medical Administrative Assistant. You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each program.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do on approved job sites in the business community. With the approval of the program chair, you may enroll in BT280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Program outcomes

Students completing the Office Fundamentals Certificate will:
- Accurately produce and proofread business documents using appropriate software and equipment within specified timelines.
- Follow professional business procedures and standards.
- Store and retrieve information to support office personnel.

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

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

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

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

Students completing the Business Support Specialist AAS will:
- Compose, proofread, and accurately produce 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 and management.
- Integrate computer, computation, communication, and critical thinking skills to accomplish 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.
- Determine the interrelationships of business, government, and society on business tasks and decisions.

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

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

Getting started

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

BT084	Business English 1	3
MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

Office Fundamentals Certificate of Completion

The Office Fundamentals program allows you to concentrate on developing the basic skills required of a receptionist, file clerk, typist, and/or an employee in other related positions. Independent study and individualized instruction allow you to proceed at your own pace. Course content includes keyboarding, records management, business English, a computer operating system, and basic word processing, spreadsheet, database, and presentation software. If you wish to refresh specific skills, you may enroll in other electives as your schedule allows.

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

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $975; class fees, $100; student services fee, $16.50; universal fee, $198; equipment and supplies, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 33 credit hours with a grade of "C" or better in all courses.

Office Fundamentals core requirements (30 credit hours):

Course	Title	Credit Hours
BT085	Business English 2	3
BT086	Personal and Professional Development	3
BT116	Office Procedures	3
BT128	Introduction to Records Management	3
BT130	Customer Service	3
CA118A	Microsoft Windows Basics	1
CA118D	Internet for the Office Environment	1
CA118E	Outlook Basics	1
CA121	Keyboarding	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CIS101	Introduction to Microcomputer Applications	3
	Office Fundamentals elective*	3

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

One-Year Certificate of Completion Programs

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

Getting started

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

BT084	Business English 1	3
CA121	Keyboarding (if less than 25 wpm)	3
MTH060	Introductory Algebra+	4
RD090	College Textbook Reading	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

Business Technology Certificate of Completion

This certificate prepares you to work as a word processing operator, general office clerk, receptionist, typist, file clerk, secretary, bookkeeping assistant, and/or accounting clerk. You may enroll part time or full time. Your classes will be offered primarily in traditional classrooms and labs. Taking classes through distance education is an option for some classes. If you are interested in taking classes primarily by distance delivery, see the Business Software Certificate.

In addition to tuition, estimated costs for students who complete the required courses listed below are books, $1,630; class fees, $144; student services fee, $25.50; universal fee, $306; equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 51 credit hours with a grade of "C" or better in all courses.

Business Technology Certificate core requirements (48 credit hours):

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT061	Electronic Calculators	2
BT085	Business English 2	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communications Skills+	4
BT128	Introduction to Records Management	3
BT130	Customer Service	3
CA118A	Microsoft Windows Basics*	1
CA118B1	Excel Basics 1	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA118E	Outlook Basics	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
PSY104	Psychology in the Workplace+	3

**Business Technology Certificate electives (select 3 credit hours):

BA202	Personal Effectiveness	3
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BA214	Business Communications	3
BT086	Personal and Professional Development	3
BT280C	Cooperative Work Experience	3
CA091	Computerized Bookkeeping	3
	or	
CA091ABC	QuickBooks Parts A,B,C-Computerized Bookkeeping	1 each
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C2	Access Basics 2	1
CA118F1	PowerPoint Basics 1	1
CA119	Office Desktop Publishing 1	3
CA122ABC	Keyboard Skillbuilding A,B,C	1 each
CA205	PageMaker 1	3
CA208	Workplace Presentations Using PowerPoint	3
CA219	Office Desktop Publishing 2	3
CA225	Advanced Document Production	3
CIS125E	Excel-Workbooks	4
MTH062	Business Applications Using Mathematics (or higher)	4

+Meets related instruction requirement, see page 44.

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

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

Business Software Certificate of Completion

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

In addition to tuition, estimated costs for students who complete required courses listed below are books, $1,680; class fees $108; student services fee, $25; universal fee, $300; equipment and supplies, $150 plus access to a computer with a modem and appropriate software. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 50 credit hours with a grade of "C" or better in all courses.

Business Software core requirements (30 credit hours):

Course	Title	Credit Hours
CA118A	Microsoft Windows Basics*	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA118F1	PowerPoint Basics 1	1
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CIS101	Introduction to Microcomputer Applications*	3
CIS125E	Excel-Workbooks	4
MTH062	Business Applications Using Mathematics+ (or higher)	4
PSY104	Psychology in the Workplace+	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication	3
WR115	Introduction to Composition+ (or higher)	3

**Business Software electives (select 20 credit hours):

BA115	Introduction to Accounting	4
BT061	Electronic Calculators	2
BT086	Personal and Professional Development	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT130	Customer Service	3
BT280C	Cooperative Work Experience	3
CA091	QuickBooks-Computerized Bookkeeping	3
	or	
CA091ABC	QuickBooks Parts A, B, C-Computerized Bookkeeping	1 each
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118C2	Access Basics 2	1
CA118E	Outlook Basics	1
CA119	Office Desktop Publishing 1	3
CA122	Skillbuilding	3
CA205	PageMaker 1	3
CA208	Workplace Presentations Using PowerPoint	3
CA213	Integrating Office Procedures	3
CA219	Office Desktop Publishing 2	3
CA225	Advanced Document Production	3
CA232	Integrating Office Software Applications	3
CIS105	Introduction to MS Windows	3
CIS125A	Micro Database Software-Access	3
CIS178I	Introduction to the Internet/World-Wide Web	3

+Meets related instruction requirement, see page 44.

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

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

Two-Year Associate of Applied Science Degrees

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

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

The program has four options: Accounting Administrative Assistant, Administrative Assistant, Business Support Specialist, and Medical Administrative Assistant. You may earn an Associate of Applied Science degree by successfully completing the credit hours required for each area. Successful completion requires that you earn a grade of "C" or better in all courses.

Getting started

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

BT084	Business English 1	3
CA121	Keyboarding (if less than 25 wpm)	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

Accounting Administrative Assistant Associate of Applied Science

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

This program provides you with basic training in bookkeeping—both manual and computerized—in addition to training in office skills such as information processing, office procedures, records management, and office management.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,800; class fees, $262; student services fee, $50; universal fee, $600; equipment and supplies, $300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 100 credit hours with a grade of "C" or better in all courses.

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

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT061	Electronic Calculators	2
BT085	Business English 2	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
BT130	Customer Service	3
CA091	QuickBooks—Computerized Bookkeeping	3
CA118A	Microsoft Windows Basics	1
CA118B1	Excel Basics 1	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
MTH062	Business Applications Using Mathematics+ (or higher)	4

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

Course	Title	Credit Hours
BA177	Payroll	4
BA214	Business Communications+	3
BA228	Computer Accounting Applications	3
BA251	Office Management	3
BT086	Personal and Professional Development	3
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics	1
CA208	Workplace Presentation Using PowerPoint	3
CA230	Executive Office Simulation	3
CA232	Integrating Office Software Applications	3
CIS125E	Excel—Workbooks	4
MTH070	Elementary Algebra (or higher)	4
PSY104	Psychology in the Workplace+	3
	Accounting Administrative Assistant electives*	9

*Accounting Administrative Assistant electives (select 9 credit hours):

BA101	Introduction to Business	4
BA202	Personal Effectiveness	3
BA203	Organizational Behavior	3
BA204	Teamwork Dynamics	3
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BA223	Principles of Marketing	3
BA226	Business Law 1	3
BA227	Business Law 2	3
BA277	Business Ethics	3
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C2	Access Basics 2	1
CA118F1	PowerPoint Basics 1	1
CA119	Office Desktop Publishing 1	3
CA122	Keyboard Skillbuilding (repeat)	3
CA205	PageMaker 1	3
CA219	Office Desktop Publishing 2	3
CA225	Advanced Document Production	3
CIS105	Introduction to MS Windows	3
CIS125A	Micro Database Software-Access	3
CIS178I	Introduction to the Internet/World-Wide Web	3
WR227	Technical Writing	3

+Meets related instruction requirement, see page 44.

Administrative Assistant Associate of Applied Science

The Administrative Assistant 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. You will become skilled in areas such as keyboarding, document production, composition, machine transcription, and computers. You will gain knowledge of records management, word processing, spreadsheets, databases, desktop publishing, and office procedures.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,800; class fees, $227; student services fee, $49.50; universal fee, $594; equipment and supplies, $300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

Administrative Assistant first-year core requirements (50 credit hours):

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BT061	Electronic Calculators	2
BT085	Business English 2	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
BT130	Customer Service	3
CA118A	Microsoft Windows Basics	1
CA118B1	Excel Basics 1	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA119	Office Desktop Publishing 1	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
	Administrative Assistant electives*	3

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

Course	Title	Credit Hours
BT086	Personal and Professional Development	3
BA214	Business Communications+	3
BA251	Office Management	3
BT280C	Cooperative Work Experience	3
CA118E	Outlook Basics	1
CA208	Workplace Presentations Using PowerPoint	3
CA219	Office Desktop Publishing 2	3
CA225	Advanced Document Production	3
CA230	Executive Office Simulation	3
CA232	Integrating Office Software Applications	3
MTH062	Business Applications Using Mathematics+ (or higher)	4
PSY104	Psychology in the Workplace+	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication	3
WR227	Technical Writing	3
	Administrative Assistant electives*	5
	Humanities/Fine Arts elective	3
	or	
	Administrative Assistant elective	3

+Meets related instruction requirement, see page 44.

*Administrative Assistant electives (select 8 credit hours):

Course	Title	Credit Hours
BA101	Introduction to Business	4
BA177	Payroll	4
BA202	Personal Effectiveness	3
BA203	Organizational Behavior	3
BA204	Teamwork Dynamics	3
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BA223	Principles of Marketing	3
BA226	Business Law 1	3
BA227	Business Law 2	3
BA277	Business Ethics	
CA091	QuickBooks—Computerized Bookkeeping	3
	or	
CA091ABC	QuickBooks Parts ABC—Computerized Bookkeeping	1 each
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C2	Access Basics 2	1
CA118F1	PowerPoint Basics 1	1
CA122	Keyboard Skillbuilding (repeat)	3
CA205	PageMaker 1	3
CIS105	Introduction to MS Windows	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel—Workbooks	4
CIS178I	Introduction to the Internet/World-Wide Web	3

Business Support Specialist Associate of Applied Science

The Business Support Specialist prepares you for a career in a variety of business environments where you are able to work independently, exercising responsible judgment. This program stresses the business environment and interpersonal relations. You will develop computer skills, including training in the use of current operating systems, software applications, the Internet, and the World-Wide Web.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,800; class fees, $212; student services fee, $50.50; universal fee, $606; equipment and supplies, $300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 101 credit hours with a grade of "C" or better in all courses.

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

Course	Title	Credit Hours
BA101	Introduction to Business	4
BA202	Personal Effectiveness	3
BT061	Electronic Calculators	2
BT085	Business English 2	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
BT128	Introduction to Records Management	3
CA118A	Microsoft Windows Basics*	1
CA118B1	Excel Basics 1	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA119	Office Desktop Publishing 1	3
CA122	Keyboard Skillbuilding	3
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications*	3
	Business Support Specialist electives**	3

Business Support Specialist second-year core requirements (51 credit hours):

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BA203	Organizational Behavior	3
BA214	Business Communications+	3
BA251	Office Management	3
BT086	Personal and Professional Development	3
BT130	Customer Service	3
BT280C	Cooperative Work Experience	3
CA091	QuickBooks—Computerized Bookkeeping	3
CA118E	Outlook Basics	1
CA208	Workplace Presentations Using PowerPoint	3
CA219	Office Desktop Publishing 2	3
CA232	Integrating Office Software Applications	3
MTH062	Business Applications Using Mathematics+ (or higher)	4
PSY104	Psychology in the Workplace+	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication	3
	Business Support Specialist electives**	3
	Humanities/Fine Arts elective	3
	or	
	Science/Applied Science	3

**Business Support Specialist electives (select 6 credit hours):

BA177	Payroll	4
BA204	Teamwork Dynamics	3
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BA223	Principles of Marketing	3
BA226	Business Law 1	3
BA227	Business Law 2	3
BA277	Business Ethics	3
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C2	Access Basics 2	1
CA118F1	PowerPoint Basics 1	1
CA122	Keyboard Skillbuilding (repeat)	3
CA205	PageMaker 1	3
CA225	Advanced Document Production	3
CA230	Executive Office Simulation	3
CIS105	Introduction to MS Windows	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel—Workbooks	4
CIS178I	Introduction to the Internet/World-Wide Web	3
WR227	Technical Writing+	3

+Meets related instruction requirement, see page 44.

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

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

Medical Administrative Assistant Associate of Applied Science

The Medical Administrative Assistant prepares you to work in medically-related offices where you may make appointments, manage patient records, meet patients, type correspondence, transcribe patient records, maintain financial records, and complete insurance forms.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,800; class fees, $215; student services fee, $48.50; universal fee, $582; equipment and supplies, $300. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

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

Course	Title	Credit Hours
BT085	Business English 2	3
BT099	Proofreading/Editing	3
BT116	Office Procedures	3
BT120	Professional Communication Skills	4
CA118A	Microsoft Windows Basics	1
CA118B1	Excel Basics 1	1
CA118C1	Access Basics 1	1
CA118D	Internet for the Office Environment	1
CA201D	Microsoft Word Processing 1	3
CA202D	Microsoft Word Processing 2	3
CA213	Integrating Office Procedures	3
CIS101	Introduction to Microcomputer Applications	3
HM101	Medical Law and Ethics	3
HM110	Health Information Systems Procedures 1	4
HM114	CPT-IV Coding/Reimbursement	3
HM115	ICD-9-CM Coding/Reimbursement	3
HM120	Medical Terminology 1	3
HM121	Medical Terminology 2	3

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

Course	Title	Credit Hours
BA115	Introduction to Accounting	4
BA214	Business Communications+	3
BI171	Introduction to Human Anatomy and Physiology 1	3
BI172	Introduction to Human Anatomy and Physiology 2	3
BT061	Electronic Calculators	2
BT086	Personal and Professional Development	3
BT128	Introduction to Records Management	3
BT130	Customer Service	3
CA122	Keyboard Skillbuilding	3
CA225	Advanced Document Production	3
CA230	Executive Office Simulation	3
HM141	Medical Transcription 1	3
MTH062	Business Applications Using Mathematics+ (or higher)	4
PSY104	Psychology in the Workplace+	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication	3
	Medical Administrative Assistant elective*	3

+Meets related instruction requirement, see page 44.

*Medical Administrative Assistant electives (select 3 credit hours):

BA101	Introduction to Business	4
BA177	Payroll	4
BA202	Personal Effectiveness	3
BA203	Organizational Behavior	3
BA204	Teamwork Dynamics	3
BA211	Financial Accounting 1	4
BA212	Financial Accounting 2	4
BA213	Managerial Accounting	4
BA223	Principles of Marketing	3
BA226	Business Law 1	3
BA227	Business Law 2	3
BA251	Office Management	3
BA277	Business Ethics	3
CA091	QuickBooks—Computerized Bookkeeping	3
	or	
CA091ABC	QuickBooks Parts ABC—Computerized Bookkeeping	1 each
CA117	Microsoft Publisher	3
	or	
CA117ABC	Microsoft Publisher 1, 2, 3	1 each
CA118B2	Excel Basics 2	1
CA118B3	Excel Basics 3	1
CA118C2	Access Basics 2	1
CA118E	Outlook Basics	1
CA118F1	PowerPoint Basics 1	1
CA119	Office Desktop Publishing 1	3
CA122	Keyboard Skillbuilding (repeat)	3
CA205	PageMaker 1	3
CA208	Workplace Presentations Using PowerPoint	3
CA219	Office Desktop Publishing 2	3
CA232	Integrating Office Software Applications	3
CIS105	Introduction to MS Windows	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel—Workbooks	4
CIS178I	Introduction to the Internet/World-Wide Web	3
WR227	Technical Writing	3

Career and Technical Education Teacher Preparation

ctteacher.chemeketa.edu

The Career and Technical Education Teacher Preparation program is designed for people who have gained professional skills from business and industry who now desire to share their knowledge and experience as teachers. Graduates of this program will be eligible to apply for a special license enabling them to teach in Oregon's public high schools. Additional upper division coursework is required for a bachelor's degree and initial teaching license.

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

To be accepted into these programs, students will need to provide verification of 4,000 hours of work experience in one of the following professional-technical fields: agricultural science and technology, communications/journalism, computer technology, design and applied arts, engineering technology, family/consumer services, financial services, forestry/natural resources, health sciences, hospitality and tourism,

integrated environmental technology, marketing/management, mechanical systems, and manufacturing technology (metals).

Program outcomes

Students completing the certificate will:

- Plan for instruction in a career and technical education program at the high school/college level.
- Establish a positive learning environment for students.
- Implement instructional plans.
- Assess pupil performance and program effectiveness.
- Plan and manage career and technical education programs.

Students completing the AAS will:

- Implement current competencies in their chosen career-technical areas.

Getting started

The first step to entering this program is to contact Career and Technical Education Teacher Preparation advisor, Malia Stevens at 503.399.2694 or malia@chemeketa.edu. After a review of your work experiences, he will advise you to take part in an assessment process that includes taking the college's free placement test. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra+	4
	(**Note:** Some professional-technical specialties may require the student to take additional math coursework above MTH060.)	
RD090	College Textbook Reading	3
WR115	Introduction to Composition+	3

If you have any questions about the requirements, call Counseling and Career Services at 503.399.5120. Failure to be assessed may delay your entry into program classes.

Career and Technical Education Teacher Preparation Certificate of Completion

In addition to tuition, estimated costs for students who complete the one-year program listed below are books, $751; class fee, $191; student services fee, $23; universal fee, $276; measles vaccination, $10; criminal background check, $54. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 46 required credit hours with a grade of "C" or better in all courses, plus any additional career and technical education coursework determined necessary by your appraisal/advisory committee:

Course	Title	Credit Hours
Term 1		
ED169	Overview of Students with Special Needs	3
ED209B	Practicum: Introductory Observation and Experience	3
ED229	Learning and Development+	3
ED235	Education Technology	3
ED258	Multicultural Education	3
ES071	Workplace Safety Skills	1
Term 2		
ED130	Comprehensive Classroom Management	3
ED131	Instructional Strategies	3
ED209C	Professional Technical Practicum 1	6
ED292	Occupational Analysis, Curriculum and Evaluation	3
Term 3		
ED200	Foundations of Education	3
ED209D	Professional Technical Practicum 2	9
ED293	Applied Integrated Academics	3

+Meets related instruction requirement, see page 44.

Career and Technical Education Teacher Preparation Associate of Applied Science

In addition to tuition, estimated costs for students who complete the two-year program listed below are books, $1,461; class fee, $110; student services fee, $47; universal fee, $564; measles vaccination, $10; criminal background check, $54. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science Degree by successfully completing the courses listed below, in addition to the courses listed under the Certificate of Completion program and any additional career and technical education coursework determined necessary. To meet graduation requirements, you must earn a total of 94 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 4		
CIS101	Introduction to Microcomputer Applications (or higher)	3
SP111	Fundamentals of Public Speaking	3
	or	
SP218	Interpersonal Communication (or higher)	3
WR121	English Composition—Exposition (or higher)	3
	Professional-Technical electives*	6
Term 5		
HPE295	Health and Fitness for Life	3
	Science/Applied Science elective	3
	Social Science elective*	3
	or	
	Humanities/Fine Arts elective*	3
	Professional-Technical electives*	6
Term 6		
	Math elective*	3
	General Education elective	3
	Professional-Technical electives*	12

+Meets related instruction requirement, see page 44.

*Approved by appraisal/advisory committee: See program chair.

Chemistry

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Chemistry are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University (SOU), University of Oregon, and Western Oregon University. SOU also offers a Business-Chemistry co-major.

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

Chiropractic

(transfer course guideline)

Western States Chiropractic College in Portland offers a degree in Chiropractic Medicine. Students must complete two years of pre-chiropractic credits (90 quarter credits) with at least a 2.25 grade point average as well as a 2.25 grade point average, in chemistry, zoology, and/or biology courses.

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

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

Civil Technology

civil.chemeketa.edu

The Civil Technology program offers both a one-year Certificate of Completion and a two-year Associate of Applied Science degree. The one-year certificate program prepares the student for entry-level surveying and drafting positions. The two-year program prepares the student to provide preliminary designs of public works projects and subdivision design in addition to surveying projects. Both curricula include courses and field experiences in drafting and surveying. The two-year program also includes basic office calculations in street, storm, and wastewater layout and design.

Job opportunities vary. As a graduate of the two-year program, you may assist in planning, design, and construction. You may go into public services dealing with water supply and wastewater treatment systems. As a technician on construction projects, you may assist in estimating costs, writing specifications, inspecting, surveying, drafting, or designing.

Program outcomes

Students completing the certificate will:

- Apply skills and attitudes that reflect professional behavior in the field and office.
- Work as a member of a team to set up and operate surveying equipment to gather data for site plans.
- Perform basic survey calculations.

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

- Perform advanced survey operations utilizing electronic surveying equipment.
- Build coverages and construct queries with GIS software.
- Lay out streets, lots, and utilities for a subdivision based on survey data or property descriptions.
- Create topographic drawings and base maps from data gathered with electronic survey equipment.
- Read and write basic metes and bounds descriptions.

Getting started

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

CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SSP051	Studying for College	3
	or	
RD090	College Textbook Reading	3
WR049	Basic Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5210. Failure to be assessed may delay your entry into program classes.

Survey Technology Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $481; class fees, $95; student services fee, $25; universal fee, $300; equipment and supplies, $355. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 50 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
CVL130	Work Zone Safety and First Aid	1
CVL143	Introduction to Civil Survey	3
DRF110	Applied Engineering Computations	2
DRF112	Sketching	1
DRF130	CAD 1	3
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
Term 2		
CVL161A	Plane Surveying 1—Lecture	2
CVL161B	Plane Surveying 1—Lab	2
DRF131	CAD 2	3
DRF220	GIS 1	2
GEG105	Physical Geography	4
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
CVL162A	Plane Surveying 2—Lecture	2
CVL162B	Plane Surveying 2—Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CIS125E	Excel—Workbooks	4
DRF221	GIS 2	3
PSY104	Psychology in the Workplace+	3

Civil Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,266; class fees, $275; student services fee, $49; universal fee, $588; equipment and supplies, $355. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

Chemeketa also offers a pre-engineering transfer program for students who want to transfer to an accredited four-year college or university to earn a Bachelor of Science degree.

An Associate of Applied Science degree is awarded upon the successful completion of the required 98 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
CVL130	Work Zone Safety and First Aid	1
CVL143	Introduction to Civil Survey	3
DRF110	Applied Engineering Computations	2
DRF112	Sketching	1
DRF130	CAD 1	3
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
Term 2		
CVL161A	Plane Surveying 1—Lecture	2
CVL161B	Plane Surveying 1—Lab	2
DRF131	CAD 2	3
DRF220	GIS 1	2
GEG105	Physical Geography	4
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
CVL162A	Plane Surveying 2—Lecture	2
CVL162B	Plane Surveying 2—Lab	2
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CIS125E	Excel—Workbooks	4
DRF221	GIS 2	3
PSY104	Psychology in the Workplace+	3
Term 4		
CVL230	Applied Statics	3
CVL240A	Construction Surveying—Lecture	2
CVL240B	Construction Surveying—Lab	2
DRF245	Civil Drafting and Design	4
PH121	Applied Physics (or higher)	4
Term 5		
CVL231	Applied Strength of Materials	4
CVL260	Survey Project Planning	3
CVL261	Environmental and Sanitary Technology	4
DRF230	Introduction to MicroStation PC	3
DRF241	Structural Drafting	3
Term 6		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
CVL263A	Topographic Surveying—Lecture	2
CVL263B	Topographic Surveying—Lab	2
DRF165	CAD System Administration	3
DRF231	Advanced MicroStation	3
DRF246	Project Development	3

+Meets related instruction requirement, see page 44.

Computer Electronics Technology

See Electronics Technologies.

Computer Science

(transfer course guideline)

All of Oregon's state universities offer Bachelor of Arts and/or Bachelor of Science degrees in Computer Science or Software Engineering. Southern Oregon University and Western Oregon University also have Computer Information Science options that require less math (See SOU and WOU catalogs for requirements). In general, most Computer Science transfer students should combine the two-year AAOT transfer degree along with the CS transfer sequence classes which include CS160, CS161, CS162, CS260 and CS271. Transfer students will also need additional math courses commonly including MTH231, MTH251 and MTH252.

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

Computer Information Systems

cis.chemeketa.edu

The Computer Information Systems program offers an Associate in Applied Science degree in Computer Systems and Information Technology that allows students to design a customized curriculum consisting of a broad foundation of general technology courses and one or more technical specialties. This specialized degree prepares students for a wide variety of employment opportunities in the computer information services industry. Students may also complete an Associate of Arts Oregon Transfer degree combined with computer science lower division transfer courses that provides the first two years of study towards a four-year bachelor's degree in computer science. This program is transferable to any public University in Oregon and is also accepted by many private universities. The Computer Information Systems program additionally provides a broad array of professional continuing education classes and certificates for professionals already working in the field and provides technology service classes for students studying in other disciplines.

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

web sites (Web masters and Web developers). The Security and Forensics Certificate graduate may work in computer crime law enforcement, corporate information systems or private computer security consulting.

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

Getting started

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

CA121	Keyboarding	3
CIS101	Introduction to Microcomputer Applications	3
MTH095	Intermediate Algebra	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

Program outcomes

Students completing the AAS will:

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

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

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

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

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

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

- Manage enterprise resources including file shares, print shares, and physical connections.
- Install, configure and support industry required operating systems for the enterprise environment.

- Utilize enterprise tools to support remote access, security and redundancy of the enterprise environment.

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

- Design and maintain websites using a variety of software packages and editing languages.
- Evaluate accessibility, compatibility, and globalization issues in web design.
- Develop and analyze organizational web design needs through individual and group assessments.

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

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

In addition to the AAS outcomes, students completing the Computer Security and Forensics Certificate will:

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

Computer Systems and Information Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire AAS program listed above are books, $2,396; class fees, $350; student services fee, $47.50; universal fee, $570; equipment and supplies, $275. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 95 credit hours. You must complete all CS/CIS core required courses with a grade of "C" or better.

General Education requirements (19 credit hours)

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

Computer Systems and Information Technology Core Requirements: (56 credit hours):

Course	Title	Credit Hours
CIS102A	Cyber Security and Safety	3
CIS120	Computer Information Science 1	4
CIS120A	CIS Careers and Education Orientation	1
CIS121	Computer Information Science 2	4
CIS122	Computer Information Science 3	4
CIS125E	Excel Workbooks	4
CIS133SC	Scripting Languages	4
CIS140B	Microcomputer Operating Systems	3
CIS140U	Unix/Linux	3
CIS145	Microcomputer Hardware	4
CIS178I	Introduction to the Internet	3
CIS179	Introduction to Client Server Networks	4
CIS244	Systems Analysis 1	3
CIS244A	Computer Science Capstone Project	1
CIS278	Data Communications	3
CIS288	Advanced Client Server Networks	4
CS275	Database Management	4

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

Course	Title	Credit Hours
ART115	Basic Design	3
BA101	Introduction to Business	4
BA202	Personal Effectiveness	3
BA277	Business Ethics	3
CIS060	Techniques of User Training	2
CIS125A	Micro Database Software – Access	3
CIS125G	Intro to Computer Game Development	4
CIS133CS	Programming for the Internet	4
CIS133J	Fundamentals of Java Program 1	4
CIS133JS	JavaScript Web Programming 1	4
CIS133VB	Visual Basic	4
CIS178W	Fundamentals of Web Design	3
CIS186	Computer Forensics	4
CIS195	Web Site Development	4
CIS233J	Fundamentals of Java Programming 2	4
CIS234J	Fundamentals of Java Programming 3	4
CIS240	Advanced Operating Systems	3
CIS240U	Advanced Unix/Linux	4
CIS276A	Introduction to Oracle SQL	4
CIS276B	Oracle: Programming with PL/SQL	4
CIS276C	Database Reports and Forms Developer	4
CIS277A	Database Admin Fundamentals 1	4
CIS277B	Database Admin Fundamentals 2	4
CIS277C	Oracle Database Performance Tuning	4
CIS278	Data Communications	3
CIS279	Network Management	5
CIS280	Cooperative Work Experience	0-9
CIS285	Introduction to SQL	3
CIS286	Web Server Configuration	4
CIS289	Advanced Network Applications Support	4
CIS295	Web Applications Development	4
CJ101	Criminology	3
CS133U	C++ Language	4
CS160	Introduction to Computer Science	3
CS161	Computer Science 1	4
CS162	Computer Science 2	4
CS260	Computer Science 3: Data Structures	4
CS271	Principles of Computer Organization	4
CS275	Database Management	4
FE205B	Resumes and Job Search Correspondence	1
FE205C	Interviewing for Success	1

Computer Programming Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the Computer Programming Certificate listed above are books, $625; class fees, $120; student services fee $11.50; universal fee, $138; equipment and supplies, $75. 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 23 credit hours with a grade of "C" or better in all courses.

Computer Programming requirements: (23 credit hours):

Course	Title	Credit Hours
BA202	Personal Effectiveness	3
or		
BA101	Introduction to Business	4
CIS133J	Fundamentals of Java Programming 1	4
CIS133VB	Visual Basic	4
CIS233J	Fundamentals of Java Programming 2	4
CIS234J	Fundamentals of Java Programming 3	4
CS133U	C++ Programming	4

Computer Security and Forensics Certificate of Completion

The Computer Security and Forensics Certificate prepares students to obtain an entry-level position in local or federal law enforcement, or as a private computer security consultant or in corporate computer security. The Computer Security and Forensics 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 Security and Forensics pathway as a stand-alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Security and Forensics Certificate program listed above are books, $525; class fees, $105; student services fee, $15; universal fee, $180; equipment and supplies, $75. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 30 credit hours with a grade of "C" or better in all courses.

Computer Security and Forensics requirements (30 credit hours):

Course	Title	Credit Hours
BA277	Business Ethics	3
CIS102A	Cyber Security and Safety	3
CIS140B	Microcomputer Operating Systems	3
CIS140U	Unix/Linux	3
CIS179	Introduction to Client Server Networks	4
CIS186	Computer Forensics	4
CIS278	Data Communications	3
CJ101	Criminology	3
MTH105	Contemporary Math (or higher)	4
or		
MTH111	College Algebra	5

Computer Support Specialist Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the Computer Support Specialist Certificate listed above are books, $995; class fees, $156; student services fee, $16.50; universal fee, $198; equipment and supplies, $75. 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 33 credit hours with a grade of "C" or better in all courses.

Computer Support Specialist requirements (33 credit hours):

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

Computer Systems Administration Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the Computer Systems Administrator Certificate listed above are books, $995; class fees, $180; student services fee, $18.50; universal fee, $222; equipment and supplies, $75. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 37 credit hours with a grade of "C" or better in all courses.

Computer Systems Administration requirements (37 credit hours):

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

Database Developer Certificate of Completion

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

In addition to tuition, estimated costs for students who complete the Database Developer Certificate program listed above are books, $1,450; class fees, $114; student services fee, $13; universal fee, $156; equipment and supplies, $75. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 26 credit hours with a grade of "C" or better in all courses.

Database Developer requirements (26 credit hours):

Course	Title	Credit Hours
BA202	Personal Effectiveness	3
or		
BA101	Introduction to Business	4
CIS276B	Oracle PL/SQL	4
CIS276C	Database Forms and Reports	4
CIS277A	Database Administration Fundamentals I	4
CIS277B	Database Administration Fundamentals 2	4
CIS285	SQL – Structured Query Language	3
CS275	Database Management	4

Web Developer Certificate of Completion

The Web Developer Certificate prepares students for employment in the area of web applications development. The web developer designs, implements, and maintains websites using various editors, web development applications, HTML, XML, data-driven web applications, and client and server-side web scripting languages. Web developers typically interface with business stakeholders, users, provide customer support, and have an appreciation for the importance of web presence for the company (*e*Commerce). The Web Developer certificate, in combination with the associate degree, has been designed to be completed in two years if you attend full time and have the required entry skills in reading, writing, and mathematics.. Alternatively, you can choose to complete the Web Developer pathway as a stand alone certificate.

In addition to tuition, estimated costs for students who complete the Computer Web Developer Certificate listed above are books, $595; class fees, $162; student services fee, $15.50; universal fee, $186; equipment and supplies, $75. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 31 credit hours with a grade of "C" or better in all courses.

Web Developer Certificate requirements (31 credit hours):

Course	Title	Credit Hours
ART115	Basic Design	3
CIS133VB	Visual Basic	4
CIS133JS	JavaScript Web Programming 1	4
CIS133SC	Scripting Languages	4
CIS178I	Introduction to the Internet	3
CIS178W	Fundamentals of Web Design	5
CIS195	Web Site Development	4
CIS295	Web Applications Development	4

Criminal Justice

cj.chemeketa.edu

Graduates of Chemeketa's Criminal Justice program may become law enforcement officers, adult or juvenile correctional officers, federal protection service workers, progress toward a career with homeland security (customs, border patrol, Transportation Security Administration, port security, Federal Bureau of Investigation, drug enforcement agency), or they may develop a foundation for a career in parole and probation. Although there is much competition for such positions, they offer good benefits. Graduates may also find jobs in 9-1-1 telecommunications, intake and release work in correctional institutions, and in private and public security work. As a graduate, you may also qualify for work in a related field as an insurance adjuster, an agency investigations officer, a hearings officer, or a licensing inspector for the state department of motor vehicles.

Some employers may require employees to earn a bachelor's degree before entering or advancing in this field. Chemeketa's program is planned so that you may transfer to a four-year school where the courses also may meet social science requirements. Before you enroll at Chemeketa, consult with the Counseling and Career Services and an advisor at the institution to which you plan to transfer.

Students are required to complete a minimum of three credit hours of Cooperative Work Experience. With the approval of the program chair, you may enroll in CJ280B-L Cooperative Work Experience and earn college credit hours for work you do relating to your program. For more information, look under Cooperative Work Experience in the catalog index.

There are several topical seminars offered during the calendar year. Please consult with the program chair about specific seminar content. Students should refer to the *Schedule of Classes* for these seminars as well as for specific criminal justice courses that are offered online.

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

Chemeketa also offers a one-year certificate in Juvenile Corrections; for information refer to page 118.

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

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

Program outcomes

Students completing the Basic Corrections Certificate will:
- Identify the historical and philosophical evolution of criminal justice sanctions and punishment.
- Describe the constitutional and statutory foundation for offender treatment within correctional facilities.

Students completing the Basic Law Enforcement Certificate will:
- Identify the historical and philosophical evolution of law enforcement in the United States.
- Identify and describe the legal foundation for law enforcement officers working under "color of law."

Students completing the Private Security Certificate will:
- Identify and describe the common private security occupations and applications.
- Describe how civil law impacts private security issues of liability and litigation.

Students completing the AAS will:
- Identify the characteristics of professional integrity and ethical standards for Oregon criminal justice professionals.
- Describe and relate the constitutional rights and responsibilities of citizens, offenders, and victims as they apply to state, federal, and procedural laws.
- Describe the processes and technology used to gather, investigate, manage, and report information in the criminal justice field.
- Identify the legal responsibilities of criminal justice professionals as they relate to cultural diversity and establishing positive community relationships.

Getting started

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

Your advisor will help you develop an individualized program of study, which may include one or more of the following:

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5163. Failure to be assessed may delay your entry into program classes.

Basic Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $931; class fees, $20; student services fee, $17; universal fee, $204. 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 34 required credit hours with a grade of "C" or better in all courses.

General Education requirements (10 credit hours):

MTH060	Introductory Algebra (or higher)	4
PSY201	General Psychology—Biological Emphasis	3
WR121	English Composition—Exposition	3

Basic Corrections core requirements (24 credit hours):

CJ101 Criminology 3
CJ130 Introduction to Corrections Process.............................3
CJ132 Introduction to Parole and Probation...........................3
CJ134 Contraband and Search...1
CJ136 Transportation, Escorting, and Restraints......................1
CJ147 Criminal Personality and Errors in Thinking.................1
CJ203 Crisis Intervention Seminar 3
CJ232 Introduction to Corrections Casework..........................3
CJ253 Introduction to Penology 3
CJ280C Cooperative Work Experience......................................3

Basic Law Enforcement Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,212; class fees, $40; student services fee, $19; universal fee, $228. 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 38 required credit hours with a grade of "C" or better in all courses.

General Education requirements (14 credit hours):

MTH060 Introductory Algebra (or higher)................................4
PE185PA Personal Defense—Beginning 1
PSY201 General Psychology—Biological Emphasis......................3
SP218 Interpersonal Communication 3
WR121 English Composition—Exposition.................................3

Basic Law Enforcement core requirements (24 credit hours):

CJ100 Survey of the Criminal Justice System 3
CJ101 Criminology 3
CJ110 Introduction to Law Enforcement................................3
CJ112 Field Operations and Patrol Procedures.........................3
CJ203 Crisis Intervention Seminar 3
CJ210 Introduction to Criminal Investigations 1: Crimes vs. Persons..3
CJ220 Introduction to Substantive Law and Oregon Criminal Code...3
CJ280C Cooperative Work Experience......................................3

Private Security Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,328; class fees, $25; student services fee, $21.50; universal fee, $258. 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 43 required credit hours with a grade of "C" or better in all courses.

General Education requirements (16 credit hours):

CIS101 Introduction to Microcomputer Applications (or higher)..3
MTH060 Introductory Algebra (or higher).................................4
PSY201 General Psychology—Biological Emphasis......................3
SP218 Interpersonal Communication 3
WR121 English Composition—Exposition.................................3

Private Security core requirements (27 credit hours):

CJ100 Survey of the Criminal Justice System 3
CJ101 Criminology 3
CJ150 Unarmed Private Security...3
CJ203 Crisis Intervention Seminar 3
CJ207 Diversity Issues in Criminal Justice 3
CJ210 Introduction to Criminal Investigations 1: Crimes vs. Persons..3
CJ217 Interviewing and Interrogation in Criminal Justice 3
CJ226 Introduction to Constitutional Law 3
CJ280C Cooperative Work Experience......................................3

Criminal Justice Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,984; class fees, $65; student services fee, $47; universal fee, $564. 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 94 required credit hours with a grade of "C" or better in all courses. These include the 58 credit hours listed under general education requirements, 18 credit hours of Criminal Justice core requirements, and 15 credit hours of Criminal Justice electives.

General Education requirements (58 credit hours):

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH060	Introductory Algebra+ (or higher)	4
	Physical Education elective (3 different activities)	3
	or	
HPE295	Health and Fitness for Life	3
SP218	Interpersonal Communication	3
	or	
	Speech elective	3
WR121	English Composition—Exposition+	3
WR122	English Composition—Logic and Style	3
WR227	Technical Writing	3
	or	
CJ212	Police Report Writing	3
	General Education electives	18
	Humanities electives*	9
	Psychology or Sociology electives+**	9

Criminal Justice core requirements (21 credit hours):

CJ100 Survey of the Criminal Justice System 3
CJ101 Criminology 3
CJ132 Introduction to Parole and Probation...........................3
CJ206 Crime and Delinquency...3
CJ210 Introduction to Criminal Investigations 1: Crimes vs. Persons..3
CJ226 Introduction to Constitutional Law 3
CJ280C Cooperative Work Experience......................................3

Criminal Justice electives (select 15 credit hours):

CJ110	Introduction to Law Enforcement	3
CJ112	Field Operations and Patrol Procedures	3
CJ123	Spanish for Law Enforcement	3
CJ130	Introduction to Corrections Process	3
CJ134	Contraband and Search	1
CJ136	Transportation, Escorting and Restraints	1
CJ138	Security Threat Groups	1
CJ142A	Managing the Mentally Ill Offenders	1
CJ144	Suicide Prevention and Intervention Skills	2
CJ145	Managing Long-Term Offenders	1
CJ146	Officer Survival Mindset	3
CJ147	Criminal Personality and Errors in Thinking	1
CJ150	Unarmed Private Security Operations and Procedures	3
CJ170	Juvenile Justice Ethics and Boundaries	3
CJ200	Family Violence and Deviancy	1
CJ203	Crisis Intervention Seminar	3
CJ207	Diversity Issues in Criminal Justice	3
CJ209	Introduction to Victimology	3
CJ211	Property Crimes: Behavior and Evidence	3
CJ212	Police Report Writing	3
CJ215	Criminal Justice Administration	3
CJ217	Interview and Interrogation	3
CJ220	Introduction to Substantive Law and Oregon Criminal Code	3
CJ222	Profiling Serial Killers	3
CJ224	Missing and Abducted Children	1
CJ230	Introduction to Juvenile Corrections	3
CJ232	Introduction to Corrections Casework	3
CJ235	Youth, Drugs, and Corrections	3
CJ236	Public Safety Leadership and Ethics 1: Personal Philosophy of Leadership	4
CJ237	Public Safety Leadership and Ethics 2: Leading Others	4
CJ238	Public Safety Leadership and Ethics 3: Organizational Leadership	4
CJ239	Public Safety Leadership and Ethics 4: Ethics and the Challenge of Leadership	4
CJ253	Introduction to Penology	3
CJ255	Preparation for Oral Boards	1

+Meets related instruction requirement, see page 44.

*Suggestions for students: Due to current bilingual hiring preferences, students are urged to take SPN111, 112, 113 for Humanities electives.

**Law enforcement and adult corrections students are urged to take PSY201, 202, 203 for Psychology electives. Students with an interest for a juvenile justice emphasis are encouraged to pursue the Juvenile Corrections Certificate. Juvenile Certificate courses may be integrated into the Criminal Justice AAS degree.

Criminal Justice

(transfer course guideline)

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

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

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

Dental Assisting

dental.chemeketa.edu

The Dental Assisting program offers technical training to people who want to work in dental offices and clinics. The program is accredited by the American Dental Association Commission on Dental Accreditation, 211 East Chicago Avenue, Chicago, Illinois 60611-2678. The telephone number is 312.440.2500. The Web site is www.ada.org.

The program includes instruction in assisting dentists in private offices or dental health clinics plus clinical and field trip experiences. Typical duties of dental assistants include preparing patients for treatment, mixing dental materials, taking impressions, sterilization and infection control, exposing and developing radiographs, assisting with clinical procedures, expanded functions, and inventory control. Laboratory duties include pouring study models of teeth and fabrication of custom trays, temporary crowns, and small appliances. As office manager, a dental assistant acts as a receptionist, schedules appointments, keeps accounts and records, prepares statements and insurance billings, and is responsible for the general appearance of an office.

Program outcomes

Students completing the certificate will:

- Perform basic and expanded chairside functions to facilitate the completion of restorative and advanced operative procedures.
- Manipulate dental materials to support chairside and laboratory procedures.
- Perform basic office procedures necessary to assist in managing a dental practice.
- Demonstrate proficiency in exposing, processing, and mounting dental radiographs.
- Practice professional behaviors as applied to the workplace environment.
- Manage asepsis, infection control, and hazard control protocol to promote a safe work environment.

Getting started

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

BI060	Basic Science for Dental Assistants	3
CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra+	4
PSY101	Psychology of Human Relations+ (or higher)	3
RD115	Academic Thinking and Reading (or higher)	3
SP111	Fundamentals of Public Speaking	3
SSP112	Effective Learning (recommended)	3
WR121	English Composition—Exposition+	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5058. Failure to be assessed may delay your entry into program classes.

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

To enroll, you must have a high school diploma or GED certificate. Students are required to submit a copy of their current CPR card and a completed physical exam form and immunizations prior to fall

registration. You must also pass a criminal background check and possibly a drug test. Successful completion of the Dental Assisting program requires that you earn a grade of "C" or better in all courses. As a graduate, you are eligible to take the Dental Assisting National Board examinations, including infection control, general chairside, and radiation health and safety.

Dental Assisting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $330; lab fees, $317; student services fee, $23.50; universal fee, $282; uniform and shoes, $250; exam fees, $500; dental kit, $480; transportation fees, $200; physical examination/immunizations, $300; criminal background check, $25; optional: professional membership fee, $35. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to spring practicum travel.

You may earn a Certificate of Completion by successfully completing the 47 required credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
DEN150	Dental Sciences	3
DEN151	Introductory Concepts in Dental Assisting	3
DEN153	Dental Materials 1	3
DEN154	Preventive Dentistry	1
DEN156	Dental Anatomy	4
DEN165	Dental Office Emergency Management	1
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
DEN180	Dental Assisting Seminar	2

+Meets related instruction requirement, see page 44.

Dental Hygiene

(transfer course guideline)

Oregon Institute of Technology and Pacific University offer a Bachelor of Science degree in Dental Hygiene.

Admission to the Dental Hygiene program is competitive; only a limited number of applicants are accepted each year. It is important to check with the college of your choice for admission requirements and deadlines, and to obtain admission materials early, as requirements change.

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

Design

(transfer course guideline)

Oregon State University offers a Bachelor of Science degree in Apparel Design, Interior Design, Housing Studies, and Merchandising Management.

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

Drafting Technology—CAD

drafting.chemeketa.edu

Drafting Technology offers two paths of entry into careers in drafting and design: Computer-Assisted Drafting (CAD) and Mechanical Design. The CAD option focuses primarily on drafting skills required for the architecture and construction areas. Mechanical Design covers drafting and design skills required in the fields of manufacturing and fabrication. Students may choose to enroll in individual courses, or work toward a certificate or an Associate of Applied Science degree.

You may be interested in our Cooperative Work Experience program which allows you to earn college credit for work you do relating to your program. In your third term or later, as a full-time student, with the approval of the program chair you may enroll in DRF280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

After graduating, with specific course substitutions, you may transfer to an institution such as Oregon Institute of Technology to complete the coursework for a bachelor's degree in Mechanical Engineering Technology or Industrial Management.

Program outcomes

Students completing the CAD Certificate will:
- Produce accurate 2-D and 3-D drawings using CAD software.

Students completing the Architectural Drafting Certificate will:
- Produce accurate 2-D and 3-D 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 Mechanical Drafting Certificate will:
- Produce accurate 2-D and 3-D drawings using CAD software.
- Apply parametric analysis tools to design mechanical components and assemblies. Illustrate and animate mechanical assemblies.
- Select materials for mechanical components based on application and manufacture process.

Students completing the Computer-Assisted Drafting (CAD) AAS will:
- Produce accurate 2-D and 3-D drawings using CAD software.
- Use effective communication skills as a team member to research data and generate drawings.
- Produce sets of architectural drawings suitable for planning division approval.
- Produce sets of structural drawings to industry standards.
- Produce sets of civil drawings including streets, lots, and utilities for a subdivision suitable for planning division approval.
- Draft sets of mechanical drawings including detail and assembly drawings of related parts.

Students completing the Mechanical Design AAS will:
- Produce accurate 2-D and 3-D drawings using CAD software.
- Use effective communication skills as a team member to research data and design a mechanical assembly.

- Display work ethic through attendance and active participation in all class activities.
- Apply parametric analysis tools to design mechanical components and assemblies. Illustrate and animate mechanical assemblies.
- Calculate power requirements and design or select transmission components for mechanical systems.
- Analyze external and internal force effects on mechanical and structural components.
- Select materials for mechanical components based on application and manufacture process.

Getting started

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

CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SSP051	Studying for College	3
	or	
RD090	College Textbook Reading	3
WR049	Basic Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5210. Failure to be assessed may delay your entry into program classes.

Computer-Assisted Drafting (CAD) Certificate of Completion

The CAD Certificate program is for students seeking a basic working knowledge of CAD systems. Full-time students can complete the program in three terms, although full-time enrollment is not required. All 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. This may not be suitable for students seeking employment as entry-level CAD design technicians.

Completion of the CAD Certificate includes a competency-based AutoCAD Assessment Exam. All credits apply toward the Associate of Applied Science degree in CAD Drafting Technology.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $692; class fees, $150; student services fee, $22.50; universal fee, $270; certification exam, $50. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 45 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+	3
DRF110	Applied Engineering Computations	2
DRF130	CAD 1	3
DRF131	CAD 2	3
MTH060	Introductory Algebra+ (or higher)	4

Course	Title	Credit Hours
Term 2		
DRF132	CAD 3	3
DRF150	Architectural Drafting 1	3
DRF230	Introduction to MicroStation PC	3
MTH070	Elementary Algebra (or higher)	4
PSY101	Psychology of Human Relations+ (or higher)	3
Term 3		
DRF095C	Special Projects in Drafting and Design	3
DRF140	Advanced Technical Graphics	3
DRF170	AutoCAD Certification Preparation	2
DRF240	Architectural Drafting 2	3
	Drafting elective*	3

+Meets related instruction requirement, see page 44.

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

Architectural Drafting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $784; class fees, $510; student services fee, $20; universal fee, $240; equipment and supplies, $215. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 40 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
DRF110	Applied Engineering Computations	2
DRF112	Sketching	1
DRF150	Architectural Drafting 1	3
DRF242	3-D Presentations	3
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5
Term 2		
CVL143	Introduction to Civil Survey	3
DRF132	CAD 3	3
DRF240	Architectural Drafting 2	3
DRF241	Structural Drafting	3
PSY104	Psychology in the Workplace	3
Term 3		
COM051	Communication Skills	3
	or	
WR121	English Composition—Exposition (or higher)	3
DRF165	CAD System Administration	3
DRF243	Architectural Design	3
DRF255	Technical Illustration	3

Computer-Assisted Drafting (CAD) Associate of Applied Science

Students graduating from the CAD program may become technicians in civil, mechanical, structural, or architectural drafting. Additional career opportunities include Geographic Information Systems (GIS), mapping, and technical illustration. Training encompasses computer-aided drafting in all of the fields listed; application of software and mathematical concepts to solve real-world problems; and broader skills in communication, teamwork and human relations.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,243; class fees, $330; student services fee, $48; universal fee, $576; equipment and supplies, $227. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 96 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
COM051	Communications Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
DRF110	Applied Engineering Computations	2
DRF112	Sketching	1
DRF114	Drafting Orientation	2
DRF130	CAD 1	3
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
Term 2		
CVL143	Introduction to Civil Survey	3
DRF131	CAD 2	3
DRF220	GIS 1	2
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
PSY104	Psychology in the Workplace+	3
Term 3		
DRF132	CAD 3	3
DRF140	Advanced Technical Graphics	3
DRF150	Architectural Drafting 1	3
DRF155	Mapping and Platting	3
DRF160	Technical Software Applications	3
	or	
CIS125E	Excel—Workbooks	4
DRF221	GIS 2	3
Term 4		
CVL230	Applied Statics	3
DRF210	Parametric Design	3
DRF242	3-D Presentations	3
DRF245	Civil Drafting and Design	4
PH121	Applied Physics	4
Term 5		
CVL261	Environmental and Sanitary Technology	4
DRF230	Introduction to MicroStation PC	3
DRF240	Architectural Drafting 2	3
DRF241	Structural Drafting	3
DRF256	AutoLISP Programming	3
Term 6		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF165	CAD System Administration	3
DRF231	Advanced MicroStation	3
DRF243	Architectural Design	3
DRF255	Technical Illustration	3

+Meets related instruction requirement, see page 44.

Mechanical Drafting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $837; class fees, $474; student services fee, $22; universal fee, $264; equipment and supplies, $295. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 44 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM111	Industrial Safety Seminar	1
COM051	Communication Skills	3
	or	
WR121	English Composition—Exposition (or higher)	3
DRF110	Applied Engineering Computations	2
	or	
GE101	Engineering Orientation	3
DRF130	CAD 1	3
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC - Lab	1
DRF131	CAD 2	3
DRF210	Parametric Design	3
MTH081	Technical Mathematics	4
	or	
MTH111	College Algebra (or higher)	5
PSY104	Psychology in the Workplace	3
Term 3		
DRF132	CAD 3	3
DRF140	Advanced Technical Graphics	3
DRF255	Technical Illustration	3
DRF262	Machine Design	3
ELT291	Advanced Industrial Electronics	4
	or	
DRF280D	Cooperative Work Experience	4

Mechanical Design Associate of Applied Science

Mechanical Design is a comprehensive drafting program with practical approaches to engineering and design concepts using Computer-Aided Design (CAD) methods.

You may train to become a technician in machine, control system, and tool-design drafting. The program emphasizes the use of the computer as a problem-solving tool in these job areas. Instruction in design also stresses the use of manufacturers' technical catalogs, technical handbooks, and practical applications of theoretical and mathematical concepts studied in courses taken concurrently.

With specific course substitutions, you may transfer credits to the Mechanical Engineering Technology Program at Oregon Institute of Technology. See your advisor for details.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,087; class fees, $296; student services fee, $49; universal fee, $588; equipment and supplies, $319. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 98 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM111	Industrial Safety Seminar	1
CAM130	CNC Machine Setup/Operation	4
DRF110	Applied Engineering Computations	2
	or	
GE101	Engineering Orientation	3
DRF130	CAD 1	3
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra (or higher)+	5
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC—Lab	1
CAM160	Programming CNC Mills	4
COM051	Communication Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
DRF131	CAD 2	3
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF132	CAD 3	3
DRF140	Advanced Technical Graphics	3
DRF160	Technical Software Applications	3
	or	
GE103	Engineering Computations	3
	or	
CIS125E	Excel—Workbooks	4
PSY104	Psychology in the Workplace+	3
Term 4		
CAM230	CAM Applications/Mills	3
CVL230	Applied Statics	3
	or	
EGR211	Statics	4
DRF210	Parametric Design	3
ELT100	Electronics Fundamentals for Non-Majors	4
PH121	Applied Physics	4
	or	
PH201	General Physics	4
Term 5		
CVL231	Applied Strength of Materials	4
	or	
EGR213	Strength of Materials	4
DRF241	Structural Drafting*	3
DRF251	Power Transmission Design	3
	or	
EGR212	Dynamics	4
DRF256	AutoLISP Programming*	3
	or	
GE102	Engineering Computations	3
DRF260	Tool Design	3

Course	Title	Credit Hours
Term 6		
DRF165	CAD System Administration*	3
DRF255	Technical Illustration*	3
DRF262	Machine Design	3
ELT291	Advanced Industrial Electronics	4
	or	
DRF280D	Cooperative Work Experience	4
	or	
EGR202	Electrical Fundamentals 2	4
MT227A	Pneumatics and Hydraulics Fundamentals	3

+Meets related instruction requirement, see page 44.

*Courses above 200 in math, physics, chemistry and engineering may be substituted.

Early Childhood Education

ece.chemeketa.edu

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

Articulation agreements with Oregon State University, Portland State University, and Western Oregon University allow Chemeketa's Early Childhood Education graduates to enroll with third-year standing. See an advisor for details.

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree or a Certificate of Completion. Students in the program must earn grades of "C" or better in all Early Childhood Education (ECE) and Human Development and Family (HDF) courses. In order to enroll in certain courses, students will be required to pass a criminal records check. A valid first aid card is required for graduation in both the one-year and two-year programs.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work relating to your program. With the approval of the program chair, you may enroll in ECE280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Program outcomes

Students completing the certificate will:

- Apply principles and skills in observing children—birth to age eight—to select guidance techniques to promote autonomy.
- Plan and implement nutrition plans.
- Practice appropriate communications skills—both written and verbal—with supervisors, colleagues, and parents.
- Plan and implement activities to work with children of diverse ages, backgrounds, and abilities based on developmentally-appropriate theories and observations.

Students completing the AAS will:

- Plan and implement curriculum in early childhood education settings that support the physical, social, emotional, and cognitive development of all young children from birth to age eight, based on knowledge of children's development.
- Use communication strategies to establish positive, collaborative relationships with families and colleagues.
- Self-assess and evaluate professional practices based on a theoretical framework of child development.

- Practice standards for professional ethics as applied to the early child-hood workplace environment.

Getting Started

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

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3
	or	
COM051	Communication Skills 1	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6077. Failure to be assessed may delay your entry into program classes.

Early Childhood Certificate of Completion

In addition to tuition, estimated costs for students who complete the one-year program listed below are books, $456; class fees, $35; student services fee, $27.50; universal fee, $330; equipment and supplies, $36; immunization fees, $10; basic first-aid card, $35; food handler card, $10; criminal records check, $3-70; conference registration, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 55 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences	1
ECE150	Introduction and Observation in Early Childhood Education	3
ECE161	Infant/Toddler Practicum	3
HDF222	Family Relationships+	3
HDF225	Prenatal, Infant and Toddler Development	3
HDF249	Introduction to Working with Infants and Toddlers	3
Term 2		
ECE068B	Observing Preschool Experiences	1
ECE151	Observing and Guiding Behavior	3
ECE152	Creative Activities	3
ECE155	Child Nutrition	2
	or	
NFM225	Nutrition	4
ECE162	Early Childhood Educator Orientation	2
HDF247	Preschool Child Development	3
MTH060	Introductory Algebra+ (or higher)	4
WR121	English Composition—Exposition+ (or higher)	3
Term 3		
ECE068C	Observing Preschool Experiences	1
ECE153	Music and Movement for Young Children	3
ECE154	Children's Literature and Literacy	3
ECE163	Preschool Practicum	4
HDF229	Development in Middle Childhood	3
HDF248	Learning Experiences for Young Children	4

+Meets related instruction requirement, see page 44.

Early Childhood Associate of Applied Science

Once an Associate of Applied Science degree in Early Childhood Education is completed, a student is eligible to take advantage of the transfer agreements with Oregon State University, Portland State University, and Western Oregon University.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $924; class fees, $55; student services fee, $47.50; universal fee, $570; equipment and supplies, $72; immunization fees, $10; basic first-aid card,$35; food handler card, $10; criminal records check, $3-70; and conference registration, $100. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 95 credit hours with a grade of "C" or better in all ECE and HDF courses.

Course	Title	Credit Hours
Term 1		
ECE068A	Observing Preschool Experiences	1
ECE150	Introduction and Observation in Early Childhood Education	3
ECE161	Infant/Toddler Practicum	3
HDF222	Family Relationships+	3
HDF225	Prenatal, Infant and Toddler Development	3
HDF249	Introduction to Working with Infants and Toddlers	3
Term 2		
ECE068B	Observing Preschool Experiences	1
ECE151	Observing and Guiding Behavior	3
ECE152	Creative Activities	3
ECE155	Child Nutrition	2
	or	
NFM225	Nutrition	4
ECE162	Early Childhood Educator Orientation	2
HDF247	Preschool Child Development	3
WR121	English Composition—Exposition+ (or higher)	3
Term 3		
ECE068C	Observing Preschool Experiences	1
ECE153	Music and Movement for Young Children	3
ECE154	Children's Literature and Literacy	3
ECE163	Preschool Practicum****	4
HDF229	Development in Middle Childhood	3
HDF248	Learning Experiences for Young Children	4
Term 4		
ECE251	Environments for Young Children	3
ECE261	Student Teaching 1, Early Childhood Education***	6
HDF285	Professional Issues in Early Childhood Education	3
MTH060	Introductory Algebra+ (or higher)	4
Term 5		
ECE280D	Cooperative Work Experience	4
HDF257	Home, School and Community	3
HDF258	Teaching in an Anti-Bias Classroom***	3
	Humanities/Fine Arts elective*	3
	or	
	Science/Applied Science elective*	3
	or	
	Communications elective* **	3
	Computer Science elective**	3
Term 6		
ECE262	Student Teaching 2, Early Childhood Education***	6
ECE295	Administration of Early Childhood Education Programs	3
	Humanities/Fine Arts elective*	3
	or	
	Science/Applied Science elective*	3
	or	
	Communications elective*	3

+Meets related instruction requirement, see page 44.
*Selection may not be repeated.
**See Associate of Applied Science Degree guidelines.
***Students transferring to Western Oregon University should see advisor.
****Requires recommendation from two Early Childhood faculty members.

Economics

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Economics are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. U of O also offers a five-year program combining an undergraduate economics major and a master of business administration.

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

Education

See also Early Childhood Education, Paraeducator Certificate, Career and Technical Education Teacher Preparation, and Speech-Language Pathology Assistant.

Elementary Education

(transfer course guideline)

Oregon's state universities offering Elementary Education programs are Oregon State University, Eastern Oregon University, and Western Oregon University, which offer Bachelor of Arts and/or Bachelor of Science degrees in Elementary Education. Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, and University of Oregon offer fifth-year programs.

Students planning on attending WOU will complete a specific series of courses leading to the Associate of Arts Oregon Transfer Degree (AAOT). Students should see a Chemeketa advisor to obtain detailed requirements. Students planning to attend EOU will also complete the AAOT, then earn a bachelor's degree in Multidisciplinary Studies with a minor in education. Students should see a Chemeketa advisor and consult with the EOU School of Education for requirements.

Students planning on enrolling in a college offering a fifth-year Elementary Education program must obtain a baccalaureate degree in an academic major before being admitted to the fifth-year teacher education program. The major may be in general or liberal studies or in any subject taught in elementary schools. OSU recommends students major in Liberal Studies, General Science, Human Development, Family Studies, or Exercises and Sport Science, or a single discipline that relates to the elementary school curriculum.

Admission to both four-year and fifth-year education programs requires a minimum grade point average (GPA), usually 2.75 to 3.00. Admission also requires passing the California Basic Educational Skills Test (CBEST). Students transferring to WOU are advised to take the test at the completion of their general education requirements or early in their sophomore year, as scores are included as data required for admission to the Elementary Education program.

Students planning to transfer to a college offering a fifth-year program should follow the educational guideline outlined in the catalog for the academic major which they plan to complete before entering a fifth-year program.

Elementary Education majors planning to transfer to George Fox or Concordia University should contact Counseling and Career Services at 503.399.5120 for transfer information.

Secondary Education

(transfer course guideline)

Oregon's state universities offering secondary education programs are Eastern Oregon University, Oregon State University, and Western Oregon University, which offer Bachelor of Science and Bachelor of Arts degrees in secondary education, and Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University, which offer a fifth-year secondary education program.

Admission to fifth-year education programs requires completion of a baccalaureate degree in the subject you plan to teach at a junior or senior high school. The secondary education program is at the graduate level. Admission to these programs requires maintaining a specific GPA—usually 2.75 to 3.00—and successfully passing the California Basic Educational Skills Test (CBEST) or Praxis I: Pre-Professional Skills Test (PPST) and the Praxis Examination in your major teaching area.

Admission to the four-year education program at Western Oregon University requires maintaining a 2.75 GPA and passing the CBEST or PPST.

You should enroll in courses that meet the general education requirements for the school to which you plan to transfer, as well as courses that meet the requirements for the major subject in which you plan to teach.

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

Electronics Technologies

electronics.chemeketa.edu

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

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do related to your program. You will need department approval before you may enroll in ELT280A-H Cooperative Work Experience. For more information, look under Cooperative Work Experience in the catalog index or contact Roger White at 503.399.5068.

For additional information or tours of the electronics laboratory, visit educationwithafuture.com.

Program outcomes:

Students completing the Electronic Engineering AAS will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, co-workers, and customers.
- Identify and solve technology problems related to electronic circuits and devices, mechanical systems, and computer hardware or software.
- Perform test procedures and use equipment to diagnose, maintain, and/or repair electronic/computer-based circuits and systems.
- Read and interpret written materials, including manuals, technical bulletins, schematics, and procedures to maintain and repair equipment or systems.

- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.
- Practice skills and attitudes—individually and as a member of a team—that reflect quality management procedures and professional standards in the workplace.
- Apply professional and environmental safety practices associated with the workplace.

In addition to the Electronic Engineering outcomes, students completing the Computer Electronics AAS will:
- Identify and solve technology problems related to the manufacture, install, or maintenance of computers or computer-like equipment.

In addition to the Electronic Engineering outcomes, students completing the Industrial Electronics AAS will:
- Identify and solve technology problems related to the development, manufacturing, installation, and servicing of computer integrated manufacturing systems, semiconductor and microelectronic manufacturing equipment, process control equipment, and robotic and other electromechanical systems.

Students completing the Advanced Technology Endorsement Certificate will:
- Apply scientific processes and critical thinking skills to issues in the technology field.
- Use appropriate technology to solve advanced applied problems and to judge the reasonableness of their results.

Students completing the Microelectromechanical Systems (MEMS) Design Certificate will:
- Use computer-aided design systems to design the templates or masks that are used to manufacture microelectromechanical devices and circuits.
- Identify and solve technology problems related to electromechanical systems.
- Read and interpret written materials, including manuals, technical bulletins, schematics, and procedures.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and co-workers.

Getting started

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

Course	Title	Credit Hours
CA121	Keyboarding	3
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR090	Fundamentals of Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

Computer Electronics Associate of Applied Science

Graduates of the Computer Electronics program begin careers with companies that manufacture, install, debug, or maintain computers or computer-like equipment. This equipment includes, but is not limited to, mainframe computers, mini and microcomputers, automated office equipment and systems (word processors, point-of-purchase terminals, local area and wide area networks), computer peripherals, engineering work stations, automated factory products, and data communication networks.

The training includes both specific technical skills needed in the field and broader skills in communications and human relations, which are necessary for career success. You'll have hands-on practice working with computer hardware and software. Classes emphasize both component and system-level troubleshooting as well as installation and maintenance of equipment and networks.

As a graduate of this program, you may also choose to transfer to a school such as Oregon Institute of Technology to complete the coursework required for a bachelor's degree. If you wish to transfer, declare your intent before the first term and work closely with electronics advisor Gene Moore (503.399.6506), and the institution to which you plan to transfer.

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,490; class fees, $430; student services fee, $52.50; universal fee, $630; equipment and supplies, $210; and Intel-compatible computer, $900. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 105 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics 1+	4
NET123	Computer Operating Systems	4
WR121	English Composition—Exposition+	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
Term 4		
ELT121	Programming Concepts 1	4
	or	
CIS133J	Fundamentals of Java Programming 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Résumés and Job Search Correspondence	1
PH201	General Physics	4
	or	
PH121	Applied Physics	4
SP111	Fundamentals of Public Speaking	3

Term 5

CIS278	Data Communications	3
ELT253	Microprocessor Systems	5
ELT254	Computer Hardware	4
	or	
CIS145	Microcomputer Hardware	4
PH202	General Physics	4
	or	
PH122	Applied Physics	4
PSY104	Psychology in the Workplace+	3

Term 6

ELT222	Programming Concepts 2	4
	or	
CIS140U	UNIX/LINUX	3
	or	
CIS140S	Solaris-UNIX Operating System	5
	or	
CIS179	Introduction to Client-Server Networks	4
ELT255	Advanced Data Communications	5
	or	
CIS279	Network Management	5
ELT256	Advanced Computer Architecture	4
ELT283	Logical Troubleshooting	5

+Meets related instruction requirement, see page 44.

Electronic Engineering Technician Associate of Applied Science

Upon graduation from the Electronic Engineering Technician program, you may begin a career assisting in the design, manufacturing, installation, and service of microelectronics and semiconductor manufacturing systems, telecommunication equipment and systems, electronic test instruments, medical measuring and monitoring equipment, computers, video systems, automation products, security and safety systems, process control systems, and flexible automation systems (robots). Training includes specific technical skills needed in the field and broader skills in communications, teamwork, and human relations, which are necessary for career success.

As a graduate of this program, you may choose to transfer to a school such as Oregon Institute of Technology to complete the coursework required for a bachelor's degree. If you wish to transfer, declare your intent before the first term and work closely with the electronic engineering advisor (Gene Moore, 503.399.6506) and the institution to which you plan to transfer. Students entering this program must have an Intel-compatible computer (Pentium III or better), and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, a word processor, and a spreadsheet).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,520; class fees, $430; student services fee, $51; universal fee, $612; Intel-compatible computer, $900; equipment and supplies, $210. 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		
DRF101	Basic CAD for Electronics	2
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics 1+	4
WR121	English Composition—Exposition+	3

Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
Term 4		
ELT121	Programming Concepts 1	4
	or	
CIS133J	Fundamentals of Java Programming 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Résumés and Job Search Correspondence	1
PH201	General Physics	4
	or	
PH121	Applied Physics	4
SP111	Fundamentals of Public Speaking	3
Term 5		
ELT253	Microprocessor Systems	5
ELT262	Linear IC Applications	3
ELT281	Antennas and Transmission Lines	2
ELT282	Telecommunications	3
PH202	General Physics	4
	or	
PH122	Applied Physics	4
Term 6		
ELT283	Logical Troubleshooting	5
ELT291	Advanced Industrial Electronics	4
PSY104	Psychology in the Workplace+	3
	Electronics electives*	6

+Meets related instruction requirement, see page 44.

*Electronics electives (select 6 credits):

CH121	College Chemistry	5
CH201	Chemistry for Engineers	4
CIS145	Microcomputer Hardware	4
ELT222	Programming Concepts 2	4
ELT254	Computer Hardware	4
ELT255	Advanced Data Communications	5
ELT256	Advanced Computer Architecture	4
ELT280C	Cooperative Work Experience*	3
ELT293	Flexible Manufacturing Systems	3
MT110	Microelectronics	3
MT221	Fluid and Vacuum Systems	4
MT223	High Vacuum Technology	3
MT227A	Pneumatics and Hydraulics Fundamentals	3
MTH241	Elementary Calculus	4
MTH243	Probability and Statistics 1	4
MTH251	Differential Calculus (or higher)	5
PH203	General Physics	4

Industrial Electronics Associate of Applied Science

Students selecting the Industrial Electronics program may begin careers—upon graduation—assisting in the development, manufacturing, installation, and servicing of computer-integrated manufacturing systems, semiconductor, and microelectronic manufacturing equipment, process control equipment, and robotic, and other electromechanical systems. This program stresses mechanical, computer, and electronic

theory, as well as the communication and human relation skills needed for career advancement.

As a graduate of this program, you may choose to transfer to a school such as Oregon Institute of Technology to complete the coursework required for a bachelor's degree. If you intend to transfer, declare your intent before the first term and work closely with the Industrial Electronics advisor (Gene Moore at 503.399.6506) and the institution to which you plan to transfer. Students entering this program must have an Intel-compatible computer (Pentium III or better), and be computer literate (type approximately 20 wpm and be familiar with the Windows operating system, a word processor and a spreadsheet).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,300; class fees, $430; student services fee, $50.50; universal fee, $606; Intel-compatible computer, $900; equipment and supplies, $210. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 101 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
DRF101	Basic CAD for Electronics	2
ELT111	Electronics Orientation	1
ELT131	Electronic Concepts 1	4
MT110	Microelectronics	3
MTH111	College Algebra+ (or higher)	5
	or	
MTH081	Technical Mathematics 1+	4
WR121	English Composition—Exposition+	3
Term 2		
ELT132	Electronic Concepts 2	4
ELT141	Transistor Fundamentals	5
ELT151	Digital Fundamentals	4
MTH112	Trigonometry (or higher)	5
	or	
MTH082	Technical Mathematics 2	4
Term 3		
ELT133	Electronic Concepts 3	4
ELT142	Semiconductor Devices	3
ELT143	Pulse Circuit Fundamentals	3
ELT161	Linear IC Fundamentals	4
WR227	Technical Writing	3
Term 4		
ELT121	Programming Concepts 1	4
	or	
CIS133J	Fundamentals of Java Programming 1	4
ELT244	Electronic Circuit Analysis	4
ELT252	Digital Circuit Applications	3
FE205B	Résumés and Job Search Correspondence	1
PH201	General Physics	4
	or	
PH121	Applied Physics	4
SP111	Fundamentals of Public Speaking	3
Term 5		
ELT253	Microprocessor Systems	5
ELT262	Linear IC Applications	3
PH202	General Physics	4
	or	
PH082	Applied Physics	4
	Technical elective*	3

Course	Title	Credit Hours
Term 6		
ELT291	Advanced Industrial Electronics	4
PSY104	Psychology in the Workplace+	3
	Technical electives*	9

+Meets related instruction requirement, see page 44.

*Technical electives (select 12 credits):

CH121	College Chemistry	5
CH201	Chemistry for Engineers	4
CIS145	Microcomputer Hardware	4
DRF251	Power Transmission Design	3
ELT254	Computer Hardware	4
ELT283	Logical Troubleshooting	5
ELT293	Flexible Manufacturing Systems	3
MT221	Fluid and Vacuum Systems	4
MT223	High Vacuum Technology	3
MT227A	Pneumatics and Hydraulics Fundamentals	3
MTH243	Probability and Statistics 1	4

Advanced Technology Endorsement Certificate of Completion

If you already have an associate degree in electronics or are a journeyman electronics technician, this certificate can help you get the skills you need to advance your career. This certificate can build on your past experience and help you get the skills needed by Oregon's advanced technology employers. To be admitted into this program, you must be interviewed by the program chair, Charles Sekafetz (sekafetz@chemeketa.edu, 503.399.6254), and have your past education and experience evaluated. Your previous education and experience must include writing, science, math, and technical expertise similar to the AAS degrees in electronics offered by Chemeketa. If you are lacking equivalent experience in any one of these areas, a program of study will be developed for you during the interview.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,500; class fees, $650; student services fee, $21.50; universal fee, $258; Intel-compatible computer, $900; equipment and supplies, $275. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 43 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CH201	Chemistry for Engineers	4
	or	
CH121	College Chemistry	5
MTH243	Probability and Statistics I	4
	or	
MTH241	Elementary Calculus	4
	or	
MTH251	Differential Calculus (or higher)	4
	or	
MTH231	Discreet Mathematics	4
WR122	English Composition—Logic and Style	3
	Advanced Technology Endorsement elective*	6
Term 2		
CH202	Chemistry for Engineers	4
	or	
CH122	College Chemistry	5
PSY104	Psychology in the Workplace	3
SP219	Fundamentals of Small Group Communications	3
	Advanced Technology Endorsement elective*	3
Term 3		
	Advanced Technology Endorsement elective*	13

*Advanced Technology Endorsement electives (select 22 credits):

CAM190	Programming CNC Lathes	4
CAM290A	CAD/CAM Integrations	8
CH123	College Chemistry	5
CIS145	Computer Hardware	4
CIS276A	Introduction to Oracle: SQL	4
CVL230	Applied Statics	3
DRF132	CAD 3	3
EGR211	Statics	4
ELT281	Antennas and Transmission Lines	2
ELT282	Telecommunications	3
ELT283	Logical Troubleshooting	5
ELT291	Advanced Industrial Electronics	4
ELT293	Flexible Manufacturing Systems	3
MT110	Microelectronics	3
MT201A	Introduction to MEMS	1
MT201B	MEMS Design 1	1
MT201C	MEMS Design 2	2
MT221	Fluid and Vacuum Systems	4
MT223	High Vacuum Technology	3
MT227A	Pneumatics	3
NET123	Computer Operating Systems	4
NET151	Network Essentials	5
NET152	Network Router Configurations	5
NET153	LANs and Internetwork Design	5
NET154	WAN Design	5
NET171	Fundamentals of Wireless LANs	5
PH203	General Physics	4
WLD073	Basic Gas Tungsten Arc Welding (TIG)	4
	Cooperative Work Experience	12
	Maximum credits allowed	

Microelectromechanical Systems (MEMS) Design Certificate of Completion

Graduates of the MEMS program are employed by firms who design and manufacture nanotechnology systems that are at the nucleus of advanced bio- and nano-technology equipment. MEMS designers use computer-aided-design systems to design the templates or masks that are used to manufacture nanotechnology systems. Graduates of this program may also be employed as electronic circuit designers and layout specialists.

The MEMS program includes courses in computer-aided design (CAD), MEMS Layout, electronics, and semiconductor manufacturing processes, as well as the communication and human relations skills needed for career advancement.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $700; class fees, $510, student services fee, $6.50; universal fee, $78; Intel-compatible computer, $900; equipment and supplies, $260. 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 following required 13 credit hours with a grade of "C" or better in all courses.

Term 1

MT110	Microelectronics	3
MT201A	Introduction to MEMS	1

Term 2

CVL230	Applied Statics	3
MT201B	MEMS Design 1	1

Term 3

MT201C	MEMS Design 2	2
PSY104	Psychology in the Workplace	3

Emergency Medical Technology—Paramedic

emt.chemeketa.edu

The Emergency Medical Technology—Paramedic (EMT) program offers career training for entry-level personnel, as well as certification and continuing education courses. Chemeketa offers a diverse, experienced EMT faculty, excellent on-campus facilities, and outstanding hospital and pre-hospital clinical training sites. The program is accredited by the Oregon Department of Education, the Oregon Department of Health Services/Emergency Medical Services (DHS-EMS), and the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions.

Students successfully completing a level of training (EMT Basic, Intermediate or Paramedic) will be eligible to sit for the state certification exam at that level.

Emergency Medical Technicians may be employed by ambulance companies, fire departments, police departments, and industries. There is a great demand for EMTs and paramedics, both locally and nationally.

Students working toward EMT Paramedic certification will complete approximately 300 hours of hospital clinical experience and 320–550 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 AAS will:

- Assess patients and apply treatment protocols in emergency medical situations.
- Use oral and written skills to communicate effectively in anxiety producing situations with patients, families, and members of the health care team.
- Perform all basic and advanced life support skills in a safe and timely manner.
- Provide on-scene leadership in emergency medical care situations.
- Apply professional values and ethical behaviors individually and as a member of a team in providing emergency care.

Emergency Medical Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,086; class fees, $1,012; student services fee, $50; universal fee, $600; equipment and supplies, $728; testing fees, $604. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 100 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours

Term 1
BI231	Human Anatomy and Physiology (or higher)	4
EMT151	Emergency Medical Technician Basic, Part 1	5
EMT175	Introduction to Emergency Medical Service	3
	or	
ES172	Introduction to Emergency Services	4
HM120	Medical Terminology 1	3
WR121	English Composition—Exposition+ (or higher)	3

Term 2
BI232	Human Anatomy and Physiology (or higher)	4
EMT152B	Emergency Medical Technician Basic, Part 2	5
ES115	Crisis Intervention	3
MTH070	Elementary Algebra+ (or higher)	4

Term 3
BI233	Human Anatomy and Physiology (or higher)	4
EMT169	EMT Rescue	3
	or	
FRP256	Fire Service Rescue Practices	4
EMT176	Emergency Response Patient Transportation	2
EMT177	Emergency Response Communication/ Documentation	2
PSY101	Psychology of Human Relations+	3
SP111	Fundamentals of Public Speaking	3

Term 4
| CIS101 | Introduction to Microcomputer Applications (or higher) | 3 |
| EMT296 | EMT Paramedic, Part 1 | 16 |

Term 5
| EMT297 | EMT Paramedic, Part 2 | 16 |
| | Sociology/Humanities elective | 3 |

Term 6
| EMT280H | Cooperative Work Experience | 8 |
| HPE295 | Health and Fitness for Life | 3 |

+Meets related instruction requirement, see page 44.

Employment Skills Training

The Employment Skills Training program provides individuals the opportunity to receive a state-approved Certificate of Completion for an individualized 12-to 44-credit program that leads to skills and knowledge necessary for employment in an occupation or career field. Students who enroll in this short-term program will receive instruction based on a curriculum personalized for their chosen occupation and their individual abilities, knowledge, and skills. This program may include a combination of classroom and on-the-job experiences. Students can enroll at the beginning of any term of the academic year.

Engineering

(transfer course guideline)

Oregon State University (OSU) and Portland State University (PSU) offer Bachelor of Science degrees in Engineering. OSU offers degrees in Biological, Chemical, Civil, Electrical and Computer, Environmental, Industrial and Manufacturing, Mechanical, and Nuclear Engineering, as well as Construction Engineering Management and Engineering Physics. PSU offers degrees in Civil, Computer, Electrical, and Mechanical Engineering.

Students can transfer at the junior level into engineering programs at OSU or PSU or Bachelor of Science engineering programs available at other institutions by successfully completing coursework at Chemeketa.

Specific required courses vary according to discipline and school selected. As a prospective student, you are required to meet with Chemeketa Engineering instructor (Mark Miller 503.399.5225, or milm@chemeketa.edu), or Counseling and Career Services to develop your educational plan. Also, you should make early contact with an engineering advisor at the institution to which you plan to transfer to learn of any possible changes in program requirements.

English

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in English are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

English as a Non-Native Language

The English as a Non-native Language program is an intensive, multi-level program designed to teach non-native English speaking students the reading, writing, listening, speaking, and intercultural skills necessary for success in academic and professional work settings. The program has reading, writing, and listening skills entry-level prerequisites for each course. To have your language skill levels assessed for placement in any of these classes, contact the ESOL office at 503.399.6298 or Counseling and Career Services at 503.399.5120.

The length of time you will need to complete the program will depend on your skills in each of these areas. Some of these courses can be transferred—as electives—to other Oregon state colleges and universities. As a student, you are responsible for learning the program requirements of the other school to which you plan to transfer.

Many of these classes are also offered on a non-credit basis. Contact the ESOL office at 503.399.6298 for more information.

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

Course	Title	Credit Hours

Grammar:
ENL031G	ESL Intermediate Grammar 1	3
ENL032G	ESL Intermediate Grammar 2	3
ENL041G	Introduction to College Grammar 1	3
ENL042G	Introduction to College Grammar	3
ENL151G	ENL College Grammar 1	3
ENL152G	ENL College Grammar 2	3

Listening and Speaking:
ENL031L	Intermediate Listening 1	3
ENL031S	Intermediate Speaking 1	3
ENL032L	Intermediate Listening 2	3
ENL032S	Intermediate Speaking 2	3
ENL040A	Introduction to Academic Listening and Speaking	3
ENL150A	Academic Listening and Speaking	3
ENL151A	Jumpstart Your Academic Language Skills	3
ENL151L	ENL Academic Listening 1	3
ENL152L	ENL Academic Listening 2	3
ENL151S	ENL Academic Speaking 1	3
ENL152S	ENL Academic Speaking 2	3

Pronunciation:
ENL030P English Vowels and Consonants...1
ENL031P Basic English Pronunciation 1...3
ENL032P Basic English Pronunciation 2...3
ENL041P Introduction to English Pronunciation 1 3
ENL042P Introduction to English Pronunciation 2 3
ENL151P Advanced English Pronunciation 1 3
ENL152P Advanced English Pronunciation 2 3

Reading:
ENL031R ESL Intermediate Reading 1 3
ENL032R ESL Intermediate Reading 2 3
ENL041R Introduction to College Reading 1 3
ENL042R Introduction to College Reading 2 3
ENL151R ENL College Reading 1 3
ENL152R ENL College Reading 2 3

Technology:
ENL030T Computer Basics for ESL..1
ENL031T Word Processing for ESL 1
ENL032T Internet for ESL..1
ENL033T Technology for ESL 3

TOEFL
ENL046I TOEFL Test Preparation Workshop 1
ENL056I TOEFL Test Preparation: Listening.....................................1
ENL057I TOEFL Test Preparation: Speaking 1
ENL058I TOEFL Test Preparation: Reading.......................................1
ENL059I TOEFL Test Preparation: Writing 1

Vocabulary:
ENL031V Vocabulary for Medical Careers..3

Writing:
ENL031W ESL Intermediate Writing 1 3
ENL032W ESL Intermediate Writing 2 3
ENL041W Introduction to College Writing 1.....................................3
ENL042W Introduction to College Writing 2.....................................3
ENL151W ENL College Writing 1 3
ENL152W ENL College Writing 2...3

Fire Protection Technology

fire.chemeketa.edu

The Fire Protection program offers career training in Fire Suppression and Fire Prevention. Both programs include training and education for those entering the career field and for those already employed. Chemeketa has a well-equipped fire station and training center on the Salem Campus and at the Emergency Services Regional Training Center in nearby Brooks, Oregon. Coursework is accredited by the Oregon Board on Public Safety Standards and Training and by the International Fire Service Accreditation Congress.

Classes in this program are offered in the traditional on-campus classroom setting for students just beginning their fire protection training, and by distance education for fire service professionals active in the field. Distance education may include earning college credit for prior learning such as local training and work experience, individualized instructional contracts, transfer credits from local schools, and independent study courses online or by correspondence. For information about distance education call 503.584.7342.

Program outcomes

Students completing the Fire Suppression AAS will:
- Operate safely and effectively under general supervision as an integral member of an emergency response team and under close supervision when engaged in hazardous activities.

- Initiate, relay, and respond to verbal or written communications in both non-emergency and emergency situations.
- Demonstrate and explain the daily operations of a fire station.
- Conduct risk reduction activity through hazard identification and public education.
- Interact with others in a diverse workforce using formal and informal rules to accomplish organizational goals.
- Assist as a member of an advanced life support team to improve patient outcomes by performing basic life support procedures including infection control, CPR, bleeding control, and shock management.
- Drive and perform pumping operations including establishing a water supply and directing the flow of water through hose lines and appliances in appropriate volumes and pressures.

Students completing the Fire Prevention AAS will:
- Operate safely and effectively under general supervision to prevent the occurrence and severity of hostile fires, to mitigate the effect of fire on people, and to assist in the determination of the cause of such fires.
- Use fire department communications equipment to initiate, relay, and respond to verbal or written communications.
- Conduct risk reduction inspections through employing hazard identification, interpreting and applying codes and standards, and applying hazard abatement process.
- Use appropriate media to educate a variety of audiences in risk reduction.
- Conduct, coordinate, and complete basic fire cause and origin investigation and participate, under supervision, in the investigation of complex fire situations.
- Interact formally and informally with others in a diverse workforce to accomplish organizational goals.
- Use communication skills and media to meet the needs of internal and external customers, resolve conflicts, and explain fire prevention concepts in a manner that places a high priority on customer satisfaction.

Getting started

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

The Fire Suppression degree program can be coordinated with the Emergency Medical Technician—Paramedic program so that both degrees can be earned in between nine and 11 terms. Dual-degree students are provided with an individualized sequence of courses that may vary depending on the term in which classes are begun. For information call 503.399.5163.

Fire Suppression Associate of Applied Science

Most firefighters work for public fire departments. Chemeketa's program includes a variety of courses in writing, mathematics, and speech as well as technical fire protection courses. Each term, students take a Fire Incident Related Experience course, which focuses on developing required skills, attitudes, and work habits. On-campus fire suppression students work a 24-hour duty shift each week and respond to actual emergency incidents under the supervision of fire department officers.

This program has special admission requirements and enrollment limits. Applications are accepted every nine months. For additional information, call 503.399.5163. The program operates year-round, including summer term.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,248; class fees, $203; student services fee, $50; universal fee, $600; equipment and supplies, $850. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 100 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
EMT151	Emergency Medical Technician Basic, Part 1	5
FRP150	Introduction to Fire Protection	3
	or	
ES172	Introduction to Emergency Services	4
FRP151	Fire Incident Related Experience 1	3
FRP157	Hazardous Materials Operations	3
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
CIS101	Introduction to Microcomputer Applications (or higher)	3
EMT152B	Emergency Medical Technician Basic, Part 2	5
FRP152	Fire Incident Related Experience 2	3
FRP266	Building Construction for Fire Suppression	3
PH111	Physical Science for Fire Science and Emergency Services (or higher)	5
Term 3		
CH110	Foundations of General, Organic, and Biochemistry (or higher)	5
FRP153	Fire Incident Related Experience 3	3
FRP154	Water Supply Operations	3
FRP158	Fire Pump Construction and Operation	3
FRP169	Fire Department Leadership	3
	Fire Suppression elective*	3
Term 4		
FRP260	Fundamentals of Fire Prevention	3
FRP261	Fire Incident Related Experience 4	3
HPE295	Health and Fitness for Life	3
SOC204	General Sociology—Introduction	3
	or	
SOC205	General Sociology - Institutions	3
	or	
SOC206	General Sociology - Social Problems	3
WR121	English Composition—Exposition+ (or higher)	3
Term 5		
FRP172	International Fire Codes	3
FRP256	Fire Service Rescue Practices	4
FRP262	Fire Incident Related Experience 5	3
SP115	Introduction to Intercultural Communications	3
Term 6		
FRP171	Fire Protection Systems and Extinguishers	3
FRP179	Wildland Urban Interface	3
FRP263	Fire Incident Related Experience 6	3
PSY101	Psychology of Human Relations+ (or higher)	3
WR227	Technical Writing	3

+Meets related instruction requirement, see page 44.

*Fire Suppression electives:

AH080	Crisis Intervention	3
BA255	Elements of Supervision	3
BI231	Human Anatomy and Physiology	4
BI232	Human Anatomy and Physiology	4
BI233	Human Anatomy and Physiology	4
BLD151	Building Codes 1	3
BLD152	Building Codes 2	3
BLD260	Fire Protection for Buildings	3
EMT167A	Emergency Medical Technician Intermediate, Part 1	5
EMT167B	Emergency Medical Technician Intermediate, Part 2	5
EMT275	Introduction to Emergency Medical Services	3
EMT280F	Cooperative Work Experience	6
FRP170	Fire Fighting Tactics and Strategies	3
FRP173	Law for Emergency Services	3
FRP174	Fire Investigation	4
FRP175	Crash/Rescue for Non-Commercial Aircraft	1
FRP259	Major Emergency Strategy and Tactics	3
FRP277	NFPA Fire Instructor 1	3
FRP278	NFPA Fire Instructor 2	3
FRP286	Advanced Detection and Protection Systems	3
HE262	Cardiopulmonary Resuscitation	2
HM120	Medical Terminology/Systems 1	3
HUM259	Death and Dying	3

Fire Prevention Associate of Applied Science

Graduates of the Fire Prevention program may be hired by public fire departments and industrial businesses as fire prevention specialists.

Our Cooperative Work Experience program allows you to apply your knowledge and skills while earning college credit for working in a state or local fire prevention bureau. With the approval of the program chair, you may enroll in FRP280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2058; class fees, $534; student services fee, $49.50; universal fee, $594; equipment and supplies, $25. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 99 credit hours with a grade of "C" or better in all courses. For information call 503.399.6241.

Course	Title	Credit Hours
Term 1		
BLD151	Building Codes 1	3
FRP150	Introduction to Fire Protection	3
	or	
ES172	Introduction to Emergency Services	4
FRP260	Fundamentals of Fire Prevention	3
FRP266	Building Construction for Fire Suppression	3
MTH095	Intermediate Algebra+ (or higher)	4
Term 2		
BLD152	Building Codes 2	3
CIS101	Introduction to Microcomputer Applications (or higher)	3
FRP172	International Fire Codes	3
PH111	Physical Science for Fire Science and Emergency Services (or higher)	5
WR121	English Composition—Exposition+ (or higher)	3

Term 3
BLD267   Non-Structural Plan Review..............................3
CH110   Foundations of General, Organic, and Biochemistry (or higher) 5
FRP171   Fire Protection Systems and Extinguishers 3
SP111   Fundamentals of Public Speaking (or higher) 3
WR227   Technical Writing..3

Term 4
FRP174   Fire Investigation 4
FRP257   Hazardous Materials for Inspectors 3
FRP280C   Cooperative Work Experience 3
PSY101   Psychology of Human Relations+ (or higher) 3
    Fire Prevention elective*...3

Term 5
FRP173   Law for Emergency Services 3
FRP281   Fire Prevention Inspection 3
FRP286   Advanced Detection and Protection Systems...................3
    or
BLD260   Fire Protection for Buildings 3
FRP280C   Cooperative Work Experience 3
FRP288   Fire Prevention Education Programs 3

Term 6
FRP154   Water Supply Operations..3
FRP179   Wildland Urban Interface 3
FRP280C   Cooperative Work Experience 3
FRP282   Juvenile Fire Setters Intervention....................................3
FRP284   Public Information for the Fire Service............................3
    Fire Prevention elective*...3

+Meets related instruction, see page 44.

*Fire Prevention electives (select 6 credits):
BLD181   Mechanical Codes 1 3
BLD260   Fire Protection for Buildings 3
CJ210   Introduction to Criminal Investigations..........................3
FRP157   Hazardous Materials Operations 3
FRP169   Fire Department Leadership...3
FRP170   Fire Fighting Tactics and Strategies.................................3
FRP272   International Fire Codes 2 3
FRP277   NFPA Fire Instructor 1 3
FRP278   NFPA Fire Instructor 2 3

Fire Service Supervision and Management Certificate of Completion

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

To be admitted to this program, you must be interviewed by the program chair, Bill Klein, 503.399.6240, and have your training, education, and experience evaluated. An individualized program of study will be developed for you.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1109; class fees, $80; student services fee, $26; universal fee, $312; equipment and supplies, $120. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 52 credit hours with a grade of "C" or better in all courses.

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

Human Relations:
PSY101   Psychology of Human Relations (or higher) 3
SOC204   General Sociology—Introduction (or higher)..................3

Science:
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 credit hours each, which include a lab component.)

Term 1
    Communications+ (See requirements above)....................3
    Human Relations+ (See requirements above) 3
FRP169   Fire Department Leadership...3
FRP173   Law for Emergency Services 3
    or
FRP166   Firefighter's Law 1
FRP174   Fire Investigation 4
FRP277   NFPA Fire Instructor 1 3
MTH052   Introduction to Algebra and Geometry+ (or higher) 3

Term 2
    Science (see requirements above)....................................4
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

Term 3
    Science (See requirements above) 4
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...3

+Meets related instruction requirement, see page 44.

Foreign Languages

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts degrees in Foreign Languages are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU offers degrees in French, German, and Spanish; PSU offers degrees in Chinese, French, German, Japanese, Russian, and Spanish; U of O offers degrees in Chinese, French, German, Greek, Italian, Japanese, Latin, Russian, and Spanish; SOU offers a Bachelor of Arts in Language and Culture with options in French, German, Spanish (see SOU catalog); and WOU offers a degree in Spanish. Eastern Oregon University offers degrees in Liberal Studies with a concentration in French, German, or Spanish.

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

Forestry

(transfer course guideline)

The Oregon State University (OSU) College of Forestry offers several Bachelor of Science degrees in forestry, including Forest Management. Some of those degrees articulate coursework from Chemeketa.

It is important to check the OSU catalog for the requirements of specific majors and to make early contact with an OSU advisor to learn of any possible changes in an academic area.

For more specific information contact D. Craig Anderson, 503.399.6565.

General Science

See Biology.

General Studies

(transfer course guideline)

Most of Oregon's state universities offer Bachelor of Arts and/or Bachelor of Science degrees in General Studies. The major is listed as General Studies at Portland State University, Liberal Studies at Eastern Oregon University and Oregon State University, Humanities at University of Oregon, and Interdisciplinary Studies at Southern Oregon University and Western Oregon University.

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

Geography

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Geography are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

Geology

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Geology are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University (Earth Science).

Graphic Design

See Visual Communications.

Health, Health Education

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Health, Health Education and/or Public Health Education are Eastern Oregon University (EOU), Oregon State University (OSU), Portland State University (PSU), Southern Oregon University (SOU) and Western Oregon University (WOU). EOU's degree is in Physical Education and Health. OSU offers options in Environmental Health and Safety, Health Promotion and Education, and Health Care Administration; PSU offers Health Education; SOU offers a Health and Physical Education degree; WOU offers a degree in Health Education with a non-teaching and a teaching option.

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

Those students planning to teach health will need to complete a fifth year of post-baccalaureate work to meet teacher certification at all state-system colleges except WOU. Please refer to the section on Elementary and Secondary Education in this catalog.

Health Services Management

healthservices.chemeketa.edu

The Health Services Management program offers one- and two-year training for students on a career ladder in health care services. The one-year program allows you to be trained as a health information technician, medical biller, coder, or other health management support staff. The two-year degree programs include Health Services Management and Medical Transcription. Medical Office Assisting students should contact the advisors for the Health Services Management program as some classes taken in the Medical Office Assisting program may apply toward the AAS degree. Students must earn grades of C or better in all required courses.

Program outcomes

Students completing the Certificate will:
- Use health records to abstract, collect, and analyze data for use by a range of health care professions and health-related organizations.
- Apply current technology and basic assessment tools to manage and maintain health information.
- Use knowledge of structure, function, and terminology related to the human body to communicate in health care systems.
- Apply the principles of professional ethics and diversity to medical-legal matters, including confidentiality, medical records management, release of information, patient rights, workplace rights,

informed consents, and electronic information in the health care facility.

- Use interpersonal and communication skills that build and maintain cooperative working relationships in the health care profession.
- Use the specific skills associated with their scope of practice such as medical coding, medical reimbursement, health records management, or health services management.
- Integrate and apply theory and skill in a health care organization through a work site experience.

In addition to the certificate outcomes, students completing the Health Services Management AAS will:

- Apply advanced theoretical concepts of management to the health service organization.
- Analyze and interpret health care data and statistics for decision making in health care organizations.
- Identify the characteristics of major health care systems to manage the health care environment.
- Apply skills in leadership, motivation, and team building in health care settings.

In addition to the certificate and Health Services Management outcomes, students completing the Medical Transcription AAS will:

- Use current technology to accurately transcribe medical data within the health care environment.
- Facilitate the access of medical information by other health care professionals by providing medical data in a usable format.

Getting started

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

AH115	Healthcare Career Success Strategies	2
CA121A	Keyboarding A (If less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra+ (or higher)	4
RD090	College Textbook Reading (or higher)	3
WR115	Introduction to Composition (or higher)	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5275. Failure to be assessed may delay your entry into program classes.

Health Information Technology Certificate of Completion

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

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

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

Health care institutions may require criminal background checks, drug tests and/or specific immunizations before a student can be placed at the facility for externship, practicum, or cooperative work experience.

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5275. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,504; class fees, $90; student services fee, $24.50; universal fee, $294; equipment and supplies, $15. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn a Certificate of Completion by successfully completing the required 49 credit hours with a grade of "C" or better in all required courses:

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM105	Professional Development A	1
	or	
FE205B	Résumés and Job Search Correspondence	1
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology 1	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM106	Professional Development B	1
	or	
FE205C	Interviewing for Success	1
HM112	Health Information Systems Procedures 2	4
HM114	CPT-IV Coding/Reimbursement	3
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology 2	3
Term 3		
HM115	ICD-9-CM Coding/Reimbursement	3
HM122	Medical Terminology 3/Human Diseases	3
HM130	Health Information Systems Office Practice	5
HM131	Health Information Systems Seminar	1
PSY101	Psychology of Human Relations+ (or higher)	3

+Meets related instruction requirement, see page 44.

Two-Year Degree Programs
Health Services Management
Associate of Applied Science

As a graduate of this two-year program, you will be prepared for a variety of middle-management jobs in the health care field. You may be employed by hospitals, state agencies, medical clinics, or other health care organizations.

The Health Services Management program curriculum focuses on four areas: applied science; the U.S. health care delivery system; accounting, business, and health management; and general education courses.

You may transfer to a four-year institution to continue coursework in public health administration or health care administration. The combination of career and technical education courses and transfer courses will give you a wide variety of options.

To be eligible for practicum, you must complete all HM and BI classes offered in terms 1 through 5 and be eligible for graduation. Healthcare institutions mare require criminal background checks, drug tests and/or specific immunizations before a student can be placed at the facility for externship, practicum or cooperative work experience.

In addition to tuition, estimated costs for students who complete the entire second year listed below are books, $2,193; class fees, $90; student services fee, $48; universal fee, $576; equipment and supplies, $15. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an Associate of Applied Science degree by successfully completing the required 96 credit hours with a grade of "C" or better in all courses. If you have completed or are currently enrolled in a health occupations program and wish to apply credits toward the Health Services Management degree program, contact the advisor in this program.

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology 1	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM112	Health Information Systems Procedures 2	4
HM114	CPT-IV Coding/Reimbursement	3
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology 2	3
Term 3		
BA206	Business Management Principles	3
HM115	ICD-9-CM Coding/Reimbursement	3
HM122	Medical Terminology 3/Human Diseases	3
MTH070	Elementary Algebra+ (or higher)	4
WR227	Technical Writing	3
Term 4		
HM105	Professional Development A	1
	or	
FE205B	Résumés and Job Search Correspondence	1
HM210	Introduction to Health Services	3
HM250	Health Services Management 1	3
MTH095	Intermediate Algebra (or higher)	4
	or	
BA211	Financial Accounting 1	4
PSY201	General Psychology—Biological Emphasis+ (or higher)	3
	Business elective (200 or higher) (Recommend BA214 or BA202)	3
Term 5		
HM106	Professional Development B	1
	or	
FE205C	Interviewing for Success	1
HM251	Health Services Management 2	3
	General Education elective (100 or higher), recommend	
SP218	Interpersonal Communication	3
	Humanities/Fine Arts elective (100 or higher)	3
	Business, Economic or Social Science elective (200 or higher)	3
	Computer elective*	3

Term 6

HM230	Health Services Externship	5
HM231	Health Services Seminar	1
HM252	Health Services Management 3	3
	Business Elective (200 or higher; BA224 recommended)	3
	General Education elective (100 or higher; HPE295 recommended)	3

+Meets related instruction requirement, see page 44.

Medical Transcription Associate of Applied Science

The two-year Medical Transcription program prepares you for a career as a professional medical transcriptionist within an acute or non-acute health care environment. This program emphasizes the transcribing applications that will help you train for entry-level employment as a medical transcriptionist and provides the basic knowledge and skills required to transcribe medical dictation accurately and within timelines. Training stresses microcomputer word processing skills as well as proofreading, transcription, and formatting.

To be eligible for practicum, you must complete all HM and BI classes offered in terms 1 through 5 and be eligible for graduation. Healthcare institutions mare require criminal background checks, drug tests and/or specific immunizations before a student can be placed at the facility for externship, practicum or cooperative work experience.

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5275. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,547; class fees, $77; student services fee, $49; universal fee, $588; equipment and supplies, $77. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an Associate of Applied Science degree by successfully completing the 98 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy and Physiology 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology 1	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
BI172	Introduction to Human Anatomy and Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM112	Health Information Systems Procedures 2	4
HM116	Introduction to Allied Health Data	3
HM121	Medical Terminology 2	3
HM141	Medical Transcription 1	3
Term 3		
BA214	Business Communications	3
BT099	Proofreading/Editing	3
HM122	Medical Terminology 3	3
HM142	Medical Transcription 2	3
	Computer elective*	3
	General Education elective	3

Term 4

HM105	Professional Development A	1
	or	
FE205B	Résumés and Job Search	1
HM143	Medical Transcription 3	3
HM210	Introduction to Health Services	3
HM250	Health Services Management 1	3
MTH070	Elementary Algebra (or higher)	4
	or	
BA211	Financial Accounting 1	4
	Approved Computer elective*	3

Term 5

HM106	Professional Development B	1
	or	
FE205C	Interviewing for Success	1
HM114	CPT-IV Coding/Reimbursement	3
HM251	Health Services Management 2	3
PSY201	General Psychology—Biological Emphasis+ (or higher)	3
SP218	Interpersonal Communications	3
	General Education elective	3

Term 6

HM115	ICD-9-CM Coding/Reimbursement	3
HM144	Medical Transcription Seminar	1
HM252	Health Services Management 3	3
HM280H	Cooperative Work Experience	8

+Meets related instruction requirement, see page 44.

*Computer electives:

CA117	Microsoft Publisher (or higher)	3
CIS105	Introduction to MS Windows (or higher)	3

History

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in History are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

Horticulture

The Horticulture program prepares students for occupations in greenhouse and nursery production, propagation, or plant protection as managers, crew leaders, inventory controllers, irrigation specialists, and plant sales or customer service representatives. The program offers a two-year Associate of Applied Science (AAS) degree.

The program includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in the Horticulture industry. Practical skills will be emphasized, and students will gain on-the-job work experience through the Cooperative Work Experience program and the Horticulture Practicum course. For more information about the program, contact Gail Gredler at 503.365.4692 or D. Craig Anderson at 503.399.6565.

Program outcomes

Students completing the AAS will:

- Perform skills and use equipment necessary to propagate, transplant, fertilize, irrigate, prune, and otherwise regulate growth of plants produced in the nursery and greenhouse.

- Recognize, name, and understand management requirements for plants commonly grown in the Oregon nursery and greenhouse industry and their associated pests.

- Demonstrate knowledge of government regulations related to nursery and greenhouse operations, workplace safety, water regulations, pesticide safety, and crop sanitation requirements to effectively manage a nursery or greenhouse.

- Evaluate production practices in terms of currently understood principles of sustainability.

Getting started

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

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

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,997; class fees, $551; student services fee, $50; universal fee, $600. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 100 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
BI131	Environmental Science 1	4
CIS101	Introduction to Microcomputer Applications (or higher)	3
HOR111	Introduction to Horticulture	4
HOR226	Identification of Woody Plants 1	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
HOR211	Plant Propagation	3
HOR227	Identification of Woody Plants 2	3
HOR260	Soils, Media, and Nutrition	4
MTH070	Elementary Algebra+ (or higher)	4
	Horticulture elective*	2
Term 3		
HOR112	Pesticides and Safety	2
HOR113	Mathematical Applications in Horticulture	2
HOR221	Nursery Production and Management	3
HOR228	Identification of Woody Plants 3	3
HOR270-HOR275	Topics in Ecological Horticulture**	2
SP111	Fundamentals of Public Speaking (or higher)	3
	or	
SP115	Introduction to Intercultural Communication (or higher)	3

Term 4
HOR222   Greenhouse Structures and Equipment 2
HOR234   Integrated Pest Management: Insects............................3
HOR270-
HOR275   Topics in Ecological Horticulture**............................2
PSY104   Psychology in the Workplace+ (or higher) 3
SPN111   Beginning Spanish Conversation Term 1 (or higher) 3
  Horticulture elective*..3

Term 5
HOR223   Greenhouse Production and Management 3
HOR224   Horticulture Practicum 3
HOR235   Integrated Pest Management: Diseases 3
HOR270-
HOR275   Topics in Ecological Horticulture**............................2
SPN112   Beginning Spanish Conversation Term 2 (or higher) 3

Term 6
HOR114   Success in the Nursery and Greenhouse Workplace 2
HOR236   Integrated Pest Management: Weeds 2
HOR255   Identification of Herbaceous Plants 1...............................3
HOR258   Nursery and Greenhouse Business Management 3
WR227   Technical Writing (or higher)...3
  Horticulture elective*..3

Term 7
HOR280F   Cooperative Work Experience 6

*Horticulture electives (select 8 credit hours):
BI132   Environmental Science 2..4
BI133   Environmental Science 3..4
BOT201   General Botany 4
BOT202   General Botany 4
BOT203   General Botany 4
CH121   College Chemistry (or higher)..5
HOR115   Nursery and Greenhouse Equipment and Safety 3
HOR212   Advanced Plant Propagation 2
HOR256   Identification of Herbaceous Plants 2..............................2
HOR257   Horticultural Marketing 3
HOR270-
HOR275   Topics in Ecological Horticulture............................2 each

**Topics in Ecological Horticulture (select 6 credit hours):
HOR270   Native Plant Propagation and Use....................................2
HOR271   Urban Applications in Ecological Horticulture.................2
HOR272   Invasive Plant Species Management 2
HOR273   Urban and Community Forestry.......................................2
HOR274   Wetlands Construction and Management 2
HOR275   Innovative Strategies for Water Management
  in Nurseries..2

Hospitality Management

hospitality.chemeketa.edu

See also Tourism and Travel Management.

The Hospitality Management curriculum focuses on the management aspects of Oregon's fastest-growing industry: hospitality. The program covers management in lodging, meeting, event, and convention management; food and beverage; and casino management. Upon graduation, students may enter the hospitality industry working in such areas as hotel marketing, sales and operations, innkeeping, meeting, convention and special event planning, restaurant management, catering and banquet operations, and casino supervision.

The intent of the program is for students with an Associate of Applied Science degree and one-year certificate to obtain entry-level management positions within the hospitality industry. Students will also be advised on opportunities to continue their education by working toward a four-year degree in hospitality management through other universities.

A practicum, approved by the program chair, is required to complete the program. See HTM144 and HTM145 course descriptions.

Program outcomes

Students completing the Hospitality Management Certificate will:
- Analyze an operation's financial statements, isolate potential problems, and identify appropriate corrective action to control and manage the critical revenue and cost centers.
- Apply marketing and sales, operations, and human resources functions and principles in the hospitality industry.
- Establish the guest-host relationship inherent to the hospitality industry and the importance of quality customer service.

Students completing the Event Management Certificate will:
- Organize and manage a special event or meeting using appropriate operational coordination.
- Incorporate the unique impacts of the hospitality and tourism industry on event planning, including destination strategies and property guest services.
- Formulate a marketing plan to promote and/or sell an event, including requisite sales and service aspects of meeting and event management.

Students completing the AAS will:
- Apply knowledge of the marketing function, including the interrelationships of the hospitality and tourism industries and how it affects financial performance in the hospitality industry.
- Apply professional market-appropriate guest service standards to deliver competitive guest experiences to diverse cultural groups.
- Identify the various hospitality industry functions and their required procedural and legal techniques.
- Discuss the importance of, and techniques for, maximizing hiring, training and development, and retention of hospitality employees.

Getting started

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

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

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or Hospitality Management program staff at 503.399.5186. Failure to be assessed may delay your entry into program classes.

Hospitality Management Certificate of Completion

The Hospitality Management Certificate focuses on hospitality industry careers related to hotel operations, marketing and sales; meeting, convention or special event planning; catering and banquet operations; or casino supervision. The certificate prepares students for direct entry into the workforce or offers the ability to continue their education into the Hospitality Management Associate of Applied Science degree program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $954; class fees, $40; student services fee, $24.50; universal fee, $294. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

A Certificate of Completion is awarded upon successful completion of the required 49 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
CIS178I	Introduction to the Internet/World-Wide Web	3
HTM100	Introduction to the Hospitality Industry	3
HTM104	Travel and Tourism Industry	3
SOC204	General Sociology—Introduction (or higher)	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
HTM101	Customer Service Management	3
HTM123	Global Distribution Systems	3
PSY104	Psychology in the Workplace+	3
	or	
PSY201	General Psychology—Biological Emphasis+ (required for lower division credit) (or higher)	3
WR227	Technical Writing	3
	Hospitality Management elective*	3
Term 3		
BA206	Business Management Principles	3
HTM102	Hotel, Restaurant, and Travel Law	3
	or	
HTM103	Marketing in the Hospitality Industry	3
NFM215	Nutrition for Foodservice and Culinary Professionals	3
SP218	Interpersonal Communication (or higher)	3
	Hospitality Management elective*	3
Term 4		
HTM144	Hospitality and Tourism Management Practicum 1	4

+Meets related instruction requirement, see page 44.

*Hospitality Management electives:

HTM105	Introduction to the Food and Beverage Industry	3
HTM107	Food Sanitation and Cost Control	3
HTM109	Front Desk Operations	3
HTM112	Bed and Breakfast Operations	3
HTM119	Introduction to Casino Management	3
HTM124	Catering and Banquet Operations	3
HTM125	Special Event Planning	3
HTM126	Meeting and Convention Management	3
HTM130	Beverage Management	3
HTM132	Menu Planning	3
HTM133	Strategic Issues in Destination Management	3
HTM134	Destination Marketing	3
HTM135	Destination Leadership	3

Event Management Certificate of Completion

The Event Management Certificate prepares students for direct employment in meeting and event planning for large hotels, convention centers, local attractions, private catering or event management companies, or private corporations.

Courses focus on the separate but related business, operational, and sales aspects of meeting and event planning for conventions, special events such as weddings or parties, and corporate meetings. Students will develop the strategic project management and marketing and sales skills necessary for success in any of these related industry segments. Additionally, students will develop critical ancillary knowledge in food and beverage planning, catering, and banquet operations as they apply to the overall hospitality industry and to the industry segments indicated above. Students will also gain knowledge and applied skill in destination marketing principles and strategies.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $532; class fees, $40, student services fee, $17.50; universal fee, $210. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

A Certificate of Completion is awarded upon successful completion of the required 35 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM124	Catering and Banquet Operations	3
HTM127	Selling in Hospitality and Tourism	3
HTM132	Menu Planning	3
HTM134	Destination Marketing	3
Term 2		
HTM101	Customer Service Management	3
HTM126	Meeting and Convention Management	3
WR121	English Composition—Exposition (or higher)	3
Term 3		
HTM125	Special Events Planning	3
HTM130	Beverage Management	3
MTH062	Business Applications Using Mathematics (or higher)	4
Term 4		
HTM144	Practicum 1—Hospitality and Tourism Management	4

Hospitality Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1740; class fees, $40; student services fee, $45.50; universal fee, $546. 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 91 required credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
CIS178I	Introduction to the Internet/World-Wide Web	3
HTM100	Introduction to the Hospitality Industry	3
HTM104	Travel and Tourism Industry	3
SOC204	General Sociology—Introduction (or higher)	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
HTM101	Customer Service Management	3
HTM105	Introduction to the Food and Beverage Industry	3
HTM123	Global Distribution Systems	3
PSY104	Psychology in the Workplace+	3
	or	
PSY201	General Psychology—Biological Emphasis+ (required for lower division credit) (or higher)	3
WR227	Technical Writing	3
Term 3		
HTM107	Food Sanitation and Cost Control	3
HTM109	Front Desk Operations	3
HTM130	Beverage Management	3
NFM215	Nutrition for Foodservice and Culinary Professionals	3
SP218	Interpersonal Communication (or higher)	3
Term 4		
CA208	Workplace Presentations Using PowerPoint (or higher)	3
HTM124	Catering and Banquet Operations	3
HTM132	Menu Planning	3
MTH062	Business Application Using Mathematics+ (or higher)	4

Term 5
BA211   Financial Accounting 1 4
HTM126   Meeting and Convention Management..........................3
             Hospitality Management elective*....................................3
             Humanities/Fine Arts elective 3

Term 6
BA212   Financial Accounting 2 4
HTM102   Hotel, Restaurant, and Travel Law 3
HTM103   Marketing in the Hospitality Industry...........................3
             Hospitality Management elective*....................................3

Term 7
HTM144   Practicum 1—Hospitality and Tourism Management 4
             or
HTM145   Practicum 2—Hospitality and Tourism Management 9
HTM290   Hospitality and Tourism Management Capstone 3
+Meets related instruction requirement, see page 44.

*Hospitality Management electives:
HTM112   Bed and Breakfast Operations 3
HTM114   Travel Destination Geography 1......................................3
HTM115   Travel Destination Geography 2......................................3
HTM116   Travel Destination Geography 3......................................3
HTM119   Introduction to Casino Management 3
HTM125   Special Events Planning 3
HTM127   Selling in Hospitality and Tourism.................................3
HTM133   Strategic Issues in Destination Management 3
HTM134   Destination Marketing..3
HTM135   Destination Leadership 3
HTM136   Tour Operations and Marketing......................................3
HTM137   Tourism Transportation: Cruise, Air, Rail.......................3

Human Services

humanservices.chemeketa.edu

The Human Services program offers training for entry-level positions in human service agencies. It is a two-year career and technical education program that combines academic coursework with 25 credits of supervised field work at two different sites, each of which is at least two terms long. Students specialize in one of two options: Addiction Studies or Social Services.

This program has special admissions requirements and enrollment limits. Students with criminal histories may be prevented from obtaining necessary field experience required for program completion. Students recovering from chemical dependency who elect the Addiction Studies option must have a minimum of two years continuous sobriety in an unrestricted environment before they will be referred to practicum. For additional information, contact the Admissions Office at 503.399.5006.

Post B.A./B.S. students are also eligible to complete the Addiction Counselor Certification Preparation program and earn a one-year certificate. Admission to the certificate program is assessed individually by Wanda Urban, 503.399.6154. Students recovering from a chemical dependency must have a minimum of two years continuous sobriety in an unrestricted environment in order to be referred to practicum.

By enrolling in the CPL120 Credit for Prior Learning Résumé course, you may be able to earn credits for prior learning you acquired through your job, non-credit classes, community or volunteer service, or individual study.

Program outcomes

Students completing the AAS will:
- Describe the nature of human systems: individual, group, organization, community, and society, and their major interactions.

- Describe the conditions that promote or limit optimal functioning and classes of deviations from desired functioning in the major human systems.
- Identify and select interventions that promote growth and goal attainment.
- Plan, implement, and evaluate interventions.
- Select interventions that are congruent with the values of one's self, clients, the employing organization, and the human services profession.
- Use process skills to plan and implement services.

In addition to the AAS outcomes, students completing Addiction Studies AAS and Addiction Counselor Certification Preparation will:
- Describe, identify, assess, and treat addictions.

In addition to the AAS outcomes, students completing Social Services AAS will:
- Adapt intervention and assessment skills to a variety of agency settings including, but not limited to: crisis counseling, employment services, children's protective services, self-sufficiency, housing, mental health, corrections, and advocacy.

Getting started

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

MTH020   Basic Mathematics 4
RD090   College Textbook Reading...3
WR121   English Composition—Exposition...................................3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5048. Failure to be assessed may delay your entry into program classes.

Addiction Studies Associate of Applied Science

The Addiction Studies option trains students to work in public and private agencies treating chemically-dependent people and their families. Training sites include both residential and out-patient programs.

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

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,520; class fees, $220; student services fee, $53; universal fee, $636; equipment and supplies, $241; measles vaccine, $15. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

An Associate of Applied Science degree is awarded upon successful completion of the required 106 credit hours with a grade of "C" or better in WR227 and all Human Services courses. Twenty-five credits of practicum are required, at least 15 of which must be in an addiction studies placement.

Course	Title	Credit Hours
Term 1		
HS101	Addiction Pharmacology and Physiology 4	
HS150	Personal Effectiveness for Human Service Workers..3	
HS154	Community Resources..3	
HS170	Introduction to Practicum...3	
WR227	Technical Writing+ (or higher)..3	

Term 2

CIS101	Introduction to Microcomputer Applications (or higher)	3
HS152	Stress Management	1
HS260	Group Dynamics	3
HS284A-HS288A	Practicum—Human Services	4-8
PSY201	General Psychology—Biological Emphasis+	3
	Humanities/Fine Arts elective	1
	or	
	Science/Applied Science elective	1

Term 3

HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques	3
HS211	HIV, TB and Infectious Diseases	1
HS219	Case Management and Client Records	3
HS284A-HS288A	Practicum—Human Services	4-8
MTH060	Introductory Algebra+ (or higher)	4

Term 4

HS156	Counseling Theories	3
HS213	Multicultural Practice	3
HS214	Advanced Interviewing and Counseling Skills	3
HS218A	Group Processes A	1
HS284A-HS288A	Practicum—Human Services	4-8
PSY239	Introduction to Abnormal Behavior	3

Term 5

HS216	Clinical Screening, Assessment and Treatment Planning	3
HS217	Group Counseling Skills	3
HS218B	Group Processes B	1
HS284A-HS288A	Practicum—Human Service	4-8
SOC204	General Sociology—Introduction	3
SP111	Fundamentals of Public Speaking	3
	or	
SP112	Fundamentals of Persuasion	3
	or	
SP130	Business and Professional Speaking	3

Term 6

HS201	Addiction and the Family System	3
HS209	Co-occuring Disorders	2
HS218C	Group Processes C	1
HS267	Systems Strategies	3
HS284A-HS288A	Practicum—Human Services	4-8
PSY237	Life Span Development	3
SOC205	General Sociology—Institutions	3
	or	
SOC206	General Sociology—Social Problems	3

+Meets related instruction requirement, see page 44.

Addiction Counselor Certification Preparation Certificate of Completion

This one-year certificate program is designed for individuals with a baccalaureate or master's degree seeking the necessary coursework and practical experience to enable them to compete for employment in the field of addiction treatment. This certificate prepares students to take the Oregon Level I Certified Alcohol and Drug Counselors (CADC) exam.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,391; class fees, $100; student services fee, $25.50; universal fee, $306; equipment and supplies, $200; measles vaccine, $15. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 51 credit hours with a grade of "C" or better in all Human Services courses and a minimum of 15 credits of practicum. This program is four terms in length, beginning with spring term. Students interested in this program must attend the winter term orientation or meet personally with Wanda Urban (503.399.6154), advisor to the program, prior to beginning coursework.

Check the course descriptions in the back of this catalog for details.

Course	Title	Credit Hours
Term 1		
HS101	Addiction Pharmacology and Physiology	4
HS103	Ethics for Human Service Workers	2
HS155	Interviewing Theory and Techniques	3
HS219	Case Management and Client Records	3
Term 2		
HS156	Counseling Theories	3
HS213	Multicultural Practice	3
HS214	Advanced Interviewing and Counseling Skills	3
HS218A	Group Processes A	1
HS285A-HS288A	Practicum—Human Services	4-8
Term 3		
HS216	Clinical Screening, Assessment and Treatment Planning	3
HS217	Group Counseling Skills	3
HS218B	Group Processes B	1
HS285A-HS288A	Practicum—Human Services	4-8
Term 4		
HS201	Addiction and the Family System	3
HS209	Co-occuring Disorders	2
HS211	HIV, TB and Infectious Diseases	1
HS218C	Group Processes C	1
HS285A-HS288A	Practicum—Human Services	4-8

Social Services Associate of Applied Science

The Social Services program trains students for employment in social service agencies. These agencies provide services in areas such as crisis counseling, employment services, housing, mental health, corrections, and advocacy.

The curriculum includes courses in personal growth, interviewing, counseling, assessment, and case management.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,468; class fees, $150; student services fee, $50.50; universal fee, $606; equipment and supplies, $247; measles vaccine, $15. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

An Associate of Applied Science degree is awarded upon successful completion of the required 101 credit hours with a grade of "C" or better in WR227 and all Human Services courses. Twenty-five credits of practicum are required.

Course	Title	Credit Hours
Term 1		
HS150	Personal Effectiveness for Human Service Workers	3
HS154	Community Resources	3
HS170	Introduction to Practicum	3
PSY201	General Psychology—Biological Emphasis+	3
WR227	Technical Writing (or higher)+	3

Term 2

CIS101	Introduction to Microcomputer Applications (or higher)..3
HS260	Group Dynamics 3
HS284S-HS288S	Practicum—Human Services 4-8
PSY239	Introduction to Abnormal Behavior...............................3
	Social Services elective*..1

Term 3

HS101	Addiction Pharmacology and Physiology 4
HS103	Ethics for Human Service Workers.................................2
HS155	Interviewing Theory and Techniques...............................3
HS211	HIV, TB and Infectious Diseases....................................1
HS284S-HS288S	Practicum—Human Services 4-8
PSY237	Life Span Development...3

Term 4

HS152	Stress Management 1
HS156	Counseling Theories...3
HS213	Multicultural Practice...3
HS265	Casework Interviewing...3
HS284S-HS288S	Practicum—Human Services 4-8
MTH060	Introductory Algebra (or higher)+...................................4

Term 5

HS220	Aging and Society**...3 or
HS222	Aging and Behavior** 3
HS266	Case Management 3
HS284S-HS288S	Practicum—Human Services 4-8
SOC204	General Sociology—Introduction 3
	Social Services elective*..3

Term 6

HS267	Systems Strategies 3
HS284S-HS288S	Practicum—Human Services 4-8
SOC205	General Sociology—Institutions ....3 or
SOC206	General Sociology—Social Problems..............................3
SP111	Fundamentals of Public Speaking...................................3 or
SP112	Fundamentals of Persuasion ....3 or
SP130	Business and Professional Speaking 3
	Humanities/Fine Arts elective ....3 or
	Science/Applied Science elective......................................3

+Meets related instruction requirement, see page 44.

*Social Services electives (four credit hours total): Any class in Human Services, Anthropology, History, Political Science, Psychology numbered 200 or above, Sociology, Women's Studies, Criminal Justice, Early Childhood Education, Paraeducator, Sign Language, or Credit for Prior Learning.

**Offered in alternate years. Consult program chair.

Integrated Circuit Mask Design

Chemeketa offers a Certificate of Completion in Integrated Circuit (IC) Mask Design.

Graduates of the IC Mask Design program are employed by firms who design and manufacture the subminiature electronic circuits that are at the nucleus of all electronic and computerized equipment. Integrated circuit mask designers use computer-aided design systems to design the templates or masks that are used to manufacture microelectronic

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

The IC Mask Design program includes courses in computer-aided-design (CAD), CMOS layout, electronics, and the semiconductor manufacturing process, as well as the communication and human relations skills needed for career advancement.

Program outcomes

Students completing the certificate will:

- Use computer-aided design systems to design the templates or masks that are used to manufacture microelectronic circuits.
- Identify and solve technology problems related to electronic circuits and devices and mechanical systems.
- Read and interpret written materials, including manuals, technical bulletins, schematics, and procedures.
- 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.

Integrated Circuit Mask Design Certificate of Completion

If you already have an associates or bachelor's degree in Electronics, you may enroll in Chemeketa's online IC Mask Design certification program. This program is offered entirely online and can be completed from anywhere in the world. Students entering this program need to contact the program chair at 503.399.6254 or visit educationwithafuture.com to have their previous coursework evaluated before registering. To register, go to online.chemeketa.edu.

Students entering this program must have an Intel compatible computer (Pentium IV or better), Internet access, and be computer literate (type approximately 20 wpm, and be familiar with the Windows operating system, word processing, spreadsheets, and basic CAD).

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $490; class fees, $80; student services fee, $9.50; universal fee, $114; Intel-compatible computer, $1,000; 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.

You may earn a Certificate of Completion by successfully completing the following required 19 credit hours with a grade of "C" or better in all courses.

Required courses:

Term 1

| MT250 | CMOS 1..4 |
| MT110 | Microelectronics ....3 |

Term 2

| MT251 | CMOS 2..3 |
| PSY104 | Psychology in the Workplace+.................................3 |

Term 3

| CIS140U | Unix/Linux ....3 |
| MT252 | CMOS 3..3 |

+Meets related instruction requirement, see page 44.

Journalism

(transfer course guideline)

The University of Oregon offers Bachelor of Arts and Bachelor of Science degrees in Journalism. Southern Oregon University offers Bachelor

of Arts and Bachelor of Science degrees in Communication: Journalism, with concentrations in News-Editorial and Photojournalism.

Students planning to transfer to U of O should consult the U of O catalog for journalism major admission requirements and to determine when to transfer. (This usually is after one year at another college.)

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

Juvenile Corrections

Juvenile corrections workers provide supervision, facilitate in the treatment process and crisis intervention, provide social and life skills training, maintain records and documentation, engage in support services, and monitor and ensure a secure environment.

This one-year certificate program is specifically designed for individuals who want to work directly with juvenile offenders through different agencies in various settings. These agencies may include Oregon Youth Authority (OYA), as well as other public, private, and non-profit organizations. The Juvenile Corrections certificate is designed to be integrated into the Criminal Justice Associate of Applied Science degree or Juvenile Justice Associate of Applied Science degree.

As a statewide cooperative effort among several Oregon community colleges, this program is transferable to the following participating schools: Clackamas Community College, Clatsop Community College, Lane Community College, Linn-Benton Community College, Portland Community College, Southwestern Oregon Community College, and Treasure Valley Community College. In addition, some courses may be applicable as electives toward a two-year degree. Consult with Counseling and Career Services or a Chemeketa advisor on course transferability.

Program outcomes

Students completing the certificate will
- Identify the distinct philosophical differences between adjudicating adolescents in the juvenile system and processing adults through the criminal justice system.
- Describe the social, legal, and rehabilitative strategies for adolescents who are adjudicated to the juvenile justice system.

Getting started

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

CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition+	3
	or	
COM051	Communication Skills 1+	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120. Failure to be assessed may delay your entry into program classes.

Juvenile Corrections Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program are books, $700; student services fee, $24.50; universal fee, $294. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion degree by successfully completing these 49 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Juvenile Corrections general education requirements (28 credit hours):		
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH060	Introductory Algebra (or higher)	4
PSY201	Psychology—Biological Emphasis	3
PSY202	Psychology—Cognitive Emphasis	3
PSY203	Psychology—Clinical/Social Emphasis	3
PSY237	Life Span Development	3
PSY239	Introduction to Abnormal Behavior	3
SOC206	Gen Sociology—Social Problems	3
WR121	English Composition—Exposition	3
Juvenile Corrections core requirements (21 credit hours):		
CJ101	Criminology	3
CJ203	Crisis Intervention Seminar	3
CJ206	Crime and Delinquency	3
CJ230	Introduction to Juvenile Corrections	3
CJ232	Corrections Casework	3
CJ235	Youth, Drugs, and Corrections	3
CJ280C	Cooperative Work Experience	3

+Meets related instruction requirement, see page 44.

Juvenile Justice

The Juvenile Justice program prepares students to work in county and state custody facilities, probationary and parole services, alternative education and treatment services, residential and group home care facilities, and juvenile court diversion services. Overall, the program provides students with a strong theoretical, historical, professional, and technical base in the juvenile justice system. The program includes knowledge and skills in criminology, crime and delinquency, juvenile corrections, youth addiction, and corrections casework, in addition to a solid foundation in psychological principles.

The Juvenile Justice Associate of Applied Science (AAS) degree is a direct pathway from the statewide Juvenile Corrections Certificate of Completion (49 credits) in that all the courses can be applied to the degree.

Program outcomes

Students completing the AAS will:
- Identify the distinct philosophical differences between adjudicating adolescents in the juvenile system and processing adults through the criminal justice system.
- Describe the social, legal, and rehabilitative strategies for adolescents who are adjudicated to the juvenile justice system.
- Identify the waiver decision making process for juveniles who will be tried in adult court.
- Identify the constitutional protections and applicable amendments for adhering to juvenile rights.

Getting started

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

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
MTH020	Basic Mathematics	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition+	3
	or	
COM051	Communication Skills 1+	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120. Failure to be assessed may delay your entry into program classes.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the CWE instructor/coordinator, you may enroll in CJ280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,200; class fees, $20; student services fee, $46.50; universal fee, $558. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
CJ101	Criminology	3
CJ206	Crime and Delinquency	3
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
PSY201	General Psychology—Biological Emphasis	3
Term 2		
CJ230	Introduction to Juvenile Corrections	3
CJ235	Youth, Drugs and Corrections	3
PSY202	General Psychology—Cognitive Emphasis	3
PSY237	Life Span Development	3
WR121	English Composition—Exposition	3
Term 3		
CJ203	Crisis Intervention Seminar	3
CJ232	Introduction to Corrections Casework	3
CJ280C	Cooperative Work Experience	3
PSY203	General Psychology—Clinical/Social Emphasis	3
PSY239	Introduction to Abnormal Behavior	3
SOC206	General Sociology—Social Problems	3
Term 4		
HS150	Personal Effectiveness for Human Service Workers	3
SP111	Fundamentals of Public Speaking (or higher)	3
WR122	English Composition—Logic and Style	3
	Humanities/Fine Arts elective	3
	Juvenile Justice elective* (CJ280C recommended)	3
Term 5		
HPE295	Health and Fitness for Life	3
	or	
HE250	Personal Health	3
HS155	Interviewing Theory and Techniques	3
WR123	English Composition—Research Writing	3
	or	
WR227	Technical Writing	3
	Humanities/Fine Arts elective	3
	Juvenile Justice elective* (CJ280C recommended)	3

Term 6		
HS217	Group Counseling Skills	3
PHL203	Ethics	3
	or	
HS103	Ethics for Human Service Workers	3
	or	
CJ170	Juvenile Justice Ethics and Boundaries	3
	Humanities/Fine Arts elective	3
	Juvenile Justice elective*	3
	Juvenile Justice elective* (CJ280C recommended)	3

*Juvenile Justice electives:

CA121	Keyboarding	3
CJ280C	Cooperative Work Experience	3
HDF260	Child Abuse and Neglect	3
HE262	Cardiopulmonary Resuscitation Instruction	2
PE185PA	Personal Defense—Beginning	1
SOC204	General Sociology—Introduction	3
SOC205	General Sociology—Institutions	3
SP115	Introduction to Intercultural Communication	3
SPN111	Beginning Spanish Conversation—Term 1	3
SPN112	Beginning Spanish Conversation—Term 2	3
SPN113	Beginning Spanish Conversation—Term 3	3

Machining Technology

Machining Technology offers training in using computer-controllers on CNC machine tools, manual machining tools, and computers as tools in machine tool control inspection (CMM), mechanical design, and engineering.

The first year of study emphasizes basic machining skills as they relate to computer-numerical control (CNC) as well as manual machining, basic measuring and inspection, and print reading. Students completing the first year may find employment as entry-level machine tool operators.

Second-year classes build on previously-learned knowledge and skills and concentrate on further enhancement of CNC and manual skills In programming and machine tool set-ups. Students will use extended time in machining labs to solve increasingly complex "real world" programming and fixturing issues. After successful completion, graduates may find employment in the fields of machining/programming and engineering technology.

If you are interested in manufacturing, machining, manual, or CNC, contact Sheldon Schnider (sschnide@chemeketa.edu, 503.589.7875).

Program outcomes

Students completing the CAM Fundamentals Certificate will:
- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.
- Set up and operate Computer Numerical Controlled (CNC) machine tools to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing the CNC Operator Certificate will:
- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.
- Set up and operate Computer Numerical Controlled (CNC) machine tools and program CNC machine tools at the machine control level to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

Students completing the Manual Machine Operator Certificate will:
- Use effective communication skills as a team member.
- Apply basic and precision industry standard measurement practices.

- Set up and operate manual machine tools to produce accurately sized parts.
- Apply cutting speeds and feeds to materials used in machining and manufacturing.

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

Getting started

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

CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
SSP051	Studying for College	3
	or	
RD090	College Textbook Reading	3
WR049	Basic Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5210. Failure to be assessed may delay your entry into program classes.

Computer-Aided Manufacturing (CAM) Fundamentals Certificate of Completion

The CAM Fundamentals Certificate offers training in the knowledge and skills used by employees in manufacturing and related occupations. The certificate includes courses in manufacturing materials, interpretation of engineering drawings, measuring practices, bench and layout work, and basic setup and operation of computer controlled mills and lathes. This certificate may qualify graduates for an entry position in a variety of manufacturing-related jobs.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $569; class fees, $162; student services fee, $14.50; universal fee, $174; equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 29 credits with a grade of "C" or better in all courses.

Term 1

CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM110A	CNC/Manual Fundamentals	4
CAM111	Industrial Safety Seminar	1
CAM130	CNC Machine Setup/Operation	4
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5

Term 2

CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC—Lab	1
CAM140	Metallurgy for Manufacturing	2
COM051	Communication Skills 1+	3
MTH053	Introduction to Trigonometry and Geometry	3
PSY104	Psychology in the Workplace+	3

Computer Numerically Controlled (CNC) Operator Certificate of Completion

This CNC Operator Certificate builds on the training provided in the CAM Fundamentals certificate with an emphasis on the setup and operation of computer-controlled machines. The certificate includes courses in manual programming ("G code") for both mills and lathes. Graduates of this certificate may qualify to work as a CNC machine tool operator or in a variety of manufacturing-related jobs.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $719; class fees, $234; student services fee, $22; universal fee, $264; equipment and supplies, $200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 44 credits with a grade of "C" or better in all courses.

Term 1

CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM110A	CNC/Manual Fundamentals	4
CAM111	Industrial Safety Seminar	1
CAM130	CNC Machine Setup/Operation	4
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Math 1	4
	or	
MTH111	College Algebra (or higher)	5

Term 2

CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC—Lab	1
CAM140	Metallurgy for Manufacturing	2
CAM160	Programming CNC Mills	4
MTH053	Introduction to Trigonometry and Geometry	3
PSY104	Psychology in the Workplace+	3

Term 3

CAM150	Cutting Tools and Materials	3
CAM190	Programming CNC Lathes	4
CAM280D	Cooperative Work Experience	4
COM051	Communication Skills 1+	3

Manual Machine Operator Certificate of Completion

The Manual Machine Operator certificate builds on the training provided in the CAM Fundamentals certificate with an emphasis on machining skills related to the setup and operation of manual machine

tools such as drills, mills, lathes, saws, and grinders. Graduates may qualify to work as a machine tool operator, entry-level machinist, or in a variety of manufacturing-related jobs.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $654; class fees, $234; student services fee, $22; universal fee, $264; equipment and supplies, $200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 44 credits with a grade of "C" or better in all courses.

Term1

CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM110A	CNC/Manual Fundamentals	4
CAM111	Industrial Safety Seminar	1
CAM130	CNC Machine Setup/Operation	4
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Mathematics 1	4
	or	
MTH111	College Algebra (or higher)	5

Term 2

CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC—Lab	1
CAM120	CNC/Manual Milling	4
CAM140	Metallurgy for Manufacturing	2
MTH053	Introduction to Trigonometry and Geometry	3
PSY104	Psychology in the Workplace+	3

Term 3

CAM121A	CNC/Manual Lathe	4
CAM150	Cutting Tools and Materials	3
CAM280D	Cooperative Work Experience	4
COM051	Communication Skills 1+	3

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

The Computer-Aided Design/Computer-Aided Manufacturing (CAD/CAM) program offers training in using computers as tools in engineering, drafting, machine tool control inspection (the CMM), and industrial mechanical design.

The first year of study emphasizes machining skills as they relate to Computer Numerical Control machining. Students completing the first year may find employment as entry-level machine tool operators and CNC programmers.

Second-year classes concentrate on integrating mechanical design and computer-aided manufacturing programming and advanced manual skills. Students apply knowledge and skills to solve increasingly complex fixturing and machining problems. After successful completion, graduates may find employment in the fields of engineering technology and manufacturing operations. Graduates will use computers on the job for drafting, design and programming, and operating CNC machine tools.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,388; class fees, $321; student services fee, $45.50; universal fee, $546; tools and supplies, $4,200. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 91 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
CAM100	Blueprint Reading and Sketching	1
CAM105	Precision Measurement	2
CAM110A	CNC/Manual Fundamentals	4
CAM111	Industrial Safety Seminar	1
CAM130	CNC Machine Setup/Operation	4
DRF130	CAD 1	3
MTH052	Introduction to Algebra and Geometry+	3
	or	
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
Term 2		
CAM115	Geometric Dimensioning/Tolerancing	2
CAM116	Geometric Dimensioning/Tolerancing for CNC—Lab	1
CAM120	CNC/Manual Milling	4
CAM140	Metallurgy for Manufacturing	2
CAM160	Programming CNC Mills	4
MTH053	Introduction to Trigonometry with Geometry	3
	or	
MTH082	Technical Mathematics 2	4
	or	
MTH112	Trigonometry (or higher)	5
Term 3		
CAM062	Practical Applications 2	2
	or	
CAM280B	Cooperative Work Experience	2
CAM121A	CNC/Manual Lathe	4
CAM150	Cutting Tools and Materials	3
CAM190	Programming CNC Lathes	4
COM051	Communications Skills 1+	3
	or	
WR121	English Composition—Exposition+ (or higher)	3
Term 4		
CAM210A	Production/Assembly Control Methods	2
CAM210B	Production/Assembly Control Methods—Lab	2
CAM230	CAM Applications/Mills	3
DRF210	Parametric Design	3
PH121	Applied Physics	4
	or	
PH201	General Physics (or higher)	4
Term 5		
CAM220A	Advanced Lathe Processes	2
CAM220B	Advanced Lathe Processes—Lab	2
CAM260	CAM Applications/Lathes	3
DRF260	Tool Design	3
PSY104	Psychology in the Workplace+	3
Term 6		
CAM290A	CAD/CAM Integrations	8
COM053	Technical Report Writing	3
	or	
WR227	Technical Writing	3
DRF262	Machine Design	3

+Meets related instruction requirement, see page 44.

Management

management.chemeketa.edu

See also Accounting and Business Administration.

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

You may select individual courses to meet your needs, or you may work toward an Associate of Applied Science degree.

Program outcomes

Students completing the AAS will:

- Explain how the strategic plan of business interrelates with functions in order to fulfill the mission and purpose of an organization.
- Work as a team member and/or leader using effective communication strategies including writing, listening, speaking, negotiating, and persuading skills.
- Use technology to produce, research, and interpret financial, marketing, and business reports.
- Identify the legal, ethical, and/or financial consequences of decisions to business organizations.

Getting started

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

BT085	Business English 2	3
CA121	Keyboarding	3
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5114. Failure to be assessed may delay your entry into program classes.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. With the approval of the CWE instructor/coordinator, you may enroll in BA280B-L Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,250; class fees, $200; student services fee, $46.50; universal fee, $558; equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 93 credit hours with a grade of "C" or better in all Business Administration (BA) courses:

Course	Title	Credit Hours
Term 1		
BA101	Introduction to Business	4
BA211	Financial Accounting 1*	4
CIS125E	Excel-Workbooks	4
MTH062	Business Applications Using Mathematics+ (or higher)	4

Term 2		
BA202	Personal Effectiveness	3
BA212	Financial Accounting 2	4
BA214	Business Communications+**	3
CIS125A	Micro Database Software-—Access	3
MTH070	Elementary Algebra (or higher)	4
Term 3		
BA203	Organizational Behavior	3
BA206	Business Management Principles	3
BA213	Managerial Accounting	4
PSY104	Psychology in the Workplace+	3
	or	
SOC204	General Sociology—Introduction+	3
	Business elective***	2
Term 4		
BA223	Principles of Marketing	3
BA226	Business Law 1	3
EC200	Introduction to Economics (or higher)	3
SP111	Fundamentals of Public Speaking	3
	Business elective***	3
Term 5		
BA222	Financial Management	3
BA227	Business Law 2	3
BA238	Sales and Persuasion	3
BA277	Business Ethics	3
WR227	Technical Writing	3
Term 6		
BA224	Human Resource Management	3
	Business elective***(BA280F recommended)	6
	Computer Science elective****	3
	Humanities/Fine Arts elective	3

+Meets related instruction requirement, see page 44.

*MTH062 or higher math placement recommended for BA211.

**Placement in math and English determined by testing. Lower division collegiate classes may be substituted.

***Business electives: Choose BA or EC courses at the 200 level or above, or BA173, CA118 series, CS135A, CIS178I, CIS178W.

****Choose from CIS133VB, CIS133C, CS133U, CA201D.

Mathematics

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Mathematics are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Oregon State University offers degrees in Mathematical Sciences and Mathematics.

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

Medical Office Assisting

medicaloffice.chemeketa.edu

This program prepares you for a wide range of duties in medical offices. Administrative responsibilities may include scheduling and receiving patients, keeping medical records, handling telephone calls and correspondence, and purchasing and maintaining supplies and equipment. Medical office assistants may be responsible for administrative functions and processing insurance claims, accounts, fees, and collections. Students should contact the advisors of the Health Services Management

program as some classes taken in the program may apply toward the Associate of Applied Science degree.

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

The program offers clinical experience as well as theory and laboratory courses. Students must complete terms 1 and 2 in all HM, BI, and MED classes to be eligible for practicum.

Program outcomes

Students completing the certificate will:

- Use medical business procedures to link patients to identified health care systems.
- 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 in order to maintain and upgrade the delivery of health care.
- Comply with the professional ethics policies and procedures related to medical and legal matters, including confidentiality, medical records management, release of information, patient rights, workplace rights, and informal consents in health care facilities.

Getting started

This is a fall term entry program with special admission requirements and enrollment limits. The first step to entering this program is to take part in an assessment process, which includes taking the college's free placement test and meeting with Counseling and Career Services. You may need to complete pre-program courses. Then, your advisor will help you develop an individualized program of study, which may include one or more of the following:

AH115	Healthcare Career Success Strategies	2
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra+ (or higher)	4
RD090	College Textbook Reading (or higher)	3
WR115	Introduction to Composition+ (or higher)	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.3994, or program staff at 503.399.5275. Failure to be assessed may delay your entry into program classes.

Medical Office Assisting Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,737; class fees, $273; student services fee, $26; universal fee, $312; equipment and supplies, $290; physical examination, $185; immunizations, $250; travel to practicum, $275; uniform, $200. 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.

Students are required to submit a copy of their current CPR card and completed physical exam and immunization forms prior to fall registration. Students must also pass a criminal background check and possible drug test.

You may earn a Certificate of Completion by successfully completing the 52 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BI171	Introduction to Human Anatomy & Physiology 1	3
	or	
BI231	Human Anatomy and Physiology	4
HM101	Medical Law and Ethics	3
HM105	Professional Development A	1
	or	
FE205B	Résumés and Job Search Correspondence	1
HM110	Health Information Systems Procedures 1	4
HM120	Medical Terminology 1	3
MED124	Medical Assisting, Basic Procedures*	4
Term 2		
BI172	Introduction to Human Anatomy & Physiology 2	3
	or	
BI232	Human Anatomy and Physiology	4
HM106	Professional Development B	1
	or	
FE205C	Interviewing for Success	1
HM112	Health Information Systems Procedures 2	4
HM114	CPT-IV Coding/Reimbursement	3
HM121	Medical Terminology 2	3
MED125	Medical Assisting, Advanced Procedures*	5
Term 3		
HM115	ICD-9-CM Coding/Reimbursement	3
HM122	Medical Terminology 3/Human Diseases	3
MED130	Medical Assisting Practice	5
MED131	Medical Assisting Seminar	1
PSY101	Psychology of Human Relations+ (or higher)	3

+Meets related instruction requirement, see page 44.

*To be taught in a Skills Lab format.

Network Technology

electronics.chemeketa.edu

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

The Networking Essentials Certificate of Completion program is wholly contained within the Network Technology associate degree and may be used as a stepping stone in the path to a network technician or computer support specialist position, then to the Network Technology degrees, or for direct entry into this field. Graduates of this program will install, configure, and support an organization's computer network, and Internet system or a segment of a network system; maintain network hardware and software; monitor network to ensure availability to all system users; and perform necessary maintenance to support network availability.

Students entering these programs must have an Intel-compatible computer (Pentium III or better), an Internet connection, and be computer literate (type approximately 20 wpm, be familiar with the Windows operating system, word processing and spreadsheets).

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work you do relating to your program. For more information, look under Cooperative Work Experience in the catalog index.

If you are already employed in the field or have a degree, some of your education and training may transfer into this program. Contact the program chair at 503.399.6506 for an appointment to assess your education/training.

Some high schools that have been certified by Chemeketa can offer selected courses to students while they are in high school. Check with

your high school counselor or contact the Mid-Willamette Education Consortium at 503.399.7746 to see if your high school is certified.

For a tour of the Network Technology laboratory, visit educationwithafuture.com.

This is a fall term entry program and has special admission procedures and requirements. For information, contact the Enrollment Services (Admissions) Office at 503.399.5006.

Program outcomes

Students completing the certificate will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, coworkers, and customers.
- Identify and solve technology problems related to computer and network hardware or software.
- Read and interpret written materials, including manuals, technical bulletins, diagrams, schematics, and procedures to design, maintain, install, and repair computer networks.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and coworkers.
- Apply professional and environmental safety practices associated with the workplace.

Students completing the AAS will:

- Use communication, interpersonal, and leadership skills to establish and maintain collaborative relationships with supervisors, coworkers, and customers.
- Identify and solve technology problems related to computer and network hardware or software.
- Perform test procedures and use equipment and software to diagnose, install, maintain, and/or repair computer and network systems.
- Read and interpret written materials, including manuals, technical bulletins, diagrams, schematics, and procedures to design, maintain, install, and repair computer networks.
- Use standard terminology and clarifying language to communicate orally and in writing with customers, suppliers, supervisors, and coworkers.
- Practice skills and attitudes—individually and as a member of a team—that reflect quality management procedures and ethical behavior in the workplace.
- Apply professional and environmental safety practices associated with the workplace.

Getting started

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

CA121	Keyboarding	3
CIS101	Introduction to Microcomputer Applications	3
MTH070	Elementary Algebra	4
RD090	College Textbook Reading	3
WR090	Fundamentals of Writing	4

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or the program chair at 503.399.6506. Failure to be assessed may delay your entry into program classes.

Networking Essentials Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,100; class fees, $250; student services fee, $20.50; universal fee, $246; Intel-compatible computer, $990; equipment and supplies, $150. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn certificate of completion by successfully completing the 41 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT100	Electronics Fundamentals for Non-Majors	4
NET123	Computer Operating Systems	4
NET151	Networking Essentials	5
NET152	Network Router Configurations	5
Term 2		
CIS145	Microcomputer Hardware	4
NET153	LANs and Internetwork Design	5
Term 3		
CIS179	Introduction to Client-Server Networks	4
NET154	WAN Design	5
NET171	Fundamentals of Wireless LANs	5

Network Technology Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,080; class fees, $410; student services fee, $53.50; universal fee, $642; Intel-compatible computer, $990; equipment and supplies, $230. 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 107 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
ELT100	Electronics Fundamentals for Non-Majors	4
MTH081	Technical Mathematics 1+	4
	or	
MTH111	College Algebra+ (or higher)	5
NET123	Computer Operating Systems	4
NET151	Networking Essentials	5
NET152	Network Router Configurations	5
Term 2		
CIS145	Microcomputer Hardware	4
CIS178I	Introduction to the Internet/World-Wide Web	3
	or	
CIS178W	Fundamentals of Web Design	5
NET153	LANs and Internetwork Design	5
SP111	Fundamentals of Public Speaking	3
WR121	English Composition—Exposition+	3
Term 3		
CIS140U	Unix/Linux	3
	or	
CIS140S	Solaris-UNIX Operating Systems	5
CIS179	Introduction to Client-Server Networks	4
NET154	WAN Design	5
NET171	Fundamentals of Wireless LANs	5
Term 4		
CIS288	Advanced Client-Server Networks	4
NET251	Advanced Routing Configuration	5
NET252	Remote-Access Networks	5
NET271	IP Telephony	4
WR227	Technical Writing	3

Term 5
FE205B   Résumés and Job Search Correspondence 1
NET253   Multi-Layer Switching 5
NET261   Fundamentals of Network Security 5
PSY104   Psychology in the Workplace+...3

Term 6
CIS286   Web Server Configuration and Management 4
CIS289   Advanced Network Application Support..........................4
            or
NET289   Advanced Network Support 4
NET254   Network Troubleshooting 5
            Network Technology elective*..2
+Meets related instruction requirement, see page 44.

*Network Technology electives:
CIS125A   Micro Database Software-Access 3
CIS240U   Advanced Unix/Linux 4
CS162   Computer Science 2...4
CS260   Computer Science 3: Data Structures..............................4
CS275   Database Management...4
ELT253   Microprocessor Systems 5
ELT280   Cooperative Work Experience
            (see program chair) .... max. 6
            Continuing Education Units
            (see program chair) .... max. 3

Nursing

nursing.chemeketa.edu

Chemeketa offers a career ladder program for those who want to become licensed practical nurses or registered nurses.

The program is approved by the Oregon State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (NLNAC). You may contact NLNAC information about the program's accreditation status, tuition, fees, and length. The address for NLNAC is 61 Broadway, New York, NY 10006. The telephone number is 212.989.9393. The Web address is www.nlnac.org.

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's nursing program, please contact Counseling and Career Services for details at 503.399.5021. You should also make early contact with an advisor at the institution to which you plan to transfer.

Program outcomes

Students completing the certificate will:
- Use a holistic approach in applying the nursing process at the practical nurse level when providing care for individuals and families across the lifespan.
- Use established guidelines to reinforce the teaching of health promotion concepts across the lifespan to groups in selected community settings.
- Communicate effectively with individual patients, families, and members of the healthcare team.
- Organize and prioritize components of care at the practical nurse level for two to four patients.
- Make decisions regarding patient care based on professional values at the practical nurse level while complying with identified legal/ethical standards (scope of practice regulations established by boards of nursing and Code of Practice guidelines established by the American Nurses Association).

Students completing the AAS will:
- Use a holistic approach to develop, implement, and evaluate plans of care for groups of patients that apply standard nursing care plans to meet individual needs.

- Communicate effectively and collaboratively in a self-directed manner with patients, families, and members of the health-care team.
- Use first-level management skills in providing care for individuals and groups of patients.
- Make decisions regarding patient care based on professional values and responsibilities at the associate degree nurse level while complying with identified legal/ethical standards (scope of practice regulations established by boards of nursing and Code of Practice guidelines established by the American Nurses Association).

The following three courses are required for application to the Nursing program for 2008-2009:

1. RD115 Academic Thinking and Reading (or higher) or placement in RD120 based upon results of Chemeketa's Reading Placement Test.
2. BI231 Anatomy and Physiology (completed within seven years).
3. MTH095 Intermediate Algebra (or higher). This requirement cannot be waived by a placement test score.

These courses must be completed with a grade of "C" or higher.

Note: Chemistry is a prerequisite for BI231. One term of accelerated college chemistry with a grade of "C" or better within the last seven years; CH110; successful completion of the Chemistry Proficiency Exam; completion of CH104 and concurrent enrollment in CH105; or completion of CH121 and concurrent enrollment in CH122 are all acceptable for meeting this prerequisite. A full sequence of chemistry is recommended for students planning to pursue a four-year degree.

In addition to the three prerequisite courses, most pre-nursing students complete the majority of general education and science courses required for the nursing program in order to enhance their chance of admission. Specific entry requirements are outlined in a nursing application packet that you may obtain from Chemeketa's Web site, www.chemeketa.edu. Enrollment in the program is limited, and there is an early deadline for applications. We recommend that you contact Counseling and Career Services at 503.399.5120 for details if you are considering the nursing program. Most students spend one or more years in a pre-nursing program to prepare for applying to the nursing program.

The nursing curriculum is designed to prepare you to apply for licensure at the following levels:

Practical Nursing Certificate of Completion

A practical nurse is a member of a nursing or health care team and gives care to patients of all ages under the direction of registered nurses and/or licensed physicians and dentists.

In addition to tuition, estimated costs for students who complete the entire Level I program listed below are books, $1,700; class fees, $308; student services fee, $25; universal fee, $300; clinical fee, $1,005; equipment and supplies, $475; criminal background check fee, $25; testing fee, $367. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a certificate by successfully completing the required 50 credit hours with a grade of "C" or better in all courses. You must earn grades of "C" or better in all required courses in order to progress to the next term. Completion of this level qualifies you to apply to take the National Council Licensure Exam (NCLEX-PN) to become a licensed practical nurse (LPN).

Course	Title	Credit Hours
Term 1		
BI232	Human Anatomy and Physiology 4
NUR106	Fundamentals of Nursing..9
PSY201	General Psychology—Biological Emphasis+....................3

Term 2

BI233	Human Anatomy and Physiology	4
NUR108	Care of Acutely Ill Patients and Developing Families 1	10
PSY237	Life Span Development	3

Term 3

BI234	Microbiology	4
NUR109	Care of Acutely Ill Patients and Developing Families 2	10
WR121	English Composition—Exposition+	3

+Meets related instruction requirement, see page 44.

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

Nursing Associate of Applied Science

You may earn an associate's degree by successfully completing the required 94 credit hours with a grade of "C" or better in all courses. You must earn grades of "C" or better in all required courses in order to progress to the next term. An associate degree in nursing qualifies you to apply to take the National Council Licensure Exam (NCLEX-RN) to become a registered nurse (RN).

RNs apply knowledge drawn from a broad, in-depth education in the social and physical sciences to assess, plan, order, give, delegate, teach, and supervise care that promotes a patient's optimum health and independence.

An RN guides other team members with less education and/or experience, evaluates needs for patient instruction, plans and participates in health teaching, and applies mental health principles to nursing care and function. RNs must also assume responsibility for their own professional development.

In addition to tuition, estimated costs for students in Level II listed below are books, $650; class fees, $288; student services fee, $22; universal fee, $264; clinical fee, $1,005; equipment and supplies, $306; licensure testing fee, $360. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

Course	Title	Credit Hours

Term 4

CIS101	Introduction to Microcomputer Applications (or CIS120 or higher CIS course with CIS101 as prerequisite)	3
NUR206	Care of Patients with Complex Health Problems	11

Term 5

NUR208	Care of Patients in Situations of Crisis and in Community-Based Settings	10
	Social Science elective*	3
	Sociology elective	3

Term 6

NUR209	Preparation for Entry into Practice	8
	General Education elective	3
	Humanities/Fine Arts elective**	3
	or	
	Communications elective**	3

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

+Meets related instruction requirement, see page 44.

*Social Science electives:

ATH101	Human Evolution (or higher)	3
CLA201	Introduction to Chicano/Latino Studies 1: Historical Overview (or higher)	4
EC200	Introduction to Economics (or higher)	3
GEG105	Physical Geography (or higher)	4
HDF222	Family Relationships (or higher)	3
HST110	History of World Civilization (or higher)	3
PS201	American Government (or higher)	3
PSY101	Psychology of Human Relations (or higher)	3
SOC204	General Sociology—Introduction (or higher)	3
WS101	Introduction to Women's Studies: Women in American Society (or higher)	3

**Humanities/Fine Arts/Communications electives:

ART101	Understanding Art (or higher)	3
ASL111	First Year American Sign Language, Term 1 (or higher)	4
BA214	Business Communications	3
ENG104	Introduction to Fiction (or higher)	3
FA255	Understanding Movies: Film Styles (or higher)	4
FR101	First Year French, Term 1 (or higher)	4
HUM251	Concept of Self: Classical Greece (or higher)	3
JNL216	Newswriting (or higher)	3
JPN101	First Year Japanese, Term 1 (or higher)	4
MUS105	Music Appreciation: Introduction to Rock Music (or higher)	3
PHL201	Introduction to Philosophy	3
RD115	Academic Thinking and Reading (or higher)	3
REL201	Asia Religions (or higher)	3
RUS101	First Year Russian, Term 1 (or higher)	4
SP100	Introduction to Communication (or higher)	3
SPN101	First Year Spanish, Term 1 (or higher)	4
TA110	Introduction to Theater (or higher)	3
WR115	Introduction to Composition (or higher)	3

Specialized Courses

The college periodically offers specialized courses to help registered nurses, licensed practical nurses, and other health-care personnel keep abreast of current knowledge and new developments in nursing. A non-credit basic nursing assistant course approved by the Oregon State Board of Nursing is also available. For more information about courses, contact the nursing office, 503.399.5058.

You may be interested in our Cooperative Work Experience program, which allows you to earn college credit for work related to your program. With the approval of the program chair, you may enroll in NUR280B-D Cooperative Work Experience and earn college credit hours. For more information, look under Cooperative Work Experience in the catalog index.

Nursing

(transfer course guideline)

Chemeketa is ready to help you plan your pre-nursing courses if you plan to transfer to a school of nursing that grants baccalaureate degrees. Chemeketa offers general education courses that apply to a Bachelor of Science degree program.

If you wish to transfer to a school of nursing that grants baccalaureate degrees after completing Chemeketa's Nursing program, please contact Counseling and Career Services 503.399.5120) for details. The college has established inter-institutional agreements with Oregon Health Sciences University and Linfield College and a partnership agreement with University of Wisconsin—Green Bay. There are various other possibilities for students as well.

Admission to nursing programs is competitive. As a student, you are responsible for learning the departmental requirements of the school to which you plan to transfer. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in an academic area.

Nutrition and Food Management

Dietetics

Oregon State University (OSU) offers a Bachelor of Science degree in Nutrition and Food Management with a Dietetics Option. The Dietetics Option meets the American Dietetics Association academic and accreditation requirements for students interested in becoming Registered Dietitians. It is essential that you work closely with OSU's program advisor or Chemeketa's Dietetics program advisor to ensure that you choose the appropriate courses. To see a copy of the specific transfer guidelines, visit www.htmprograms.com and click on "Academic Programs."

Please contact the Hospitality and Tourism Management program at 503.399.5186 for further advising. For OSU advice about undergraduate course requirements, students can contact the OSU College of Health and Human Sciences Student Support and Advising Office at 541.737.8900. A program guideline is available at www.htmprograms.com.

Occupational Skills Training

ost.chemeketa.edu

The Occupational Skills Training (OST) program offers students with a career goal in mind the opportunity to earn college credit for worksite-based training at approved community training sites throughout the state. When you enroll in this short-term program (up to 44 credits), you will receive hands-on training at a worksite based on a curriculum personalized for your chosen occupation and your individual abilities, skills, and interests. A suitable training site and curriculum will be determined jointly with you, your sponsoring agency (if applicable), and a Skills Training Coordinator at Chemeketa. The program is offered on an open entry/open exit basis so you may start the program any time during the year.

A variety of occupational areas may be appropriate for the Occupational Skills Training program. Related classroom instruction may be included in the program if deemed part of the approved training plan

Program outcomes

Students completing the certificate will:
- Demonstrate specific work habits required for employment.
- Perform job skills based on industry standards.

Costs vary depending on credits and related classes taken. Books and supplies average $250 per term if related courses are taken.

Some sites may receive an additional $336 per term trainer incentive in addition to the above costs if approved and paid by the sponsoring agency (if applicable).

You may earn a Certificate of Completion by successfully completing up to 44 credits of ST050A-P Occupational Skills Training and related prescribed courses based upon the approved length of your training plan. Up to 12 credits may be applied toward the Associate of Arts Oregon Transfer degree. Up to 36 credits may be applied toward the Associate of

General Studies degree, and variable credits may be applied toward the Associate of Applied Science degree as determined by each career and technical education program area.

Non-credit options (such as On-the-Job Evaluation, see page 40) are also available to evaluate potential sites as well as student skills and career potential.

For an appointment or a schedule of OST orientations, contact an Occupational Skills Training Coordinator in Building 20 on the Salem Campus, 503.399.5028.

Paraeducator

paraeducator.chemeketa.edu

The Paraeducator Certificate program offers the training necessary to become an Instructional Assistant or, with additional coursework, a licensed teacher in public schools. This 51-credit program is endorsed by the Oregon Department of Education as evidence of having met the requirements of the Elementary and Secondary Education Act (No Child Left Behind) for instructional assistants. Students who complete the certificate may then work toward an Associate of General Studies degree (see requirements on page 52). Completion of this degree enables you to transfer to Portland State University or Oregon State University, where you may complete a Bachelor of General Studies/Liberal Arts degree and then apply to a postgraduate teacher licensing program. Students interested in attending Western Oregon University, George Fox University, or Concordia University should contact Counseling and Career Services 503.399.5120 or Education Program staff for advising.

The Paraeducator Certificate is a statewide program. Students not residing in the Chemeketa district may complete some or all of the certificate requirements at their local community college; you may transfer your local coursework to Chemeketa and complete the remaining certificate requirements through our distance education program.

Students pursuing the Paraeducator Certificate take a core of required courses including both general education and education-specific courses. The general education component assures that the candidate has a foundation of basic skills in reading, writing, mathematics, and technology. The Education component offers instruction in basic teaching strategies, human relations, communication, and non-instructional support skills. Students also participate in a worksite practicum.

Program outcomes

Students completing the certificate will:
- Demonstrate appropriate strategies and techniques to provide instructional support to students of diverse populations.
- Demonstrate attitudes and behaviors that are appropriate in meeting the needs of diverse populations.
- Apply best practices in classroom management to optimize the potential for student learning.
- Apply technology to support teaching, learning and communication.

Getting started

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

CIS101 Introduction to Microcomputer Applications..........................3
MTH060 Introductory Algebra 4
RD090 College Textbook Reading 3
WR115 Introduction to Composition... 3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5048. Failure to be assessed may delay your entry into program classes.

Paraeducator Certificate of Completion

In addition to tuition, estimated costs for students who complete the certificate program listed below are books, $1043; class fees, $241; student services fee, $25.50; universal fee, $306; measles vaccine, $10; criminal records check, $54. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

The paraeducator certificate is awarded upon successful completion of the 51 required credit hours listed below. Included in the 51 credit hours are 13 credit hours of general education coursework and 38 credit hours of education program requirements. Please note that if your placement test scores suggest that you have met some or all of the general education requirements, you and your advisor may select electives appropriate to your career goals to reach the 51 credit certificate requirement. Students should consult with the paraeducator certificate advisor, Malia Stevens, (503.399.2694 or malia@chemeketa.edu) for approval before enrolling in elective classes.

You may earn a Certificate of Completion by successfully completing these 51 required credit hours with a grade of "C" or better in all education courses:

Paraeducator general education requirements (13 credit hours):

Course	Title	Credit Hours
CIS101	Introduction to Microcomputer Applications (or higher)	.3
MTH060	Introductory Algebra+*	4
RD090	College Textbook Reading*	3
WR115	Introduction to Composition+*	3

Paraeducator core requirements (38 credit hours):

ED100	Introduction to Education	3
ED113	Instructional Strategies for Language Arts	3
ED114	Instructional Strategies for Math and Science	3
ED130	Classroom Management	3
ED131	Instructional Strategies	3
ED169	Overview of Students with Special Needs	3
ED200	Foundations of Education	3
ED229	Learning and Development+	3
ED235	Education Technology	3
ED254	Instructional Strategies for ELL Students	3
ED258	Multicultural Education	3
ED271	Practicum 2	5

*Paraeducator electives:

ED209V1-V4	Advanced Education Practicum	3-6
ED210	Professional Portfolio	3
ED213	Advanced Instructional Techniques in Language Arts	3
ED214	Advanced Instructional Techniques in Math and Science	3
ED256	Bilingual Methodology	3
ED266	Current Issues in Special Education	3
ED269	Educating the Mildly and Severely Disabled	3
ED270	Practicum 1	3

+Meets related instruction requirement, see page 44.

*Students whose Asset/Compass scores indicate a more advanced placement may substitute electives approved by their advisor.

Pharmacy Technician/ Pharmacology

pharmacology.chemeketa.edu

The pharmacy technician/Pharmacology program 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 (AAS) degree in pharmacology.

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 nonprescription 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 healthcare. In addition, students will develop communication skills and essential mathematical concepts related to medication dosing. Students will also participate in workplace experiences.

The intent of the program is to prepare students to take the national certification examination to become Certified Pharmacy Technicians and be employed in a pharmacy setting.

Program outcomes

Students completing the certificate will:
- Organize and maintain patient records and inventory.
- Compound and prepare prescriptions under the direction of a licensed pharmacist.

Students completing the AAS will:
- Prepare prescriptions in specialized pharmaceutical settings.
- Manage patient records and inventory control.

Getting started

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

AH115	Healthcare Career Success Strategies (suggested)	2
CA121A	Keyboarding A (if less than 25 wpm prior to CIS101)	1
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
CIS101	Introduction to Microcomputer Applications	3
HM120	Medical Terminology 1	3
MTH095	Intermediate Algebra (or higher+)	4
RD115	Academic Thinking and Reading (or higher)	3
WR121	English Composition—Exposition+	3

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.5058. Failure to be assessed may delay your entry into program classes.

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

Students are required to submit a copy of their current CPR cards and completed immunization forms prior to fall registration. Students must also pass a criminal background check and possible drug test (pursuant to OAR 855-010-0045). Practicum sites also require student licensure from the Oregon Board of Pharmacy.

Pharmacy Technician Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,322; class fees, $126; student services fee, $25.50; universal fee, $306; equipment and supplies, $60; criminal background check $25; CPR certification, $45; immunizations, $250; examination fee, $129. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn a Certificate of Completion by successfully completing the required 51 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
BI231	Human Anatomy and Physiology	4
HM121	Medical Terminology 2	3
PHM101	Introduction to Pharmacy Technology	1
PHM115	Pharmacy Operations/Management	4
PHM230	Pharmaceutical Drug Classifications	3
PHM231	Pharmacology 1	3
Term 2		
BI232	Human Anatomy and Physiology	4
PHM110	Pharmacy Calculations	3
PHM120	Pharmacy Operations/Laboratory	3
PHM210	Over-the-Counter (OTC) Products	2
PHM232	Pharmacology 2	3
PSY201	General Psychology—Biological Emphasis+	3
Term 3		
BI233	Human Anatomy and Physiology	4
PHM130	Pharmacy Information/Law and Ethics	3
PHM150	Pharmacy Technician Practicum	4
PHM151	Pharmacy Seminar	1
PHM233	Pharmacology 3	3

+Meets related instruction requirement, see page 44.

Pharmacology Associate of Applied Science

In addition to tuition, estimated costs for students who complete second year courses listed below are books, $931; class fees, $108; student services fee, $50.50; universal fee, $606; equipment and supplies, $25; CPR certification, $45. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs. Students are responsible for costs related to travel to practicum locations.

You may earn an Associate of Applied Science degree by successfully completing 101 required credit hours of the two-year pharmacology program (50 credits during the second year after 51 credits of Pharmacy Technician) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 4		
FE205B	Résumés and Job Search Correspondence	1
	or	
HM105	Professional Development A	1
HM210	Introduction to Health Services	3
HM250	Health Services Management 1	3
HS101	Addiction Pharmacology and Physiology	4
PHM205	Pharmacy Specialized Care	3
SP218	Interpersonal Communication	3
Term 5		
HM251	Health Services Management 2	3
HPE295	Health and Fitness for Life	3
PHM215	Sterile Compounding/Cytotoxic Medications	3
PHM220	Multicultural Patient Healthcare	2
PSY237	Life Span Development (or higher)	3
WR227	Technical Writing	3
Term 6		
EC201	Introduction to Microeconomics (or higher)	4
NFM225	Nutrition (or higher)	4
PHM250	Pharmacy Externship	5
	Humanities/Fine Arts elective (200 or higher)	3

Philosophy
(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Philosophy are Oregon State University, Portland State University, University of Oregon, and Western Oregon University.

As a student, you are responsible for learning the program requirements of the school to which you plan to transfer. Consult with our Counseling and Career Services or a Chemeketa advisor. You should also make early contact with an advisor at the institution to which you plan to transfer to learn of any possible changes in a program.

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

Physical Education/ Human Movement Studies
(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physical Education, Human Movement Studies, or Exercise and Movement Science are Eastern Oregon University, Oregon State University, Southern Oregon University, University of Oregon, and Western Oregon University. OSU offers a bachelor's degree in Exercise and Sports Science with options in Athletic Training, Exercise Science, Physical Education Teacher Education, Pre-therapy and Applied Exercise Science. SOU offers options in Athletic Training/Sports Medicine and Health Promotion/Fitness Management. WOU has teaching and non-teaching options. Those students planning to teach Physical Education will need to complete a year of post-baccalaureate work to meet teacher certification at all state system colleges except WOU. Refer to the section on Elementary and Secondary Education in this catalog.

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

Physics

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Physics are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, and University of Oregon.

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

Political Science

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts or Bachelor of Science degrees in Political Science are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

Pre-Engineering

See Engineering.

Pre-Law

(transfer course guideline)

University of Oregon is the only state university in Oregon that has a School of Law. (Lewis and Clark College and Willamette University are the Oregon independent schools which have Schools of Law.) Applicants for law school must have a baccalaureate degree from an accredited college or university. Admission to law schools is highly competitive.

Law schools do not recommend any particular major for pre-legal education. In general, they prefer a liberal undergraduate background to one that is narrowly specialized. Students may pursue an undergraduate major of their choice. The University of Oregon School of Law emphasizes the importance of well-developed skills in writing and communications, and of acquiring the ability to read with understanding, to think logically, and to perform research and analysis competently.

Although not required for admission, University of Oregon recommends the following courses: BA211, 212, 213 Financial Accounting and Managerial Accounting; EC201, 202 Introduction to Microeconomics and Introduction to Macroeconomics; HST201, 202, 203 History of the United States; WR121, 122, 123 English Composition; as well as Philosophy, Psychology and Sociology courses.

Pre-Professional Study

(Medicine, Dentistry, Pharmacy, Veterinary Medicine)

(transfer course guideline)

Oregon Health Sciences University offers a DMD degree in Dentistry and an M.D. degree in Medicine, and Oregon State University offers a DVM in Veterinary Medicine and a PharmD. in Pharmacy.

Because admission into these professional schools is highly competitive, students should plan to transfer to a four-year institution upon completion of the first year at Chemeketa. Students should complete the most rigorous chemistry sequence for which they are qualified, as well as stipulated courses in basic science and general education.

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

Psychology

(transfer course guideline)

Oregon's state universities offering Bachelor of Arts and/or Bachelor of Science degrees in Psychology are Eastern Oregon University, Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University.

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

Retail Management

retail.chemeketa.edu

The Retail Management certificate prepares students for careers in sales and management. The program emphasizes skill development in interpersonal communication; business accounting; marketing; human resource management and supervision; and focuses on professional growth, employment, and advancement opportunities. Employment for these positions is estimated to grow by over 17 percent between 2002 and 2012. This certificate fulfills coursework leading to an Associate of Applied Science degree in Management.

As a statewide cooperative effort this program is also offered by other community colleges including: Clackamas, Lane, Linn-Benton, Oregon Coast, Mt. Hood, and Portland.

Program Outcomes

Students completing this certificate will:

- Use communication skills with individuals and groups in retail settings.
- Apply math and computer skills requisite with industry expectations.
- Evaluate and select marketing and retailing strategies.
- Apply basic accounting theory and practice to a service or retail setting.
- Explain the impact, roles, skills, responsibilities, and accountability of supervisors/managers in managing, leading, and controlling human resources within an organization.

Getting Started

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

CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra	4
RD090	College Textbook Reading	3
WR121	English Composition—Exposition	3

Retail Management Certificate of Completion

In addition to tuition estimated costs for students who complete the program listed below are books/software, $1,005; student services fee, $16.50; universal fee, $198. Please contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 33 credit hours with a grade of "C" or better in all Business Administration courses. Courses may be taken in Salem, at our outreach campuses or centers, or online. The following courses may be taken in any order providing prerequisites are met.

Course	Title	Credit Hours
BA203	Organizational Behavior	3
BA206	Business Management Principles	3
BA211	Financial Accounting 1	4
BA214	Business Communications	3
BA223	Principles of Marketing	3
BA224	Human Resource Management	3
BA249	Retailing*	3
CIS120	Computer Information Science 1	4
	or	
CIS125E	Excel—Workbook	4
MTH062	Business Applications Using Math	4
SP111	Fundamentals of Public Speaking	3
	or	
SP100	Introduction to Communication	3
	or	
SP130	Business and Professional Speaking	3

*Available through other community colleges online.

Small Business Management

The Small Business Management (SBM) program is designed to provide practical skills to owners of small businesses and their partners.

This nine-month course features monthly classes, workshops, and on-site business consultation. The owner's business becomes the textbook and laboratory, achievement of business and family goals is the course assignment, and putting the owner in control of the business is the course objective. Students are enrolled annually, but are allowed to reapply each year.

Classes cover small business taxation, recordkeeping and accounting, marketing and advertising, human resources, and legal considerations. For more information or to be evaluated for enrollment, call 503.399.5088.

Sociology
(transfer course guideline)

Oregon's state universities offering Bachelor of Arts or Bachelor of Science degrees in Sociology are Oregon State University, Portland State University, Southern Oregon University, University of Oregon, and Western Oregon University. Eastern Oregon University offers an Anthropology/Sociology degree with emphasis in Sociology.

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

Speech
(transfer course guideline)

Oregon State University, Portland State University, and Western Oregon University offer Bachelor of Arts and/or Bachelor of Science degrees in Speech or Speech Communications. Oregon State University offers an option in Theatre Arts. Southern Oregon University offers a baccalaureate degree in Communications with options in Human Communications, Mass Media Studies, and Journalism.

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

Speech-Language Pathology Assistant

speechpathology.chemeketa.edu
See also Education.

The Speech-Language Pathology Assistant (SLPA) program is a comprehensive certificate and degree program of both theory and practical experience designed to prepare students to become certified speech language pathology assistants (SLPAs).

An SLPA is a certified support person who works under the supervision of a licensed speech-language pathologist to carry out professional responsibilities. The SLPA carries out 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, or 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 to, listen to, and interact with others. SLPAs are responsible for taking and tracking data, and following the direction of others while working independently to deliver therapy services to children and adults.

The SLPA program will heavily assess communication skills in the areas of speaking and writing. Students who are ESOL speakers must have a satisfactory TOEFL score or ESOL level. Students applying to the SLPA program will be required to: communicate clearly in English with clear articulation skills, use writing skills to take data, communicate clearly in chart notes, and use written discourse in taking descriptive therapy data and dialogue.

In order to be employed as a Certified Speech-Language Pathology Assistant, one must hold current Certification as a Speech-Language Pathology Assistant with the Oregon Board of Examiners for Speech

Pathology and Audiology. To be eligible to apply for certification, an applicant must submit transcripts showing: (a) 45 quarter hours or 30 semester hours of speech-language pathology technical coursework; (b) 45 quarter hours or 30 semester hours of general education credit; (c) written evidence of 100 clinical interaction hours. These hours are collected during the practicum coursework in the SLPA program.

For more information, contact the Oregon State Board of Examiners for Speech Pathology and Audiology: 971.673.0220, www.oregon.gov/BSPA/index.shtml

Program outcomes

Students completing the AAS or earning Certificate of Completion will:

- Conduct individual and small group speech and language therapy services as directed by supervising Speech-Language Pathologist.
- Accurately record and organize data taken from the therapy sessions and communicate findings to supervising Speech-Language Pathologist.

This program has admission requirements and enrollment limits. An application packet is required to apply for admission to this program. This is a separate step in addition to the assessment and meeting with Counseling and Career Service department. Applications are available on the program Web site: speechpathology.chemeketa.edu. Application deadlines are typically July 15 for fall term entry and February 15 for spring term entry. Once admitted, students are required to follow the prescribed outline of the courses throughout the program.

Getting started

The first step to entering the SLPA program is to obtain the current SLPA program application from the SLPA program website: http://speechpathology.chemeketa.edu. Students may need to take part in an assessment process to demonstrate competent abilities in the pre-program coursework areas, including computer literacy, keyboarding, math, reading, and writing. Students are strongly encouraged to meet with the designated counselor for the SLPA program within Counseling and Career Services to formulate an individualized program of study, which may include the following pre-program courses:

Course	Title	Credit Hours
CA121A	Keyboarding A (if less than 25 wpm)	1
CIS101	Introduction to Microcomputer Applications	3
MTH060	Introductory Algebra+	4
RD090	College Textbook Reading	3
WR115	Introduction to Composition+	3

If you have any questions about the requirements, call Counseling and Career Services at 503.399.5120 or Ashley Northam at 503.589.7815. Failure to be assessed may delay your entry into program classes.

Speech-Language Pathology Assistant Certificate of Completion

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $980; class fees, $540; student services fee, $22.50; universal fee, $270; online fee, $525. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 45 required credit hours with a grade of "C" or better in all courses. Applicants working toward a Certificate of Completion would have already completed a minimum of 45 general education credits (30 semester credits) or have earned a prior degree in another discipline.

Course	Title	Credit Hours
ED130	Comprehensive Classroom Management	3
ED169	Overview of Students with Special Needs	3
ED229	Learning and Development+	3
ED258	Multicultural Education	3
SLP180	Survey of Speech and Language Disorders	3
SLP181	Phonetics for Language	3
SLP182	Intervention Strategies for SLP Assistants	3
SLP183	Introduction to Language Development	3
SLP184	Language Therapy	3
SLP185	Anatomy and Physiology of Speech and Language	3
SLP186	Speech Intervention with Children, Adolescents and Adults	3
SLP187	Clinical Documentation and Materials Management for the SLPA	3
SLP188	Communication Disorders in Low Incidence Populations	3
SLP189	SLPA Practicum 1	3
SLP190	SLPA Practicum 2	3

+Meets related instruction requirement, see page 44.

Speech-Language Pathology Assistant Associate of Applied Science Degree

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,830; class fees, $1,080; student services fee, $45; universal fee, $540; online fee, $1,050. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a two-year Associate of Applied Science degree as a Speech-Language Pathology Assistant by successfully completing 90 credit hours (45 credits for the certificate, and 45 general education requirements) with a grade of "C" or better in all courses.

Course	Title	Credit Hours
General Education requirements (45 credit hours):		
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH070	Elementary Algebra (or higher)	4
SP100	Introduction to Communication (or higher)	3
WR121	English Composition—Exposition (or higher)	3
	Humanities/Fine Arts electives	9
	Physical Education or Health	3
	Science/Applied Science electives	8
	Social Science electives	12

+Meets related instruction requirement, see page 44.

Tourism and Travel Management

tourism.chemeketa.edu

See also Hospitality Management.

The Tourism and Travel Management program prepares students for a broad range of leadership positions in various types of destination marketing organizations such as convention and visitors bureaus (CVBs), chambers of commerce, and government agencies, as well as private tourism departments of large hotels, convention centers, resort complexes, and travel-related businesses.

Courses will focus on the knowledge, skills, and abilities needed to formulate and implement effective business and marketing strategies in a tourism context. Students will develop strong leadership and communication skills required to lead destination stakeholder groups and local business leaders. In addition, students will learn the administrative skills required to direct and manage other destination management professionals responsible for researching, developing, and promoting the tourism of their locality, region, or destination resort.

The intent of the program is for students with the AAS degree and certificate to obtain entry-level management positions within the tourism industry. Students will also be advised on opportunities to continue their education by working toward a four-year degree in tourism through other universities.

A practicum, approved by the program chair, is required to complete the program. See HTM144 and HTM145 course descriptions.

Program outcomes

Students completing the Tourism and Travel Management Certificate will:
- Use the key tourism industry elements, including global travel destinations and the distribution process in international tourism, to promote travel products and services to potential clients.
- Practice effective customer service and selling techniques using tourism industry technology systems and applications.

Students completing the Destination Marketing Certificate will:
- Practice approaches in tourism that help coordinate relationships among hosts and guests, suppliers and consumers, residents, government officials, and CVB leaders and employees.
- Apply administrative skills and effective marketing techniques to research, develop, and attract visitors to destinations.
- Discuss the social, economic, and environmental consequences of tourism activities.

Students completing the AAS will:
- Coordinate hospitality and tourism components in a single, inter-related system to service visitors, including meeting, trade show, and convention groups in destination.
- Apply knowledge of the destination marketing function and how it affects the destination's tourism economy.
- Accurately prepare and organize travel documents and packages for clients, including the issuance of routine travel tickets using the Internet, vendor computer networks, and Web-based e-commerce applications.
- Apply relevant technology, recordkeeping and basic financial knowledge and skills—including cost control techniques—to the operation of a tourism organization.

Getting started

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

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

If you have any questions about the requirements, call Counseling and Career Services at 503.399.5120 or Tourism and Travel program staff at 503.399.5186. Failure to be assessed may delay your entry into program classes.

Tourism and Travel Management Certificate of Completion

The Tourism and Travel Management one-year certificate focuses on travel-related careers in airline, tour operations, resort and hotel front-desk, or travel agency employment. The certificate prepares students for direct entry into the workforce or offers the ability to continue into Tourism and Travel Management AAS Degree program.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $623; class fees, $40; student services fee, $21.50; universal fee, $258. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 43 required credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
CIS178I	Introduction to the Internet/ World-Wide Web	3
HTM104	Travel and Tourism Industry	3
HTM114	Travel Destination Geography 1	3
HTM127	Selling in Hospitality and Tourism	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
HTM101	Customer Service Management	3
HTM115	Travel Destination Geography 2	3
HTM123	Global Distribution Systems	3
HTM137	Tourism Transportation: Cruise, Air, Rail	3
PSY104	Psychology in the Workplace+ (or higher)	3
Term 3		
HTM116	Travel Destination Geography 3	3
HTM136	Tour Operations and Marketing	3
HTM144	Hospitality and Tourism Management Practicum 1	4
SP218	Interpersonal Communication+ (or higher)	3

+Meets related instruction requirement, see page 44.

Destination Marketing Certificate of Completion

The Tourism and Travel Management certificate in Destination Marketing prepares students for direct employment in destination marketing organizations including convention and visitor bureaus (CVBs), chambers of commerce, economic development offices, and government agencies, as well as private local tour operators and the tour departments of large hotels, resorts, or convention centers.

Courses focus on the abilities needed to formulate and implement effective marketing and communications strategies in a destination context. Students will develop strong planning and communication skills needed to successfully coordinate, with local stakeholders, clients, and business leaders.

With this certificate, students can obtain direct entry-level employment positions as destination marketing specialists. Students will be advised on other related opportunities, as well as their career opportunities with the full Tourism and Travel Management Associate of Applied Science degree.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $578; student services fee, $18.50; universal fee, $222. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 37 required credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours
Term 1		
HTM104	Travel and Tourism Industry	3
HTM127	Selling in Hospitality and Tourism	3
HTM134	Destination Marketing	3
WR121	English Composition—Exposition (or higher)	3

Term 2
HTM101 Customer Service Management.........................3
HTM126 Meeting and Convention Management...........................3
HTM135 Destination Leadership 3
SP218 Interpersonal Communication (or higher) 3

Term 3
CA208 Workplace Presentations Using PowerPoint (or higher)....3
HTM133 Strategic Issues in Destination Management 3
HTM136 Tour Operations and Marketing.........................3

Term 4
HTM144 Practicum 1—Hospitality and Tourism Management 4

Tourism and Travel Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,568; class fees, $40; student services fee, $45.50; universal fee, $546. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

If you have any questions about the requirements, call Counseling and Career Services at 503.399.5120 or call the HTM department at 503.399.5186. Failure to be assessed may delay your entry into program classes.

You may earn an Associate of Applied Science degree by successfully completing the required 91 credit hours with a grade of "C" or better in all Hospitality and Tourism Management (HTM) courses.

Course	Title	Credit Hours

Term 1
CIS178I Introduction to the Internet/World-Wide Web 3
HTM100 Introduction to the Hospitality Industry.........................3
HTM104 Travel and Tourism Industry 3
HTM114 Travel Destination Geography 1.......................3
WR121 English Composition—Exposition+ (or higher)...............3

Term 2
HTM101 Customer Service Management.........................3
HTM115 Travel Destination Geography 2.......................3
HTM123 Global Distribution Systems 3
PSY101 Psychology of Human Relations+ (or higher)...................3
 or
PSY201 General Psychology—Biological Emphasis+ (or higher, required for lower division credit) 3
 or
PSY104 Psychology in the Workplace+..........................3
WR227 Technical Writing 3

Term 3
HTM116 Travel Destination Geography 3.......................3
HTM136 Tour Operations and Marketing.........................3
SP218 Interpersonal Communication (or higher) 3
 Humanities/Fine Arts elective 3
 or
 Science/Applied Science elective.......................3

Term 4
CA208 Workplace Presentations Using PowerPoint (or higher)....3
HTM127 Selling In Hospitality and Tourism.................3
HTM134 Destination Marketing.........................3
MTH062 Business Applications Using Mathematics+ (or higher)....4
 Tourism and Travel Management elective* 3

Term 5
BA211 Financial Accounting 1 4
HTM126 Meeting and Convention Management...........................3
HTM135 Destination Leadership 3
HTM137 Tourism Transportation: Cruise, Air, Rail.........................3

Term 6
BA212 Financial Accounting 2 4
HTM133 Strategic Issues in Destination Management 3
HTM102 Hotel, Restaurant, and Travel Law 3
 Tourism and Travel Management elective* 3

Term 7
HTM144 Practicum 1—Hospitality and Tourism Management OR4
HTM145 Practicum 2—Hospitality and Tourism Management 9
HTM290 Hospitality and Tourism Management Capstone 3
+Meets related instruction requirement, see page 44.

*Tourism and Travel Management electives:
HTM105 Introduction to the Food and Beverage Industry..............3
HTM109 Front Desk Operations 3
HTM112 Bed and Breakfast Operations 3
HTM119 Introduction to Casino Management 3
HTM124 Catering and Banquet Operations.....................3
HTM125 Special Event Planning....................................3
HTM130 Beverage Management 3
HTM132 Menu Planning..3

Vineyard Management

vineyard.chemeketa.edu

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

For more information about this program, contact Al MacDonald at 503.584.7254 or D. Craig Anderson at 503.399.6565.

Program outcomes

Students completing the certificate will:
- Evaluate the potential of a site for vineyard development through soil and environmental analysis.
- Perform skills necessary for the seasonal vineyard operations of pruning, disease and pest control, grapevine canopy management, and crop regulation.
- Prepare reports to track ripening data, vineyard pesticide applications, fertilizer requirements, and canopy measurements.

In addition to the certificate outcomes, students completing the AAS will:
- Project timing of vineyard operations and make correct decisions on relevant grapevine management choices.
- Use knowledge of government regulations related to vineyard operations, OSHA rules, employment requirements, pesticide application postings, and field sanitation requirements.
- Use computer skills to track vineyard operations; prepare and use budget information.
- Research and develop a vineyard business management plan.

Getting started

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

CA121A	Keyboarding A (if less than 25 wpm) 1	
MTH020	Basic Mathematics 4	
RD090	College Textbook Reading..3	
WR049	Basic Writing 4	

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Vineyard Operations Certificate of Completion

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

For more information about this program, contact Al MacDonald at 503.584.7254 or D. Craig Anderson at 503.399.6565.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $865; class fees, $101; student services fee, $19.50; universal fee, $234. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing the required 39 credit hours with a grade of "C" or better in all courses:

Course	Title	Credit Hours
Term 1		
CIS101	Introduction to Microcomputer Applications (or higher)..3	
VMW101	General Viticulture 3	
VMW110	Fall Vineyard Practices..4	
WR115	Introduction to Composition+ (or higher) 3	
Term 2		
MTH052	Introduction to Algebra and Geometry+ (or higher)..3	
VMW111	Winter Vineyard Practices...4	
VMW261	Vine Physiology 4	
Term 3		
PSY104	Psychology in the Workplace+ (or higher) 3	
VMW112	Spring Vineyard Practices...4	
VMW260	Soil and Plant Nutrition..4	
Term 4		
VMW113	Summer Vineyard Practices...4	

+Meets related instruction requirement, see page 44.

Getting started

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

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

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Vineyard Management Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,565; class fees, $208; student services fee, $48.50; universal fee, $582. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
CH121	College Chemistry (or higher)......................................5	
MTH070	Elementary Algebra+ (or higher) 4	
SPN111	Beginning Spanish Conversation Term 1 (or higher) 3	
VMW101	General Viticulture 3	
Term 2		
CH122	College Chemistry (or higher)......................................5	
CIS101	Introduction to Microcomputer Applications (or higher).3	
VMW105	Spanish in the Vineyard 3	
	or	
SPN112	Beginning Spanish Conversation Term 2 (or higher) 3	
VMW111	Winter Vineyard Practices...4	
WR121	English Composition—Exposition+ (or higher)...............3	
Term 3		
CH123	College Chemistry (or higher)......................................5	
CH172	Chemical Methods for Analysis of Musts and Wines........3	
VMW112	Spring Vineyard Practices...4	
WR227	Technical Writing (or higher) 3	
Term 4		
VMW113	Summer Vineyard Practices...4	
Term 5		
SP111	Fundamentals of Public Speaking (or higher) 3	
VMW110	Fall Vineyard Practices 4	
VMW280D	Cooperative Work Experience......................................4	
	Vineyard Management elective*...................................6	
Term 6		
PSY104	Psychology in the Workplace+(or higher)........................3	
VMW122	Introduction to Winemaking..3	
VMW261	Vine Physiology 4	
VMW280D	Cooperative Work Experience......................................4	
Term 7		
VMW255	Wine Industry Business Management 3	
VMW260	Soil and Plant Nutrition..4	
VMW280D	Cooperative Work Experience......................................4	
	Vineyard Management elective*...................................3	

+Meets related instruction requirement, see page 44.

*Vineyard Management electives (select 9 credit hours):

BI131	Environmental Science 1...4	
BI132	Environmental Science 2...4	
BI133	Environmental Science 3...4	
BOT201	General Botany 4	
BOT202	General Botany 4	
BOT203	General Botany 4	
CA091	QuickBooks—Computerized Bookkeeping 3	
CIS125A	Micro Database Software-Access 3	
CIS125E	Excel—Workbooks 4	
HOR211	Plant Propagation 3	
SPN112	Beginning Spanish Conversation Term 2.........................3	
SPN113	Beginning Spanish Conversation Term 3.........................3	
VMW102	Wine Industry Exploration 3	
VMW131	Wine Appreciation..3	
VMW132	Wines of the World...3	
VMW134	Wines of the Pacific Northwest 3	
VMW170	Introduction to Wine Marketing....................................3	
WLD051	Basic Arc Welding...5	

Visual Communications

vc.chemeketa.edu

The Visual Communications program is constantly evolving to reflect the ongoing excitement in the field of graphic arts. Graphic design integrates work in print, web, photography, illustration and interactive media.

The language of design serves as a powerful core of knowledge and skills that will allow you to begin work in any number of creative fields. The future is wide open for those willing to be flexible and embrace new technologies and for those who are willing to work hard at the balance of creativity and technical skill.

As part of the Visual Communications program, you will develop skills in graphic design, layout, typography, photography, and digital media, as well as the teamwork and creative problem solving essential to a lifelong career. Students will produce both a traditional print and digital portfolio of work, including a personal stationery package and résumé in preparation for entering the job market. A class portfolio show is part of spring term your final year.

The Visual Communications program offers an Associate of Applied Science degree that emphasizes graphic design. Additional coursework is available in fine arts, illustration, photography, web, video, animation, and interactive media. This hands-on, intensive program can lead to numerous career options. The program takes two full years to complete beginning in fall term. Most students spread their work over three years, which allows for more in-depth study and taking elective classes. Students interested in completing their bachelor's degree have several transfer options and should meet with an advisor before beginning the program. For more information and a complete application packet, visit the Web site at vc.chemeketa.edu.

Program outcomes

Students completing the AAS will:

- Work with others in the creation and production of original ideas and graphic design.
- Research and present design solutions to communication projects.
- Use current and evolving industry standard methods and processes in the production and crafting of graphic communications.
- Apply and articulate the trade practices, ethics, and copyright laws related to graphic arts.
- Participate in a client-designer relationship in the implementation and evaluation of projects.
- Organize and present a portfolio of work that gives evidence of the skills, knowledge, and abilities to begin a graphic arts career.

Getting started

Apply early. The program has special admissions prerequisites, requirements and enrollment limits.

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

CIS101	Introduction to Microcomputer Applications	3
MTH020	Basic Mathematics	4
SSP014ABC	Spelling Rules	1-3
SSP051	Studying for College	3
	or	
RD090	College Textbook Reading	3
WR115	Introduction to Composition	3

All Visual Communications classes take place in a Macintosh computer lab and require extensive computer knowledge. Detailed information about the program and application process is available on the Web site and at regularly scheduled program overview sessions. If you have questions about program requirements, call Counseling and Career Services at 503.399.5120 or the program chair at 503.399.6473.

Visual Communications Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program average $600 per term. Costs include photographic supplies, books, high resolution output, presentation supplies, tracing paper, sketchbooks and digital media. A digital SLR camera is required for all courses; details are on the web site. A portfolio, at a cost of up to $250, is required for graduation. Class fees total $673 for required courses, student services fees are $52; and universal access fees are an additional $624. Although not required, a home computer greatly enhances the student's ability to successfully complete coursework and learn new software. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by maintaining a grade point average of 2.50 and successfully completing the 104 credit hours with a grade of "C" or better in all required courses.

Course	Title	Credit Hours
Term 1		
ART131	Introduction to Drawing 1 (or higher)	4
ART265	Digital Photography	4
VC111	Introduction to Visual Communications	4
VC114	Introduction to Digital Graphics	4
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
ART115	Basic Design	3
ART224	Type Design 1	4
MTH060	Introductory Algebra+ (or higher)	4
SP112	Fundamentals of Persuasion	3
VC151	Electronic Imaging 1: Digital to Print	3
Term 3		
ART116	Basic Design	3
ART225	Type Design 2	4
ART266	Studio Photography	4
PSY104	Psychology in the Workplace+	3
VC121	Layout 1: Page Design	4
Term 4		
ART221	Graphic Design 1: Icons and Symbols	4
VC122	Layout 2: Intermediate Page Design	4
VC237	Web Design 1	4
VC251	Electronic Imaging 2: Color Correction	3
VC271	Studio Practices	2
	or	
VC280B	Cooperative Work Experience	2
Term 5		
ART222	Graphic Design 2: Logo Design	4
ART237	Photo Illustration	4
	or	
VC243	Animation 1	3
	or	
VC265	Digital Video 1	3
VC221	Layout 3: Publication Design	4
VC238	Web Design 2	4
VC246	File Prep	3

Term 6

ART223	Graphic Design 3: Package Design	4
VC241	Interactive Media	3
VC283	Business of Graphic Arts	4
VC284	Portfolio Preparation	4

+Meets related instruction requirement, see page 44.

Welding Technology

welding.chemeketa.edu

The Welding Technology program offers two options. A three-term welding program combines training with classes in the background knowledge needed by workers in welding occupations. You practice and develop your welding skills in the laboratory and may take an examination for certification in plate welding. The six-term Welding Fabrication program is for those who want to acquire the technical knowledge and skills required for workers in welding, fabrication, and related occupations.

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

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

Program outcomes

Students completing the certificate will:

- Set up and operate manual and semi-automatic welding and cutting equipment used in the metal fabrication industry.
- Perform basic layout and fabrication skills to produce welded metal parts and products.
- Read and interpret engineering drawings to American Welding Society standards.
- Use welding process and procedure applications.
- Apply basic metallurgy knowledge to fabrication processes.
- Perform as a team member and practice skills that reflect professional and ethical behavior in the workplace.

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

- Perform basic set-ups and operations for manual and computer numeric controlled machining equipment.
- Design and carry out planning procedures for machining purposes.
- Select and use tools and equipment to manufacture, measure, and inspect parts in a machining environment.

Welding Certificate of Completion

This program prepares you for a variety of positions in job specialty production and maintenance shops. Graduates may find work as MIG welders, arc welders, oxyacetylene welders, semiautomatic welding equipment operators, and TIG welders.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $402; class fees, $488; student services fee, $25; universal fee, $300; equipment and supplies, $430; certification test, $260 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn a Certificate of Completion by successfully completing these 50 required credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
WLD051	Basic Arc Welding	5
WLD056	Blueprint Reading and Sketching	2
WLD061	Basic Gas Metal Arc Welding (MIG)	3
WLD070	Oxyacetylene Processes	3
Term 2		
COM051	Communications Skills 1+ (or higher)	3
PSY101	Psychology of Human Relations+ (or higher)	3
WLD052	Intermediate Arc Welding	5
WLD057	Layout Practices	1
WLD062	Intermediate Gas Metal Arc Welding (MIG)	3
WLD073	Basic Gas Tungsten Arc Welding (TIG)	4
Term 3		
WLD053	Advanced Arc Welding	3
WLD058	Weld Shop Problems	7
WLD063	Advanced Gas Metal Arc Welding (MIG)	3
WLD080	Metallurgy for Welders	2

+Meets related instruction requirement, see page 44.

Welding Fabrication Associate of Applied Science

As a graduate of the Welding Fabrication program, you may qualify for positions in business and industry such as machinery fabrication, structural fabrication, welding fitting and layout, automatic and semiautomatic welding, automatic flame cutter operation, millwright welding, plant maintenance, and quality control and development.

The program offers you a background in manufacturing materials, processes, and systems, including shear and press brake operation, blueprint reading, and shop drawing and layout. The curriculum includes written and oral communications and general education classes and emphasizes related scientific, mathematical, and general mechanical principles.

At the end of the third term you may take a plate or pipe certification test. The fee for this test is determined by the number of students involved and the type of test.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $909; class fees, $750; student services fee, $46; universal fee, $576; equipment and supplies, $510; certification test, $260 (optional). Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

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

Course	Title	Credit Hours
Term 1		
MTH052	Introduction to Algebra and Geometry+ (or higher)	3
WLD051	Basic Arc Welding	5
WLD056	Blueprint Reading and Sketching	2
WLD061	Basic Gas Metal Arc Welding (MIG)	3
WLD070	Oxyacetylene Processes	3
Term 2		
COM051	Communication Skills 1+	3
WLD052	Intermediate Arc Welding	5
WLD057	Layout Practices	1
WLD062	Intermediate Gas Metal Arc Welding (MIG)	3
WLD073	Basic Gas Tungsten Arc Welding (TIG)	4

Term 3
WLD053   Advanced Arc Welding..3
WLD058   Weld Shop Problems..7
WLD063   Advanced Gas Metal Arc Welding (MIG) 3
WLD080   Metallurgy for Welders...2

Term 4
CAM110A   CNC/Manual Fundamentals 4
CAM111   Industrial Safety Seminar 1
CAM130   CNC Machine Setup/Operation...................................4
GS104   Physical Science (or higher)...4
PSY101   Psychology of Human Relations+ (or higher) 3

Term 5
CAM062   Practical Applications 2..2
CAM120   CNC/Manual Milling..4
CAM160   Programming CNC Mills 4
COM052   Communication Skills 2 (or higher)...............................3
MTH053   Introduction to Trigonometry with Geometry (or higher) 3

Term 6
CAM121A   CNC/Manual Lathe...4
CAM150   Cutting Tools and Materials 3
WFB097   Weld Shop Problems 2..6
           or
WFB280F   Cooperative Work Experiencee 6
+Meets related instruction requirement, see page 44.

Wine Marketing

The Wine Marketing program includes instruction and hands-on training in the basic knowledge and technical skills required for successful employment in wine marketing. Wine marketing training prepares students for occupations, such as tasting room sales manager, wine steward, wine club supervisor, wine buyer or broker, wine marketing or sales manager, wine distribution manager, freelance wine marketing, winery public relations manager, or wine shop owner/manager.

Communication skills are emphasized, and students will gain on-the-job work experience through the Cooperative Work Experience program. Students have flexibility to choose electives that will help tailor the curriculum and training to their particular career interest in wine marketing.

For more information about this program, contact Barney Watson at 503.584.7255 or D. Craig Anderson at 503.399.6565.

Program outcomes

Students completing the AAS will:
- Develop a wine marketing plan for a variety of distribution channels.
- Create and present sales presentations.
- Develop a brand plan for a winery.

Getting started

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

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

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $2,185; class fees, $207; student services fee, $50; universal fee, $600. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 100 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BA223	Principles of Marketing	3
CIS101	Introduction to Microcomputer Applications (or higher)	3
MTH070	Elementary Algebra+ (or higher)	4
VMW101	General Viticulture	3
WR121	English Composition—Exposition+ (or higher)	3
Term 2		
PSY104	Psychology in the Workplace+ (or higher)	3
SP111	Fundamentals of Public Speaking (or higher)	3
VMW122	Introduction to Winemaking	3
VMW170	Introduction to Wine Marketing	3
	Wine Marketing elective*	3
Term 3		
BA238	Sales and Persuasion	3
VMW131	Wine Appreciation	3
VMW255	Wine Industry Business Management	3
WR227	Technical Writing (or higher)	3
	Wine Marketing elective*	3
Term 4		
VMW280D	Cooperative Work Experience	4
Term 5		
VMW271	Wine Marketing 1—Brand Development	4
VMW280D	Cooperative Work Experience	4
	General Education elective	3
	Wine Marketing elective*	3
	Wine Marketing elective*	3
Term 6		
VMW132	Wines of the World	3
	or	
VMW134	Wines of the Pacific Northwest	3
VMW232	Sensory Evaluation of Wine Varietals	3
VMW272	Wine Marketing 2—Understanding the Wine Market Place	4
	Wine Marketing elective*	3
	Wine Marketing elective*	3
Term 7		
VMW233	Sensory Evaluation of Wine Components	3
VMW273	Wine Marketing 3—Assessing and Targeting the Market	4
VMW280D	Cooperative Work Experience	4
	Wine Marketing elective*	3
	Wine Marketing elective*	3

*Wine Marketing electives (select 24 credit hours):

BA226	Business Law 1	3
BA277	Business Ethics	3
CA091	QuickBooks—Computerized Bookkeeping	3
CIS125A	Micro Database Software-Access	3
CIS125E	Excel-Workbooks	4
CIS178I	Introduction to the Internet/World-Wide Web	3
CIS195	Web Site Development	4
HTM101	Customer Service Management	3
HTM125	Special Events Planning	3
JNL225	Advertising/Public Relations	3
SPN111	Beginning Spanish Conversation Term 1	3
SPN112	Beginning Spanish Conversation Term 2	3
SPN113	Beginning Spanish Conversation Term 3	3
VMW254	Wine Process Planning and Design	3

Winemaking

winemaking.chemeketa.edu

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

For more information about this program, contact Barney Watson at 503.584.7255 or D. Craig Anderson at 503.399.6565.

Program outcomes

Students completing the AAS will:

- Evaluate wine grape maturity and make harvest decisions for quality wine production, including sensory and chemical analysis of juice, and must and chemical adjustments.
- Perform wine grape processing, fermentation management, and wine processing practices, including operating and maintaining winery equipment from primary processing through bottling.
- Use chemical and sensory quality control analysis techniques and appropriate winery processing practices for the chemical, microbial, and physical stability of wines.
- Research and develop a winery facility, including winery design, layout, operational systems, process calculations, and equipment selection.
- Comply with government regulations for wine production, including licensing, operating a winery premise, recordkeeping, regulatory compliance, and health and safety programs.

Getting started

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

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

If you have questions about the requirements, call Counseling and Career Services at 503.399.5120 or 503.399.6071. Failure to be assessed may delay your entry into program classes.

Winemaking Associate of Applied Science

In addition to tuition, estimated costs for students who complete the entire program listed below are books, $1,487; class fees, $446; student services fee, $50.50; universal fee, $606. Contact the Financial Aid Office at 503.399.5018 to find out if you qualify for help with these costs.

You may earn an Associate of Applied Science degree by successfully completing the required 101 credit hours with a grade of "C" or better in all courses.

Course	Title	Credit Hours
Term 1		
BI230	Introductory Microbiology	4
CH121	College Chemistry (or higher)	5
MTH070	Elementary Algebra+ (or higher)	4
VMW101	General Viticulture	3

Term 2

CH122	College Chemistry (or higher)	5
PSY104	Psychology in the Workplace+ (or higher)	3
SP111	Fundamentals of Public Speaking (or higher)	3
VMW122	Introduction to Winemaking	3
	Winemaking elective*	3

Term 3

CH123	College Chemistry (or higher)	5
CH172	Chemical Methods for Analysis of Musts and Wines	3
CIS101	Introduction to Microcomputer Applications (or higher)	3
VMW131	Wine Appreciation	3
VMW222	Science of Winemaking	3

Term 4

VMW244	Wine Production	6
VMW280D	Cooperative Work Experience	4
WR121	English Composition—Exposition+ (or higher)	3
	Winemaking elective*	4

Term 5

VMW132	Wines of the World	3
	or	
VMW134	Wines of the Pacific Northwest	3
VMW170	Introduction to Wine Marketing	3
VMW245	Wine Clarification and Stabilization	4
VMW280D	Cooperative Work Experience	4
WR227	Technical Writing (or higher)	3

Term 6

VMW233	Sensory Evaluation of Wine Components	3
VMW246	Wine Aging, Filtration, and Bottling	4
VMW254	Wine Process Planning and Design	3
VMW255	Wine Industry Business Management	3
VMW280D	Cooperative Work Experience	4

+Meets related instruction requirement, see page 44.

*Winemaking electives (select 7 credit hours):

BI101	General Biology	4
BI102	General Biology	4
BI103	General Biology	4
CA091	QuickBooks—Computerized Bookkeeping	3
CIS125A	Micro Database Software—Access	3
CIS125E	Excel—Workbooks	4
VMW102	Wine Industry Exploration	3
VMW110	Fall Vineyard Practices	4
VMW111	Winter Vineyard Practices	4
VMW112	Spring Vineyard Practices	4
VMW113	Summer Vineyard Practices	4
VMW232	Sensory Evaluation of Wine Varietals	3
VMW261	Vine Physiology	4

Zoology

See Biology.

DIVERSITY

CHEMEKETA
CORE VALUES

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

Course Descriptions

About these course descriptions

This list of course descriptions reflects the diversity and scope of the many credit courses Chemeketa currently offers. Some of our current courses may not be included here as the college may add classes after this catalog is published.

The courses are listed alphabetically by prefix.

You will find prerequisites specified in many of these course descriptions. These are conditions you must meet before you enroll in a course. It is your responsibility as a student to fulfill the prerequisite.

Some prerequisites indicate that you must complete certain preparatory courses or must have the consent of the course instructor. To gain consent, meet with the instructor. Consent is based on the instructor's assessment of your readiness to enroll in the course.

Chemeketa also offers many non-credit personal enrichment courses not included here. They are also listed in the *Schedule of Classes*.

Note: The letters, **F, W, Sp,** and **Su** at the end of a course description indicate the term (fall, winter, spring, summer) the course is usually offered.

For information on when and where classes meet, consult the *Schedule of Classes* available each term.

How courses are numbered

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

Developmental Courses*

MTH: Mathematics
RD: Reading
SSP: Study Skills Program
WR: Writing

*Developmental courses numbered less than 50 do not apply to meeting the requirements of the AAOT, AAS, AS/OT-BUS or AGS degrees.

Career and Technical Courses**

AH: Allied Health
AQS: Aquarium Science
AUM: Automotive Technology
BLD: Building Inspection Technology
BT: Business Technology
CA: Computer Applications
CAM: Computer-Aided Manufacturing
CJ: Criminal Justice
COM: Communication Skills
CPL: Credit for Prior Learning
CS: Computer Science
CVL: Civil Technology
DEN: Dental Assisting
DRF: Drafting Technology
ECE: Early Childhood Education
ED: Paraeducator, Education
ELT: Electronics Technologies
EMT: Emergency Medical Technology
ENL: English as a Non-Native Language
ES: Emergency Services
FE: Field Experiences
FRP: Fire Protection Technology
FT: Forest Management
HD: Human Development
HDF: Human Development and Family Studies
HM: Health Services Management
HOR: Horticulture
HS: Human Services
HTM: Hospitality Management; Tourism and Travel Management

MT: Industrial
MED: Medical Office Assisting
MFG: Manufacturing Technologies
NET: Network Technology
NUR: Nursing
PHM: Pharmacy Technician/Pharmacology
QS: Quality Science
RD: Reading
SLP: Speech-Language Pathology Assistant
SSP: Study Skills
ST: Occupational Skills Training
VC: Visual Communications
VMW: Vineyard Management/Winemaking
WFB: Welding Fabrication
WLD: Welding

**Many career and technical courses are applicable to the baccalaureate degree; check with the four-year institution.

Lower Division Collegiate Courses (first two years of the baccalaureate degree)

ART: Art
ASL: American Sign Language
ATH: Anthropology
BA: Business Administration***/****
BI: Biology***
BOT: Botany
CG: Counseling and Guidance***
CH: Chemistry
CIS: Computer Information Science
CJ: Criminal Justice****
CLA: Chicano/Latino Studies
CS: Computer Science***/****
EC: Economics
ECE: Early Childhood Education****
EGR: Engineering****
ENG: English
FA: Film Arts
FR: French
GE: General Engineering****
GEG: Geography

GEO: Geology
GS: General Science
HE: Health Education
HOR: Horticulture
HPE: Health and Physical Education
HS: Human Services****
HST: History
HUM: Humanities
JNL: Journalism
JPN: Japanese
MTH: Mathematics***
MUP: Music Performance
MUS: Music
NFM: Nutrition and Food Management
OC: Oceanography
PE: Physical Education
PH: Physics***
PHL: Philosophy
PS: Political Science
PSY: Psychology
RD: Reading***
REL: Religion
RUS: Russian
SOC: Sociology
SP: Speech
SPN: Spanish
SSC: Social Science
TA: Theater Arts
WR: Writing***
WS: Women's Studies
ZOO: Zoology

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

****Many career and technical degrees have specific transfer articulation agreements; check with Counseling and Career Services.

Accounting

See BA—Business Administration.

AH

Allied Health

See also CH—Chemistry, DEN—Dental Assisting, EMT—Emergency Medical Technology, ES—Emergency Services, HE—Health Education, HM—Health Services Management, MED—Medical Office Assisting and NUR—Nursing.

AH115 Healthcare Career Success Strategies
2 class hrs/wk, 2 cr.

Presents an applied approach to the introduction of health careers. Includes health career options and preparation requirements, professional behavior, teamwork and leadership, customer service, introduction to legal and ethical concepts, societal issues, health promotion and wellness, preventive procedures, and safety practices. Integrates academic success strategies with healthcare applications. **F, W, Sp, Su**

AQS

Aquarium Science

AQS100 Introduction to Aquarium Science
2 class and 2 lab hrs/wk, 3 cr.

Examines the history of animal keeping and present-day aquatic animal husbandry industries. Explores the biological processes occurring in the aquarium environment. Learn proper set-up and maintenance of home aquaria. **Offered as needed.**

AQS110 Aquarium Science Practicum 1
6 lab hrs/wk, 2 cr.

Introduces aquatic animal husbandry work environment and the care of captive aquatic animals. Emphasize daily animal care and exhibit readiness. **Offered as needed.**

AQS111 Aquarium Science Practicum 2
6 lab hrs/wk, 2 cr.

Builds upon the experiences gained in Practicum 1. Involves participation in a higher level of aquatic animal husbandry activities including animal health procedures, long-term record keeping, and life support systems training. **Prerequisite:** AQS110. **Offered as needed.**

AQS141 Interpretation and Communication
3 class and 2 lab hrs/wk, 4 cr.

Examines the techniques used to present natural resource educational experiences to visitors. Emphasizes developing the skills to conduct informational research and assimilate information into a presentation that takes into account individual learning styles. **Offered as needed.**

AQS151A Special Projects in Aquarium Science
3 lab hrs/wk, 1 cr.

Provides the opportunity to work on an approved special project in aquarium science. Includes independent research in an area of interest or in-depth study in a particular aspect of aquarium science. Course may be repeated for a maximum of three credits. **F, W, Sp, Su**

AQS151B Special Projects in Aquarium Science
6 lab hrs/wk, 2 cr.

Provides the opportunity to work on an approved special project in aquarium science. Topics may include independent research in an area of interest or in-depth study in a particular aspect of aquarium science. Course may be repeated for a maximum of six credits. **F, W, Sp, Su**

AQS151C Special Projects in Aquarium Science
9 lab hrs/wk, 3 cr.

Provides the opportunity to work on an approved special project in aquarium science. Includes independent research in an area of interest or in-depth study in a particular aspect of aquarium science. Course may be repeated for a maximum of six credits. **F, W, Sp, Su**

AQS165 Current Issues in Aquarium Science
1 class hr/wk, 1 cr.

Focuses on industry professionals sharing their experiences about facility operations and challenges facing their organizations. Incorporates various topics each term.

AQS186 Introduction to Scientific Diving
3 lab hrs/wk, 1 cr.

Introduces the technical and safety components of scientific diving. Includes underwater activities related to fish identification and behavior analysis. **Prerequisite:** enrollment in the Aquarium Science program and PE185SA or open-water diving certification from an internationally recognized certification agency or consent of instructor. **Sp**

AQS187 Scientific Diving
3 lab hrs/wk, 1 cr.

Continues the training of scientific divers in the safety aspects and techniques of underwater science activities. **Prerequisite:** AQS186. **Sp, Su**

AQS215 Biology of Captive Fish
3 class and 2 lab hrs/wk, 4 cr.

Examines the anatomy and physiology of freshwater and marine fishes and the constraints placed upon them in a controlled environment. Increases an understanding of fish behavior through the use of ethograms. **Prerequisite:** BI103 or consent of instructor. **Offered as needed.**

AQS216 Elasmobranch Husbandry
2 class hrs/wk, 2 cr.

Examines the history of captive shark and ray management, current regulations, legislation and conservation of elasmobranches. Emphasizes requirements associated with keeping a healthy population of elasmobranches. **Prerequisite:** AQS100 or consent of instructor. **Sp**

AQS220 Biology of Captive Invertebrates
3 class and 2 lab hrs/wk, 4 cr.

Reviews the life history and captive care requirements of invertebrates commonly cultured in the aquatic animal industry/profession. **Prerequisite:** BI103 or consent of instructor. **Offered as needed.**

AQS226 Biology of Diverse Captive Species
1 class and 2 lab hrs/wk, 2 cr.

Examines the basic husbandry requirements and the most commonly experienced health ailments of different phyla found in public aquarium animal collections. Reviews the natural history and wild-population status of selected species. **Prerequisite:** BI103, enrollment in Aquarium Science program, or consent of instructor. **W**

AQS230 Fish and Invertebrate Nutrition
3 class and 2 lab hrs/wk, 4 cr.

Examines the nutritional requirements of fishes and invertebrates throughout their life history. Reviews the composition of fresh frozen feed and processed diets. Discusses industry standards for food handling and HACCP requirements. **Prerequisite:** AQS215 and AQS220. **Offered as needed.**

AQS231 Fish and Invertebrate Reproduction
3 class and 2 lab hrs/wk, 4 cr.

Examines the reproductive strategies of fishes and invertebrates in a controlled environment and the manipulation of environmental and physiological parameters to initiate reproduction. **Prerequisite:** AQS215 and AQS220. **Offered as needed.**

AQS232 Reproduction and Nutrition of Aquatic Animals
3 class and 2 lab hrs/wk, 4 cr.

Examines the reproductive strategies of fishes and invertebrates in a controlled environment, and the manipulation of environmental and physiological parameters that initiate reproduction. Explores the nutritional requirement of selected aquatic animals throughout their life history. Discusses industry standards for food handling and HACCP requirements. **Prerequisite:** AQS215 and AQS220. **F**

AQS240 Life Support System Design and Operation
3 class and 2 lab hrs/wk, 4 cr.

Examines the role of life support systems in maintaining a balanced, stable aquatic environment. Presents how to design, construct, maintain, and troubleshoot semi-closed, closed, and open systems. **Prerequisite:** concurrent enrollment in AQS215 and AQS220 or consent of instructor. **Offered as needed.**

AQS245 Animal Husbandry in a Research Capacity
2 class hrs/wk, 2 cr.

Examines the use of fish in research and the ethical issues associated with this practice. Common procedures and research methodology such as anesthesia, biopsy, blood draws, minor surgeries, field study, behavioral techniques, and euthanasia will be presented. **Prerequisite:** consent of instructor. **F**

AQS250 Principles of Exhibit Development
3 class and 2 lab hrs/wk, 4 cr.
Examines the processes involved in natural resources-related exhibit development. Presents the issues, materials, and technologies associated with aquatic exhibit development. Emphasis is placed on integrating diverse goals, assimilating information, and coordinating personnel to ensure an effective exhibit team. **Prerequisite:** concurrent enrollment in AQS270. **Offered as needed.**

AQS252 Exhibits and Interpretation
3 class and 2 lab hrs/wk, 4 cr.
Overviews the principles of exhibit development and interpretive presentations. Covers projects in exhibit planning, performing interpretive presentations, and writing interpretive pieces. Emphasizes the process of developing exhibits and interpretation from conceptual statement through fabrication, performance, or publication. **Prerequisite:** AQS215 and AQS220, or consent of instructor. **W**

AQS270 Fish and Invertebrate Health Management
3 class and 2 lab hrs/wk, 4 cr.
Reviews the common infectious and non-infectious diseases of captive fish and invertebrates. Examines the common techniques of fish and invertebrate health management. **Prerequisite:** AQS215 and AQS220. **Offered as needed.**

AQS275 Aquarium Science Internship
400 lab hrs, 12 cr.
Exposes students to the daily diligence, responsibilities, and rewards of the aquatic animal husbandry profession. Includes daily animal care and facility readiness routines, assisting life support staff and animal health management professionals, and evaluation of operational aspects of the facility. **Prerequisite:** AQS111 and AQS270. **Offered as needed.**

ART

Art
See also VC—Visual Communications.

ART101 Understanding Art
3 class hrs/wk, 3 cr.
Provides the tools to look at, think about, and communicate ideas about the visual arts. Focuses on purposes of art; subject/form/content; media and techniques; approaches to art (critical, historical, analytical, interpretive); and artists' intentions. **Prerequisite:** college-level writing skills.
F, W, Sp, Su

ART115, 116, 117 Basic Design
2 class and 2 lab hrs/wk, 3 cr. each
ART115, 116 and 117 form a three-term introduction to the basic principals of design, visual perception, and organization of visual elements in works of art. ART115 explores black and white two-dimensional design; ART116 focuses on color and two-dimensional design; ART117 studies three-dimensional design. ART115: **F, W, Sp, Su**; ART116: **F, W, Sp, Su**; ART117: **Sp**

ART118 Digital Design and Color
2 class and 4 lab hrs/wk, 4 cr.
Introduces the basic principles of design, visual perception, and organization of visual elements in works of art and design. Focuses on digital design and color. **Offered as needed.**

ART131 Introduction to Drawing 1
2 class hrs and 4 lab hrs/wk, 4 cr.
Provides individualized instruction in practical drawing skills designed for the beginner. Introduces fundamental gesture, contour, and value approaches to drawing, utilizing a variety of monochromatic media. Offers lectures, demonstrations, and training in traditional methods of representing shape and space on a two-dimensional surface.
F, W, Sp, Su

ART132 Introduction to Drawing 2
6 lab hrs/wk, 3 cr.
Covers basic drawing skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasizes composition and the understanding of visual form, and introduces style as a means to personal expression. **Prerequisite:** ART131 or consent of instructor (based on portfolio review). **W, Sp**

ART133 Introduction to Drawing 3
6 lab hrs/wk, 3 cr.
Continues training in skills of observation, selection, representation, perception, and hand-eye-mind coordination. Emphasizes composition and understanding drawing as a visual form of communication and expression. **Prerequisite:** ART132 or consent of instructor (based on portfolio review). **W, Sp**

ART154 Pottery 1—Handbuilding
6 lab hrs/wk, 3 cr.
Introduces handbuilding ceramic objects. Includes basic form and design considerations as well as pinch, coil, slab, press mold, decoration, and glazing techniques. **F, W, Sp, Su**

ART155 Pottery 2—Beginning Wheel Throwing
6 lab hrs/wk, 3 cr.
Introduces producing pottery using the potter's wheel. Emphasizes forming, trimming, decorating, glazing, and firing of projects, as well as visual and functional form considerations. **F, W, Sp, Su**

ART156 Pottery 3—Intermediate Techniques
6 lab hrs/wk, 3 cr.
Expands on basic wheelthrowing skills through a series of intermediate projects. Includes producing and testing glazes, lidded containers, teapots, combined forms, altered forms, kiln theory and design, and alternative firing techniques. **Prerequisite:** ART154 and ART155, or consent of instructor. **Sp**

ART204 Introduction to Art History
3 class hrs/wk, 3 cr.
Examines art in the Western tradition from its beginnings in the Prehistoric era through the Early Christian/Byzantine period. College-level writing skills recommended. **F, Offered as needed.**

ART205 Introduction to Art History
3 class hrs/wk, 3 cr.
Examines art in the Western tradition from the Middle Ages to A.D. 1500. Second term of the Survey of Art History. College-level writing skills recommended. **W, Offered as needed.**

ART206 Introduction to Art History
3 class hrs/wk, 3 cr.
Examines art in the Western tradition from A.D. 1500 to the present. Third term of the Survey of Art History. College-level writing skills recommended. **Sp, Offered as needed.**

ART210 Topics in Art History
3 class hrs/wk, 3 cr.
Focuses on the history of a specific art historical topic. Topics will vary and may include: historical styles/periods, genres, women artists, media. **Offered as needed.**

ART221 Graphic Design 1: Icons and Symbols
2 class and 4 lab hrs/wk, 4 cr.
Applies the principles and elements of design to the process of creating solutions to graphic design challenges with an emphasis on icons and symbols. **Prerequisite:** ART115, ART116 and ART131; demonstrated ability to work with vector graphic software or consent of instructor. **F**

ART222 Graphic Design 2: Logo Design
2 class and 4 lab hrs/wk, 4 cr.
Builds on the concepts learned in ART221 with an emphasis on logo design and branding. **Prerequisite:** ART221. **W**

ART223 Graphic Design 3: Package Design
2 class and 4 lab hrs/wk, 4 cr.
Builds on the concepts learned in ART221 and ART222. Continues exploration of graphic design with advanced projects emphasizing package design. **Prerequisite:** ART222. **Sp**

ART224 Type Design 1
2 class and 4 lab hrs/wk, 4 cr.
Introduces the study of typography and its importance in the design of visual communications. **Prerequisite:** VC111 and VC114, or consent of instructor. **W**

ART225 Type Design 2
2 class and 4 lab hrs/wk, 4 cr.
Continues the study of letterforms and typography as a design element in visual communications. **Prerequisite:** ART224. **Sp**

ART230 Drawing: Anatomy for Artists
1 class and 4 lab hrs/wk, 3 cr.
Introduces anatomy course for art students. Includes a brief overview of body organization and terminology, examines body proportions, skeletal and muscle systems, and a summary of surface features (e.g., skin, superficial vessels). Uses and expands on basic drawing skills developed in beginning drawing classes. **Prerequisite:** grade C or better in ART131, ART132, ART133, or consent of instructor based on portfolio review. **Offered as needed.**

ART234 Figure Drawing 1
6 lab hrs/wk, 3 cr.
Uses the human figure as a constant subject matter. Offers intensive study of the problems the figure presents to the artist. Emphasizes proportion, composition, and dynamic representation. **Prerequisite:** ART131 or consent of instructor. **F, W, Sp, Su**

ART235 Figure Drawing 2
6 lab hrs/wk, 3 cr.
Offers further study and practice in drawing the human figure. **Prerequisite:** ART234 or consent of instructor. **F, W, Sp, Su**

ART236 Figure Drawing 3
6 lab hrs/wk, 3 cr.
Continues study and practice in drawing the human figure. **Prerequisite:** ART235 or consent of instructor. **F, W, Sp, Su**

ART237 Photo Illustration
2 class and 4 lab hrs/wk, 4 cr.
Adds digital imaging and manipulation to traditional photographic skills in the study of photo illustration for print or Web design. **Prerequisite:** ART265 and VC130 or equivalent. **W**

ART238 Introduction to Illustration
2 class and 2 lab hrs/wk, 3 cr.
Introduces traditional illustration techniques. Course may be repeated for a maximum of six credits. **Prerequisite:** ART131. **F, Offered as needed.**

ART239 Introduction to Digital Illustration
2 class and 2 lab hrs/wk, 3 cr.
Introduces the basics of digital illustration. Course may be repeated for a maximum of six credits. **Prerequisite:** ART221, or VC139, or demonstrated experience in vector graphics software and PhotoShop. **W**

ART240 Advanced Digital Illustration
2 class and 2 lab hrs/wk, 3 cr.
Offers advanced instruction in techniques and content of digital illustration. Course may be repeated for a total of six credits. **Prerequisite:** ART239 or consent of instructor. **Sp**

ART244 Stained Glass
6 lab hrs/wk, 3 cr.
Provides individualized instruction for the beginner in the design and construction of two moderately challenging stained glass windows made of both smooth clear and textured colored glass. Introduces techniques in designing, pattern making, glass cutting, assembling, soldering, and puttying using both lead cane and copper foil. Students produce original designs based on sources selected by the student. ART115 and ART116 recommended. **F, W, Sp, Su**

ART245 Intermediate Stained Glass
6 lab hrs/wk, 3 cr.
Provides individualized instruction for the intermediate level student. Students consult with the instructor and complete projects that are original, challenging and complex. Students will learn glass techniques such as sandblasting, fusing, and slumping. **Prerequisite:** ART244 or equivalent. **F, W, Sp, Su**

ART246 Advanced Stained Glass
6 lab hrs/wk, 3 cr.
Continues ART245. Projects will reflect an in-depth investigation of sources, including personal influences, and exhibit technical mastery of the medium. **Prerequisite:** ART245. ART115 and ART116 recommended. **F, W, Sp, Su**

ART247 Glass Fusing and Slumping—Beginning
6 lab hrs/wk, 3 cr.
Introduces technical information for using an electric kiln and refractory molds to flat fuse and form glass. Recommend completion of at least one of the following studio art classes: ART244, 245, or 246; ART291, 292, or 293; ART154; ART115 and ART116. **F, W, Sp, Su**

ART247B Glass Fusing and Slumping—Intermediate
6 lab hrs/wk, 3 cr.
Provides intermediate skills and technical information on using an electric kiln and high-temperature molds to flat-fuse and form glass. **Prerequisite:** ART247. **W, Sp, Su**

ART247C Glass Fusing and Slumping—Advanced
6 lab hrs/wk, 3 cr.
Explores using glass as the primary material of expression through the use of electric kilns and molds. Incorporates techniques such as Basque relief, mold making, inclusions, pattern bars, glass raking, and color layering. **Prerequisite:** ART247B or consent of instructor. **F, W, Sp, Su**

ART248 Kiln Cast Glass—Beginning
6 lab hrs/wk, 3 cr.
Provides an introduction and technical information on casting solid sculptural glass forms and hollow glass containing forms using open and closed face molds. Includes an extension of the glass chemistry and finishing techniques presented in ART247. Recommend completion of at least one of the following studio art classes: ART244, 245, or 246; ART291, 292, or 293; ART154; ART115 and ART116. **Offered as needed.**

ART248B Kiln Cast Glass—Intermediate
6 lab hrs/wk, 3 cr.
Exposes students to the fundamentals necessary to problem solve advanced casting projects. Presents multiple mold making processes for reproduction and for high temperature casting. Includes glass testing, sculpting in a variety of materials, cold-working, firing, and taking safety precautions. Also covers the exploration of the historical and contemporary development of cast art glass. Uses assignments to develop more advanced glass casting skills. **Prerequisite:** ART248 or consent of instructor. **Offered as needed.**

ART250 Flameworking—Beginning
6 lab hrs/wk, 3 cr.
Provides an introduction and technical information on using a torch to model and shape hot glass. Recommend completion of at least one of the following studio art classes: ART244, 245, or 246; ART291, 292, or 293; ART154; ART115 and ART116. **F, W, Sp, Su**

ART250B Flameworking—Intermediate
6 lab hrs/wk, 3 cr.
Provides intermediate flameworking skills to create solid, sculptural, and blown forms. Covers techniques using hollow tubing incorporating montage, incalmo, filligrana, bits, and Venetian glass. Continues the basic skills and techniques presented in ART250. **Prerequisite:** ART250 or consent of instructor. **F, W, Sp, Su**

ART250C Flameworking—Advanced
6 lab hrs/wk, 3 cr.
Provides advanced flameworking skills to create solid, sculptural, and blown forms. Covers techniques using hollow tubing incorporating zanfrico, rondels, reticello, murrine, graal, and Venetian glass. Continues the skills and techniques presented in ART250B. **Prerequisite:** ART250B or consent of instructor. **Offered as needed.**

ART251 Glass Blowing—Beginning
6 lab hrs/wk, 3 cr.
Provides an introduction and technical information necessary for blowing and shaping basic hot glass forms. **Prerequisite:** ART247, 248, ART250. **Offered as needed.**

ART254 Pottery 4—Low-Fire Ceramics
2 class and 3 lab hrs/wk, 3 cr.
Introduces low-fire ceramic materials, including both low-tech and high-tech applications and processes. **Prerequisite:** ART154, ART155, ART156, or consent of instructor. **Offered as needed.**

ART256 Art as a Profession
3 class hrs/wk, 3 cr.
Provides visual artists with the professional and business skills necessary to succeed in their own art business. Brings together marketing, promotion, presentation, employment, and education related topics to establish an understanding of the business aspects involved in being a successful visual artist. **Prerequisite:** completion of a studio art class, experience with studio art, or consent of instructor. **Offered as needed.**

ART261 General Photography
2 class and 4 lab hrs/wk, 4 cr.
Introduces 35mm black and white photography. Includes the history of contemporary photography, use of camera equipment, correct exposure calibrations, film processing, darkroom techniques, and presentation of enlargements. **F, W, Sp, Su**

ART261D General Photography: Digital
2 class and 2 lab hrs/wk, 3 cr.
Introduces digital photography camera handling, editing, and printing of digital images. Covers important photographic themes and composition. **Offered as needed.**

ART262 Intermediate Photography
2 class and 4 lab hrs/wk, 4 cr.
Introduces technical photography including studio lighting for portraits and product work, color, photojournalism, and art direction. **Prerequisite:** ART261. **Sp, Offered as needed.**

ART263 Photography: Special Topics
2 class and 4 lab hrs/wk, 4 cr.
Emphasizes the freedom to experiment with photographic techniques. May include darkroom work, infrared black and white, toning techniques, compositing images, and aesthetic issues. **Prerequisite:** ART261 or ART265 or consent of instructor. **Offered as needed.**

ART265 Digital Photography
2 class and 4 lab hrs/wk, 4 cr.
Investigates digital photography stressing competent SLR camera handling. Emphasizes exposure control, digital management, image editing, printing and presentation. Examines important photographic themes, lighting, and composition. **F, W, Sp, Su**

ART266 Studio Photography
2 class and 4 lab hrs/wk, 4 cr.
Introduces studio lighting for portraits and product photography, color, and art direction. **Prerequisite:** ART265. **Sp**

ART270 Printmaking: Screen Printing 1
6 lab hrs/wk, 3 cr.
Introduces the methods, materials, and techniques of silkscreen printing, including the photostencil process. Includes designing and pulling prints. **Prerequisite:** ART131 or ART115 or ART261 or consent of instructor. ART116 recommended. **F, W, Sp, Su**

ART271 Printmaking: Photo-Etching
6 lab hrs/wk, 3 cr.
Introduces the fundamental techniques used in making etchings as fine art prints. Includes contemporary photo processes, development of personal imagery, and technical understanding of the printing process. **Prerequisite:** ART131 or ART115 or ART261 or consent of instructor. **W, Sp**

ART272 Printmaking: Woodcuts and Linocuts
6 lab hrs/wk, 3 cr.
Offers studio experience and instruction in techniques used in making woodcuts and linoleum block prints. Emphasizes studio practice, experimentation, and development of style as a means of personal expression. **Prerequisite:** ART131 or ART115 or ART261 or consent of instructor. **W, Sp**

ART273 Printmaking: Monoprints
6 lab hrs/wk, 3 cr.
Offers studio experience and instruction in techniques used in making monoprints and monotypes as fine art prints. **Prerequisite:** ART131 or ART115 or ART261 or consent of instructor. **W, Sp**

ART274 Printmaking: Screen Printing 2
6 lab hrs/wk, 3 cr.
Continues skill building in techniques of silkscreen printing introduced in ART270, including photographic processes. **Prerequisite:** ART270. **F, W, Sp, Su**

ART275 Printmaking: Screen Printing 3
6 lab hrs/wk, 3 cr.
Offers studio practice in the expressive and technical principles of screen printing. Emphasizes skill development and use of composition, color, and various stencil processes to achieve an expressive visual form. **Prerequisite:** ART274. **F, W, Sp, Su**

ART281 Painting
6 lab hrs/wk, 3 cr.
Introduces traditional approaches to and techniques of painting. Includes introduction to materials, color theory, and historical perspectives. Intended for beginning painters who have strong fundamental drawing skills. Course may be repeated for a maximum of nine credits. **Prerequisite:** ART131 or consent of instructor based on demonstration in drawing. ART115 and ART116 recommended. **F, W, Sp**

ART281B Intermediate Painting
6 lab hrs/wk, 3 cr.
Emphasizes skill development and the composition of finished, balanced paintings. Includes development of individual and creative subject matter and critical analysis of work. **Prerequisite:** ART131, ART281, or consent of instructor based on demonstration of fundamental painting and drawing skills. **F, W, Sp**

ART281C Advanced Painting
6 lab hrs/wk, 3 cr.
Emphasizes proficiency in executing a variety of techniques, with an emphasis on finished, balanced paintings. Continues development of individual and creative subject matter and critical analysis. Students locate their work in the larger context of art including historical and contemporary practices. **Prerequisite:** ART131, ART281B, or consent of instructor based on demonstration of intermediate painting and foundation drawing skills. **F, W, Sp**

ART282 Landscape Painting
6 lab hrs/wk, 3 cr.
Introduces fundamental approaches and techniques of painting, focusing on elements affiliated with landscape painting. Includes introduction to materials, color theory, illusory depth devices, and historical and contemporary approaches. Engages both beginning and intermediate painters who have strong fundamental drawing skills. **Prerequisite:** ART131 or consent of instructor. ART115 and ART116 recommended. **Su**

ART284 Watercolor
6 lab hrs/wk, 3 cr.
Introduces fundamental watercolor techniques, characteristics of watercolor as a medium and compositional problems, observation of detail, potential for personal expression, and color theory and design elements. **Prerequisite:** ART131 or consent of instructor based on demonstrated skill in drawing. ART115 and ART116 recommended. **Offered as needed.**

ART285 Intermediate Watercolor
6 lab hrs/wk, 3 cr.
Emphasizes skill building and technical control of the watercolor medium. **Prerequisite:** ART284 or consent of instructor. **Offered as needed.**

ART286 Advanced Watercolor
6 lab hrs/wk, 3 cr.
Emphasizes enhanced skill development and exploration of watercolor as a creative medium. **Prerequisite:** ART285 or consent of instructor. **Offered as needed.**

ART291 Beginning Sculpture
6 lab hrs/wk, 3 cr.
Introduces the use of materials, tools, and methods of sculpture, and an exploration of the three-dimensional form. **Prerequisite:** ART117 recommended. **F**

ART292 Ceramic Sculpture
6 lab hrs/wk, 3 cr.
Introduces the characteristics and potential of clay as a sculptural material. **Prerequisite:** ART117 recommended. **W**

ART293 Wax to Bronze Sculpture
6 lab hrs/wk, 3 cr.
Introduces the casting and finishing of bronze sculpture through the lost wax process using ceramic shell technologies. **Prerequisite:** ART117 recommended. **F, Sp**

ASL

American Sign Language

ASL111 First Year American Sign Language, Term 1
4 class hrs/wk, 4 cr.
Introduces American Sign Language (ASL), supported by expressive and receptive readiness activities, finger-spelling techniques, vocabulary, grammar, and guided communication. Covers Deaf Culture and community, as well as historical aspects though reading and writing. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** Internet skills required. **F, W, Sp, Su**

ASL112 First Year American Sign Language, Term 2
4 class hrs/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 though reading and writing. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** grade of "C" or better in ASL111 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **W, Sp, Su, Offered as needed.**

ASL113 First Year American Sign Language, Term 3
4 class hrs/wk, 4 cr.
Continues American Sign Language (ASL), supported by vocabulary, grammar, and active communication. Presents Deaf Culture and community as well as historical aspects through reading, writing, and short signed or videotaped presentations. Uses ASL as the primary language in the classroom. Course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** grade of "C" or better in ASL112 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. Sp, Su, **Offered as needed.**

ASL211 Second Year American Sign Language, Term 1
4 class hrs/wk, 4 cr.
Continues development of expressive and receptive skills learned in American Sign Language (ASL) first year. Expands vocabulary and introduces forms of ASL literature. Continues study in complex grammatical structures. Explores issues pertaining to the Deaf Community and multiculturalism, not limited to ethnic differences but also other perspectives including Deaf with other disabilities and gay, lesbian and transgender cultural issues. Uses ASL for classroom interaction and instruction. Course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** grade of "C" or better in ASL113 within one year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **F, Offered as needed.**

ASL212 Second Year American Sign Language, Term 2
4 class hrs/wk, 4 cr.
Continues development of expressive and receptive skills learned in ASL211. Expands vocabulary and continues study in forms of ASL literature. Also continues complex grammatical structures. Explores concepts of linguistics as it relates to variations in ASL. Emphasizes current research as well as field work. Introduces basic transcription and analysis of signing from video/digital as well as interviews. Uses ASL for classroom interaction and instruction. This course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** grade of "C" or better in ASL211 within last year or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **W, Offered as needed.**

ASL213 Second Year American Sign Language, Term 3
4 class hrs/wk, 4 cr.
Continues development of expressive and receptive skills learned in ASL212. Expands vocabulary and continues study and performance of forms of American Sign Language (ASL) literature. Continues to analyze complex grammatical structures. Explores concepts of linguistics as it relates to variations in ASL. Emphasizes current research as well as field work. Performs more advanced transcription and analysis of signing from video/digital as well as interviews. Uses ASL for classroom interaction and instruction. This course has an online component that requires students to use Internet resources for coursework. **Prerequisite:** grade of "C" or better in ASL212 or consent of instructor. Instructor can test student or require additional assignments to satisfy prerequisite skill/knowledge requirements. Internet skills required. **Sp, Offered as needed.**

Astronomy
See PH—Physics.

ATH

Anthropology

ATH101 Human Evolution
3 class hrs/wk, 3 cr.
Studies the processes of the biocultural evolution of humans with emphasis on evolutionary theory, Mendelian and population genetics, the fossil record, classification of primates, and the nature of race. **F, W, Sp, Su**

ATH102 Archaeology
3 class hrs/wk, 3 cr.
Covers basic archaeological method and theory, and reviews the techniques used for investigating the past. Focuses on the interpretation and assessment of archeological data. Includes the development of technology and food production, the origins of complex societies and the resulting social inequalities, and the evolution of cultural systems. Includes some of the major contributions of archaeology and discusses the relevance of archaeology to everyday life. Selection of specific societies and sites for study may vary according to each instructor's expertise. **F, W, Sp, Su**

ATH103 Introduction to Cultural Anthropology
3 class hrs/wk, 3 cr.
Surveys the field of cultural anthropology and its focus on the human patterns of behaviors, thoughts, and feelings. Introduces a methodology for studying human sociocultural adaptations. Includes the topics of major cross-cultural studies with a focus on language, adaptation, economics, marriage, kinship, gender, political organization, stratification, and religion. Examines the process of culture change and the application of cultural anthropology to practical society problems.
F, W, Sp, Su

ATH153 Introduction to Field Archaeology
3 class hrs/wk, 3 cr.
Introduces the diverse theories, methods, and goals of field or "dirt" archaeology used throughout much of the world. Includes basic techniques of scientific archaeological excavation, artifact collection, and documentation through classroom activities. **Offered as needed.**

ATH180 The Nature of Language
3 class hrs/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, multiculturalism, and written language development in both the old and new world. **Offered as needed.**

ATH212 Aztec Civilization/La Civilizacion Azteca
3 class hrs/wk, 3 cr.
Presents an overview of Aztec institutions and demonstrates examples present in contemporary Mexican culture. Focuses on the daily life, culture, religion, philosophy, literature, social, political, and economic structures of the Aztecs. Analyzes and compares Aztec concepts of life, death, the sacred, time, space, property, and education with American mainstream concepts. **Offered as needed.**

ATH214 Contemporary Mexican Culture
3 class hrs/wk, 3 cr.
Provides an introduction to Mexican culture by focusing on the main historical events that have shaped the identity of the Mexican. Explores the mixture of cultural institutions in modern Mexico from pre-Columbian indigenous cultures through European conquest and the Revolution. **Offered as needed.**

ATH215 Introduction to Early Greek and Aegean Archaeology
3 class hrs/wk, 3 cr.
Explores early Greek culture (10,000 BC - 1000 BC) with an emphasis on the Bronze Age and the islands of the Aegean. Includes trade, exploitation of natural resources, material culture elaboration, and the development of maritime orientation, marine-based faunal ritualization and cosmologies. Also covers the role of Crete and other Aegean islands in trade and craft/specialty food production, and their relationships with Egypt, Syria, and the Mediterranean world. **Offered as needed.**

ATH231 Native American Studies
3 class hrs/wk, 3 cr.
Focuses on the Northeastern and Southeastern Native American cultures from earliest times to the present. Contrasts the Algonkian and Iroquois confederacies, as well as the Five Civilized Tribes. Evaluates differences in tribal strategies adapting to Europeans while struggling to retain tribal sovereignty. Covers native identity, intertribal culture, and contemporary issues. **Offered as needed.**

ATH232 Native American Studies
3 class hrs/wk, 3 cr.
Focuses on the Prairie-Plains (Northern and Southern Plains) and Southwestern Native American cultures from earliest times to the present, emphasizing environmental adaptive strategies. Explores Lakota and Kiowa relations with Euroamericans while struggling to retain tribal sovereignty. Surveys intertribal powwows, religious rights, urban migration, culture loss and retention, and changing gender roles. **Offered as needed.**

ATH233 Native American Studies
3 class hrs/wk, 3 cr.
Focuses on the Northwestern and Southwestern Native American cultures, from earliest times to the present. Contrasts the various cultures west of the Rockies, with particular emphasis on women's changing roles. Explores Oregon coastal (Coos) and California (Pomo) tribal cultures, and evaluates Navajo and Hopi Southwestern tribal adaptations to Europeans while struggling to retain tribal sovereignty. Covers Kwakiutl and Haida masking arts, Shoshone women's music, and contemporary potlatch. **Offered as needed.**

AUM

Automotive Technology

AUM151 Basic Automotive Engines
3 class and 6 lab hrs/wk, 5 cr.
Covers construction, working principles, and methods of servicing a gasoline internal combustion engine. Stresses proper use of tools, torque wrenches, micrometers, and equipment. Discusses theory and operation of the makeup of simple and complex machines involving levers, cams, inertia, and momentum. **F**

AUM152 Automotive Machine Shop
2 class and 6 lab hrs/wk, 4 cr.
Covers the methods, technical aspects, theory, checks, and procedures used to recondition internal combustion engines and related components. Introduces the precision measuring tools, torque wrenches, and machining equipment used daily by automotive machinists. Discusses procedures, precision measuring devices and special tools, as well as theories of leverage, pressure/volume, expansion, momentum, inertia, and work related to engines. **Prerequisite:** AUM151, AUM157, and AUM184, or consent of instructor. **W**

AUM157 Automotive Brake Systems
2 class and 7 lab hrs/wk, 5 cr.
Covers the theory and principles of automotive brake systems. Includes service and repair of disc and drum brakes, manual and power brakes, brake system controls, indicating devices and an introduction to ABS systems. **F**

AUM158 Automotive Steering and Suspension
2 class and 8 lab hrs/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. **Prerequisite:** AUM151, AUM157, and AUM184, or consent of instructor. **W**

Aum159 Automotive Chassis Systems
2 class and 7 lab hrs/wk, 5 cr.
Presents the theory, operation, and service of automotive chassis systems, including steering, suspension, and brakes. **F, W**

AUM161 Manual Drive Trains and Axles 1
3 class and 6 lab hrs/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 and AUM158; or consent of instructor. **Sp**

AUM168 Automotive Electrical Systems 1
3 class and 3 lab hrs/wk, 4 cr.
Introduces automotive electricity and electronics systems. Includes an overview of automotive circuits. **Prerequisite:** AUM152 and AUM158; or consent of instructor. **Sp**

AUM184 Automotive Materials and Resources
2 lab hrs/wk, 1 cr.
Covers various service manuals, service information, labor calculation, and electronic manual systems. Focuses on the use of computerized manual systems commonly used in the automotive repair industry. **F, W, Sp**

AUM185A Automotive Machining Fundamentals
2 class and 3 lab hrs/wk, 3 cr.
Introduces the fundamentals of automotive machine processes and automotive fasteners, presses, pedestal grinders, arbor presses, and basic layout and tool sharpening. Includes use of appropriate charts and tables including decimal equivalent and drill and tap selection with speed and feed calculations. **F**

AUM186A Automotive Lathe Fundamentals
2 class and 3 lab hrs/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 or consent of instructor. **Sp**

AUM187A Automotive Milling Machine Processes
2 class and 3 lab hrs/wk, 3 cr.
Covers basic milling processes, work-holding methods, cutter identification, selection and use, speeds and feeds, adapters, tool holders and application. Includes operation of milling machines as applied to typical automotive machining operations. **Prerequisite:** AUM185A or consent of instructor. **W**

AUM188 Automotive Machine Shop—Upper Engine
1 class and 4 lab hrs/wk, 3 cr.
Introduces theory and application used in automotive machining procedures. Includes use of precision measuring tools, torque wrenches, valve and seat grinding, valve guide and seat repairs, resurfacing, valve springs, and cylinder head assembly. **F**

AUM189 Automotive Machine Shop—Lower Engine
1 class and 4 lab hrs/wk, 3 cr.
Introduces the theory and application used in automotive machining procedures. Emphasizes precision measuring tools, torque wrenches, cylinder block boring and honing, cylinder block resurfacing, mainline checks and repairs, and connecting rod reconditioning. **W**

AUM190 Automotive Machine Shop—Engine Assembly
1 class and 4 lab hrs/wk, 3 cr.
Covers theory and application in automotive machining procedures. Includes use of precision measuring tools, torque wrenches, camshaft timing checks, clearancing, blueprint measurement, and engine assembly and sealing techniques. **Sp**

AUM192 Automotive Diesel Engines
2 class and 3 lab hrs/wk, 3 cr.
Covers construction, working principles, and methods of servicing automotive diesel engines. **Prerequisite:** AUM152 and AUM158; or consent of instructor. **Sp**

AUM253 Automotive Engines 2
1 class and 6 lab hrs/wk, 3 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, AUM277, AUM282, and AUM286; or consent of instructor. **Sp**

AUM262 Manual Drive Trains and Axles 2
1 class and 6 lab hrs/wk, 3 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, AUM168, and AUM192; or consent of instructor. **F**

AUM263 Automatic Transmissions and Transaxles 1
3 class and 6 lab hrs/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, AUM168 and AUM192; or consent of instructor. **F**

AUM266 Basic Fuel Systems
3 class and 3 lab hrs/wk, 4 cr.
Covers basic principles of carburetion and carburetor circuits. Includes the basics of pressure differential, the venturi principle, fuel systems, gasoline, and engine variables pertinent to gasoline. Examines basic one-, two-, and four-barrel carburetor overhaul, service and adjustment, fuel pump testing and inspection, and introduces closed loop systems. **Prerequisite:** AUM161, AUM168 and AUM192; or consent of instructor. **F**

AUM267 Advanced Fuel Systems
3 class and 4 lab hrs/wk, 5 cr.
Focuses on automotive fuel injection systems, computer functions, inputs, commands, system diagnosis, causes of emissions, testing, and instrumentation studies and infrared, four-gas, and five-gas analyzer testing. Covers turbocharging and supercharging. **Prerequisite:** AUM262, AUM263, AUM266, and AUM276; or consent of instructor. **W**

AUM273 Automatic Transmissions and Transaxles 2
1 class and 6 lab hrs/wk, 3 cr.
Focuses on diagnosis, repair, and service of automatic transmissions and automatic transaxles, including electronic transmissions. Emphasizes speed and accuracy in diagnosis and repair. Builds on prior training. **Prerequisite:** AUM267, AUM277, AUM282, and AUM286; or consent of instructor. **Sp**

AUM276 Automotive Electrical Systems 2
3 class and 3 lab hrs/wk, 4 cr.
Continues DC electrical systems for the repair and service of automotive vehicles. Focuses on body electrical systems and troubleshooting of individual systems. **Prerequisite:** AUM161, AUM168 and AUM192; or consent of instructor. **F**

AUM277 Automotive Electrical Systems 3
3 class and 4 lab hrs/wk, 5 cr.
Emphasizes testing, diagnosis, theory of ignition operations, charging, cranking systems, electronic ignitions, oscilloscope testing, meter usage, and vehicle computer systems and testing. Reviews basic electrical principles, laws, and forces. **Prerequisite:** AUM262, AUM263, AUM266, and AUM276; or consent of instructor. **Sp**

AUM280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

AUM281 Advanced Driveability and Emissions
3 class and 8 lab hrs/wk, 6 cr.
Covers tune-up and diagnosis procedures of the gasoline internal combustion engine, including use of diagnostic equipment. Emphasizes repair of computer-controlled vehicles. **Prerequisite:** AUM267, AUM277, AUM282, and AUM286; or consent of instructor. **Sp**

AUM282 Electronic Vehicle Controls 1
3 class and 5 lab hrs/wk, 5 cr.
Covers history and development of automotive computer-controlled systems. Focuses on operation, diagnosis, and repair of individual systems. **Prerequisite:** AUM262, AUM263, AUM266, and AUM276; or consent of instructor. **W**

AUM283 Electronic Vehicle Controls 2
2 class and 5 lab hrs/wk, 4 cr.
Covers alternative power sources, including hybrid and fuel cell technology. Provides advanced training in the operation and testing of automotive electronic control systems. **Prerequisite:** AUM267, AUM277, AUM282, and AUM286; or consent of instructor. **Sp**

AUM286 Automotive Heating and Air Conditioning
3 class and 5 lab hrs/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 AUM276; or consent of instructor. **W,Su**

BA

Business Administration

BA101 Introduction to Business
4 class hrs/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. **F, W, Sp, Su**

BA115 Introduction to Accounting
4 class hrs/wk, 4 cr.
Covers basic accounting principles and procedures to provide familiarity with financial records and current accounting terminology. Includes processing techniques for handling information: special journals, controlling accounts, worksheets used in preparation of account statements, purchases, sales, and end-of-the-period procedures. **F, W, Sp, Su**

BA121 Project Management 1—Tools and Techniques
3 class hrs/wk, 3 cr.
Covers tools and techniques associated with project management. Focuses on gathering, analyzing, formatting, and presenting specific types of information and data. **Offered as needed.**

BA122 Project Management 2—Teams and Influencing Without Authority
2 class hrs/wk, 2 cr.
Covers team development associated with project management, including application, and how to influence others without authority. **Offered as needed.**

BA123 Project Management 3—Estimating, Risk, Contracts and Procurement
3 class hrs/wk, 3 cr.
Covers estimating, risk, contracts, and procurement. **Offered as needed.**

BA124 Project Management 4—Simulation: Controlling the Project
2 class hrs/wk, 2 cr.
Reviews project management techniques from start-up to close-out. Brings together tools learned in the previous Project Management courses through use of a simulation. **Offered as needed.**

BA145 Introduction to Entrepreneurship
3 class hrs/wk, 3 cr.
Examines the business skills and commitment necessary to successfully operate an entrepreneurial venture, and reviews the challenges and rewards of entrepreneurship. Provides an overview of the role of entrepreneurial businesses in the United States and their impact on our national and global economy. **Prerequisite:** consent of instructor. **F**

BA150A Planning Your Business 1
3 class hrs/wk, 3 cr.
Examines the process of researching, developing, and writing a detailed business plan. Centers on the segments of business planning, including opportunity recognition, business concept development, feasibility testing, and the business plan. First of a three-term sequence. **Prerequisite:** consent of instructor. **F, W, Sp, Su**

BA150B Planning Your Business 2
3 class hrs/wk, 3 cr.
Examines the process of researching, developing, and writing a detailed business plan. Focuses on the elements of marketing, including industry analysis, market penetration, and product/service pricing. **Prerequisite:** consent of instructor. **F, W, Sp, Su**

BA150C Planning Your Business 3
3 class hrs/wk, 3 cr.
Examines the process of researching, developing, and writing a detailed business plan. Covers financial planning, cash flow, inventory, equity and debt, and financial statements. Also addresses plan evaluation presentation and next steps in establishing a business. **Prerequisite:** consent of instructor. **F, W, Sp, Su**

BA160 Purchasing
3 class hrs/wk, 3 cr.
Discusses purchasing functions, policies, procedures, manuals, legal considerations, public relations, ethics, quality and sources of supplies, storekeeping, and personnel. **Offered as needed.**

BA173 Public Relations in Business
3 class hrs/wk, 3 cr.

Explains the basic theories and principles involved in the practice of public relations and provides practical information needed to develop or implement public relations activities in the business environment. **Offered as needed.**

BA177 Payroll
4 class hrs/wk, 4 cr.

Offers a comprehensive overview to both federal and State of Oregon payroll practices and procedures. Includes computing and recording gross wages, withholding amounts, and net wages. Introduces computerized and manual systems to create and maintain employee earnings records and payroll registers; compute employers taxes and other payroll-related costs; make payroll tax deposits; complete payroll reports and W-2s; and make general journal entries for all payroll transactions. **Prerequisite:** CIS101; and BT090 or BA211; or consent of instructor. **F, Sp**

BA202 Personal Effectiveness
3 class hrs/wk, 3 cr.

Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, individual problem-solving, and presents strategies to assist student in maintaining employment and demonstrating a professional image and work behavior. **F, W, Sp**

BA203 Organizational Behavior
3 class hrs/wk, 3 cr.

Covers interpersonal relations in an organization. Includes effective verbal and non-verbal communication styles, interviewing skills, coworker relations considering individual and cultural differences, customer relationships, conflict management, and power and politics. **Prerequisite:** BA202 recommended. **W, Sp, Su**

BA204 Teamwork Dynamics
3 class hrs/wk, 3 cr.

Introduces fundamentals of effective work-team relationships. Covers team building, group problem solving, self-directed teams, cultural diversity in the Northwest, and diversity and team management. **Prerequisite:** BA202 recommended. **Offered as needed.**

BA206 Business Management Principles
3 class hrs/wk, 3 cr.

Analyzes and synthesizes historical and current theories in leadership, group processes, organizational structures, personnel policies, motivation, and training that allow an individual to plan, organize, control, staff, and give direction in an organization. **Prerequisite:** college-level reading and writing recommended. **F, W, Sp, Su**

BA211 Financial Accounting 1
4 class hrs, 4 cr.

Covers the complete accounting cycle for service and merchandising firms, including recording transactions, adjustments, financial statements, worksheets, closing entries, cash and accounts receivable, notes and interest, and accounting for inventories. **Prerequisite:** MTH060 and CIS101 skill levels or higher or consent of instructor. **F, W, Sp, Su**

BA212 Financial Accounting 2
4 class hrs, 4 cr.

Covers accounting theory, capital assets and depreciation, current and long-term liabilities, partnerships, corporations, investments, cash flow statements, and ratio analysis. **Prerequisite:** BA101, grade of "C" or better in BA211, and MTH062 skill level or higher, or consent of instructor. **F, W, Sp, Su**

BA213 Managerial Accounting
4 class hrs/wk, 4 cr.

Covers the accountant's role in an organization, cost terms and purposes, cost-volume-profit relationships, budgeting, systems design, standard costs, flexible budgets and overhead control, joint costing, cost allocation, income effects of alternative product-costing methods and relevant costs, and the contribution approach to decisions. **Prerequisite:** grade of "C" or better in BA212, CIS125E, and MTH070 skill level, or higher or consent of instructor. **F, W, Sp, Su**

BA214 Business Communications
3 class hrs/wk, 3 cr.

Applies principles of written, oral, and non-verbal communication. Covers preparation of good news, bad news, and persuasive messages in applied situations using properly formatted letters, memoranda, and reports. Includes development of résumés, job application letters, and job interviews. Emphasizes written and oral assignments that require individual and group work. **Prerequisite:** grade of "C" or better in CA121 or equivalent skill, and grade of "C" or better in BT120 or WR121, or consent of instructor. **F, W, Sp, Su**

BA215 Cost Accounting
3 class hrs/wk, 3 cr.

Analyzes methods of detailed and specific identification of cost elements within the business enterprise. Focuses on job order, process and standard cost accounting systems, and their related theory. Emphasizes principles, techniques and managerial use of cost accounting data, and the use of budget and performance reports as they relate to cost accounting. **Prerequisite:** BA213. **W**

BA222 Financial Management
3 class hrs/wk, 3 cr.

Covers the principles of planning, acquiring, and using funds in an organization. Includes investment analysis, budgeting, ratio analysis, capital investments (using present value and internal rate of return), cost of capital, and cash and credit management. **Prerequisite:** BA212; CIS125E; MTH062 or higher. **F, W, Sp**

BA223 Principles of Marketing
3 class hrs/wk, 3 cr.

Surveys all functions of marketing from research and product development to the sale of a product or service and feedback of consumer acceptance. Emphasizes marketing planning and strategy as dictated by the consumer through marketing research. **Prerequisite:** BA101. **F, Sp**

BA224 Human Resource Management
3 class hrs/wk, 3 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. **F, W, Sp, Su**

BA226 Business Law 1
3 class hrs/wk, 3 cr.

Introduces the nature and function of the law in society. Covers contracts, employment, tort, criminal and constitutional law. **F, W, Sp, Su**

BA227 Business Law 2
3 class hrs/wk, 3 cr.

Covers legal aspects of personal property, sales, and commercial paper. **Prerequisite:** BA226. **W, Sp**

BA228 Computer Accounting Applications
3 class hrs/wk, 3 cr.

Introduces computer-based accounting for small businesses and provides hands-on experience with business applications including general ledger, accounts receivable, accounts payable, payroll, inventory management processing, sales invoicing, check reconciliation, and financial statements. **Prerequisite:** BA213 and CIS125E or equivalent microcomputer experience; or CA091 and CIS125E or equivalent microcomputer experience.**Sp**

BA238 Sales and Persuasion
3 class hrs/wk, 3 cr.

Emphasizes behavioral sciences, sales psychology and techniques, and communication. Attention is given to sales of ideas and attitudes internal to the firm, as well as products or services to customers. **F, W**

BA240 Governmental/Non-Profit Accounting 1
3 class hrs/wk, 3 cr.

Considers budgets, accounting for general funds, special revenue funds, revenue accounting, expenditure accounting, capital projects funds, debt service funds, special assessment funds, enterprise funds, capital assets, and summary of funds and groups. Includes comprehensive study of accounting for state and local governmental and non-profit entities. **Prerequisite:** BA211 or consent of instructor. **F**

BA242 Investments
3 class hrs/wk, 3 cr.

Explains individual investment opportunities as part of an investor's portfolio. Covers how investors may consolidate and coordinate previous experiences with basic information and data in order to survive in the marketplace. **Offered as needed.**

BA249 Retailing
3 class hrs/wk, 3 cr.
Introduces students to retailing and provides an understanding of the types of businesses, strategies, operation, formats and environments through which retailing is carried out. Takes a multi-disciplinary approach to consider the process and structure of retailing. Retailing topics to be covered will include: planning, research, consumers behavior, store design, merchandising strategy, management strategy, promotional strategy, and pricing strategy. The global dimensions of retailing as well as the relationship between retailing and our society will be stressed throughout the course. **Prerequisite:** BA101. **Offered as needed.**

BA250 Small Business Management
3 class hrs/wk, 3 cr.
Introduces basic aspects of managing a small business, including planning, organizing, staffing, actuating, and controlling. Covers general functions and procedures used in the operation of a small business. **Prerequisite:** consent of instructor. **Offered as needed.**

BA251 Office Management
3 class hrs/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. **Offered as needed**

BA256 Income Tax Accounting 1
4 class hrs, 4 cr.
Presents the first of two introductory courses in preparing Federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the Board of Tax Service Examiners educational requirements to take the Oregon Tax Preparer's Licensing Examination. **Prerequisite:** BA211 or consent of instructor. **F, Sp**

BA257 Income Tax Accounting 2
4 class hrs/wk, 4 cr.
Offers the second of two introductory courses in preparing federal and Oregon individual income tax returns. Completing BA256 and BA257 meets the Board of Tax Service Examiners educational requirements to take the Oregon Tax Preparer's Licensing Examination. **Prerequisite:** BA256 or consent of instructor. **F, Su**

BA259 Internal Auditing
4 class hrs/wk, 4 cr.
Covers the fundamental audit concepts that internal auditors need to know and understand. Includes the Professional Practices Framework, performance standards, ethics, enterprise-wide governance principles, risk management, COSO framework, business processes and risks, internal control, information technology risks and controls, fraud risks and controls, managing the internal audit function, gathering and documenting audit evidence, communicating results to management, and following up on audit recommendations. **Prerequisite:** grade C or better in BA212, CIS125E, and MTH070 or higher, or consent of instructor. **Offered as needed.**

BA266 Intermediate Financial Accounting 1
4 class hrs/wk, 4 cr.
Studies the environment and development of accounting principles, basic theory, accounting process, statement of income and retained earnings, statement of financial position, cash flow statements, and present value. **Prerequisite:** BA213 or concurrent enrollment in BA213 or consent of instructor. **F**

BA267 Intermediate Financial Accounting 2
4 class hrs/wk, 4 cr.
Studies monetary assets, valuation of inventories, plant assets, depreciation, depletion, intangible assets, accounting changes, error analysis, financial statement analysis, and cash flow statements. **Prerequisite:** grade of "C" or better in BA266 or consent of instructor. **W**

BA268 Intermediate Financial Accounting 3
4 class hrs/wk, 4 cr.
Offers a comprehensive study of revenue recognition, income taxes, pension plans, leases, long-term liabilities, issuance and reacquisition of capital stock, additional paid-in capital and retained earnings, dilutive securities and earnings per share calculations, and long-term investments in securities and funds. **Prerequisite:** grade of "C" or better in BA267 or consent of instructor. **Sp**

BA271A Information Technology in Business
3 class hrs/wk, 3 cr.
Covers application of information technology as a personal productivity tool within a business environment. Presents integrative use of application programs including database management systems, spreadsheets, presentation graphics, and Internet usage. **Prerequisite:** CIS125E and CIS125A. **Offered as needed.**

BA275 Quantitative Business Methods
4 class hrs/wk, 4 cr.
Presents management decision processes utilizing statistical methods. Includes use and application of probability concepts, sampling procedures, statistical estimation, and regression. **Prerequisite:** MTH111, CIS125E. **Offered as needed.**

BA277 Business Ethics
3 class hrs/wk, 3 cr.
Includes a comparative study of ethical and economic systems designed to increase decision making capabilities. Emphasizes issues and policy formation in varied business settings. **F, W, Sp, Su**

BA280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

Biology

BI060 Basic Science for Dental Assistants
2 class and 2 lab hrs/wk, 3 cr.
Designed specifically 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, and basic laboratory techniques. **Sp**

BI100 Orientation to Marine Life of the Oregon Coast
2 class and 3 lab hrs/wk, 3 cr.
Presents introductory information about marine organisms, including birds, mammals, fishes, and invertebrates native to the Oregon Coast. Includes identification of these organisms, basic knowledge about their natural history, introduction to scientific terminology, basic awareness of scientific classification, and information related to the understanding of the physical exhibitory structure and life support systems in maintaining these animals in an aquarium environment. Provides background and practice in interpretation of the knowledge gained to members of the general public. **Sp**

BI101 General Biology
3 class and 3 lab hrs/wk, 4 cr.
Investigates the diversity of organisms, principles of ecology, and effects and consequences of ecosystem alteration by humans. Includes mandatory field trips. This sequence need not be taken in order, although some carryover from one term to the next does occur. **F, Sp, Su**

BI102 General Biology
3 class and 3 lab hrs/wk, 4 cr.
Investigates the principles of cell division; Mendelian, population, and molecular genetics; evolution, natural selection and origin of species; and animal behavior. This sequence need not be taken in order, although some carryover from one term to the next does occur. **F, W. Offered summer as needed.**

BI103 General Biology
3 class and 3 lab hrs/wk, 4 cr.
Investigates the principles of animal structure (anatomy) and function (physiology); human (and comparative) reproductive, nervous, circulatory, immune, digestive, respiratory, and urinary systems; plant structure and function; nutrition, growth and reproduction. Includes mandatory field trips. This sequence need not be taken in order, although some carryover from one term to the next does occur. **W, Sp. Offered summer as needed.**

BI131 Environmental Science 1
3 class and 3 lab hrs/wk, 4 cr.
Introduces basic principles of ecology and environmental science and examines environmental problems and issues concerning human population growth. **F**

BI132 Environmental Science 2
3 class and 3 lab hrs/wk, 4 cr.

Examines environmental problems and issues related to resource use and management, such as deforestation, global warming, soil erosion, water and food shortages, the loss of biodiversity, and energy issues. **Prerequisite:** BI131 or BI101. **W**

BI133 Environmental Science 3
3 class and 3 lab hrs/wk, 4 cr.

Examines environmental problems and issues related to environmental contamination, such as air and water pollution, solid waste, and pesticide use. Explores relationships between environmental problems and other aspects of society. **Prerequisite:** BI132. **Sp**

BI143 Marine Biology
3 class and 3 lab hrs/wk, 4 cr.

Investigates a variety of marine ecosystems, including intertidal areas, salt marshes, estuaries, and other marine environments. Examines the ecology, physiology, and morphology of marine plants and animals. Emphasizes Oregon adaptations of life forms to marine environments. **W**

BI171 Introduction to Human Anatomy and Physiology 1
2 class and 2 lab hrs/wk, 3 cr.

Introduces the normal structure and function of the human body from the chemical level to the systems level, focusing on homeostatsis and system integration. Includes lecture, activities, laboratories, and student projects. **Offered as needed.**

BI172 Introduction to Human Anatomy and Physiology 2
2 class and 2 lab hrs/wk, 3 cr.

Introduces the normal structure and function of the human body from the chemical level to the systems level, focusing on homeostatsis and system integration. Includes lecture, activities, laboratories, and student projects. **Prerequisite:** BI171. **Offered as needed.**

BI200 Principles of Ecology—Field Biology
3 class and 3 lab hrs/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 in detail using student-collected field data. Course may be repeated for a maximum of eight credits. **Prerequisite:** BI101 or BI131 or equivalent, or consent of instructor. **Su**

BI230 Introductory Microbiology
3 class and 3 lab hrs/wk, 4 cr.

Surveys the history, anatomy, and physiology of micro-organisms 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, environmental microbiology with applications to grape growing and winemaking and standard microbiological laboratory techniques. **W, Offered as needed.**

BI231 Human Anatomy and Physiology
3 class and 3 lab hrs/wk, 4 cr.

Presents an in-depth examination of the structure and function of the human body in the first of a three-term sequence. Includes a review of chemical principles, the study of cells, tissues and the integumentary, skeletal, and nervous systems. **Prerequisite:** one term of accelerated college chemistry with a grade of "C" or better within the last seven years; CH110, or successful completion of Chemistry Proficiency Exam; or completion of CH104 and concurrent enrollment in CH105; or completion of CH121 and concurrent enrollment in CH122. **F, W, Sp. Offered summer as needed.**

BI232 Human Anatomy and Physiology
3 class and 3 lab hrs/wk, 4 cr.

Covers an in-depth examination of the structure and function of the human body in the second of a three-term sequence. Includes the study of the muscular, circulatory, and respiratory systems. **Prerequisite:** BI231 with a grade of "C" or better within the last seven years; and concurrent enrollment in CH106 or CH123 if taking a chemistry sequence; or consent of instructor. **F, W, Sp. Offered summer as needed.**

BI233 Human Anatomy and Physiology
3 class and 3 lab hrs/wk, 4 cr.

Covers an in-depth examination of the structure of the human body in the third of a three-term sequence. Includes the study of the endocrine, digestive, urinary, and reproductive systems. Also includes an examination of body fluids, electrolytes, pH balance, and medical genetics **Prerequisite:** BI232 with a grade of "C" or better within the last seven years or consent of instructor. **F, W, Sp. Offered summer as needed.**

BI234 Microbiology
3 class and 3 lab hrs/wk, 4 cr.

Presents a survey of bacteria and other micro-organisms, emphasizing their impact upon human health. Includes discussion of infection, immunity, common pathogens, and mechanisms of control. **Prerequisite:** BI231 with a grade of "C" or better within the last seven years or consent of instructor. **F, W, Sp. Offered summer as needed.**

BI251 Principles of Wildlife Conservation
3 class hrs/wk, 3 cr.

Introduces the principles and practices of wildlife conservation and management. Covers the history of wildlife conservation, basic ecological concepts, human impact on wildlife and habitat, social and economic issues relating to wildlife management, and management objectives and strategies for fisheries and wildlife populations. **Sp**

BLD

Building Inspection Technology

BLD151 Building Codes 1
3 class hrs/wk, 3 cr.

Covers the non-structural standards of the International Building Code including occupancy classifications, building area, height and location limitations, types of construction, and exit and fire resistive standards. Emphasizes commercial structures. **F**

BLD152 Building Codes 2
3 class hrs/wk, 3 cr.

Continues building code studies concerning areas that present hazards in building construction such as vertical shafts, treatment of exterior and interior surfaces, detailed exit requirements, fire protection systems, public property, and weather protection. **Prerequisite:** BLD151. **W**

BLD153 Building Codes 3
3 class hrs/wk, 3 cr.

Provides a comprehensive review of the International Building Code including pedestrian protection, permanent occupancy, prefabricated construction, fire systems, energy conservation, and architectural barriers. **Prerequisite:** BLD151 and BLD152. **Sp**

BLD155 Building Department Administration
3 class hrs/wk, 3 cr.

Discusses purpose and procedures of building department administration. Examines laws and principles that affect building department personnel and code compliance. **Sp**

BLD159A Materials of Construction
3 class hrs/wk, 3 cr.

Covers materials and processes regulated by the International Building Code. **F**

BLD160 Construction Print Reading
2 class hrs/wk, 2 cr.

Provides instruction in reading civil, architectural, structural, mechanical, plumbing and electrical construction drawings used in residential and commercial construction. Introduces terminology, abbreviations, symbols, construction notes, component schedules, and materials common to the different construction trades through the use of sample plans. Includes a refresher in fractional math, instruction on reading of architect's and engineer's scales, an overview of dimensioning practices, and an explanation of plan views, elevations, cross-sections, and sectional details. **F**

BLD161 Structural Inspection—Wood
3 class hrs/wk, 3 cr.

Introduces basic methods of wood framing. Covers allowable stresses, loads, and fundamental design of wood products and construction systems. Emphasizes wall bracing methods. **W**

BLD162 Structural Inspection—Masonry
3 class hrs/wk, 3 cr.
Covers the specific code requirements for all types of masonry construction, both structural and non-structural. Includes an introduction to fireplace construction. **F**

BLD181A Mechanical Codes 1
2 class and 3 lab hrs/wk, 3 cr.
Introduces the Oregon Mechanical Specialty Code (OMSC) by examining scoping provisions and administrative requirements. Covers necessary mechanical terminology and definitions, the laws of thermodynamics, the combustion process, and heat transfer. Examines combustion and dilution air requirements for fuel burning appliances and equipment. Includes the requirements for the design, construction, installation, and inspection of heating, ventilation, and air conditioning (HVAC) equipment; heating, ventilation, and air conditioning ducts; fuel gas piping systems extending from the gas meter to the appliance; and ventilation systems that provide outside air for building occupants. **W**

BLD182A Mechanical Codes 2
2 class and 3 lab hrs/wk, 3 cr.
Examines the Oregon Mechanical Specialty Code (OMSC), including requirements for: chimneys and vents serving fuel burning appliances and equipment; special solid fuel and fuel gas burning appliances and equipment; kitchen hoods, grease ducts, hazardous exhaust ducts, and product conveying ducts; refrigerants, refrigeration systems, and refrigeration mechanical rooms; boilers, hot water heaters, and pressure vessels; hydronic piping and solar heating systems; and fuel oil piping and storage tanks. **Prerequisite:** BLD181A. **Sp**

BLD193A-F Building Inspection Lab
4 lab hrs/wk, 2 cr. each
Provides code standards and conditions typical of building inspection work for inspectors in the following areas: mechanical inspection, structural inspection, and one- and two-family dwelling codes. Stresses writing correction notices based on field observations. **F, W, Sp**

BLD260 Fire Protection for Buildings
3 class hrs/wk, 3 cr.
Covers the installation, function, location, and purpose of sprinkler and fire alarm systems. **W**

BLD263 Structural Inspection—Concrete
3 class hrs/wk, 3 cr.
Introduces concrete as a construction material and its identity as a type of construction as defined by the International Building Code. Covers its physical properties including mix design, handling, storage, delivery, placement, and fire-resistive qualities. Emphasizes analysis of one- and two-family structures. **Sp**

BLD266 Structural Plan Review
2 class and 3 lab hrs/wk, 3 cr.
Covers the fundamentals of structural plan review. Includes analysis and design of beams, columns, and connections. **Prerequisite:** BLD269. **W**

BLD267 Non-Structural Plan Review
2 class and 3 lab hrs/wk, 3 cr.
Examines the techniques and processes of non-structural plans. Includes familiarization with plan and construction documents, specifications, and the application of fire, life, and safety code requirements. **Prerequisite:** BLD151 and BLD152. **Sp**

BLD268 Foundations, Excavation and Grading
3 class hrs/wk, 3 cr.
Covers fundamentals of and the code requirements for regulating excavations and fills for any building or structure, construction of foundation and retaining structures, and general grading. Presents code requirements and emphasizes application to plan review and inspection functions. Uses grading and building plans and soil reports to complement the codes. **Prerequisite:** MTH052. **Sp**

BLD269 Engineering for the Building Inspector
3 class hrs/wk, 3 cr.
Studies static forces and their effect on 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. **F**

BLD270 Engineering for the Building Inspector 2
3 class hrs/wk, 3 cr.
Studies dynamic wind and seismic loads on structures and their reduction to simplified equivalent static forces used in the design of structures. Covers how to determine the required lateral load path elements: diaphragms, shear walls and foundations used to resist lateral forces. Emphasizes code requirements of Chapter 16 Section 1609 for wind and Sections 1613 through 1623 of the Oregon Structural Specialty Code (2006 IBC). Uses the Western Woods Use Book related to lateral design. Also studies the design, fabrication and erection of structural steel for buildings and structures. Emphasizes code requirements of Oregon Structural Specialty Code Chapter 22 and the American Institute of Steel Construction Steel Manual. **Prerequisite:** BLD269. **W**

BLD271 Plumbing Codes 1
3 class hrs/wk, 3 cr.
Investigates certain standards of the Uniform Plumbing Code. Covers the principles of plumbing design, materials, and installation standards related to dwelling construction. **F**

BLD272 Plumbing Codes 2
3 class hrs/wk, 3 cr.
Covers plumbing code requirements related to water and gas distribution systems, storm and sanitary sewer systems, water heater installations, and mobile home connections. **Prerequisite:** BLD271 or consent of instructor. **W**

BLD280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

BLD291 One- and Two-Family Electrical Code
3 class hrs/wk, 3 cr.
Covers general wiring design, methods and equipment, as related to one- and two-family dwelling applications. **F**

BLD292A International Residential Code (Structural)
3 class hrs/wk, 3 cr.
Covers the structural portion of the International Residential Specialty Code as it relates to residential construction and other applicable codes. **F**

BLD292B International Residential Code (Mechanical)
3 class hrs/wk, 3 cr.
Covers the mechanical portion of the International Residential Specialty Code as it relates to residential construction and applicable codes. **W**

BOT

Botany

BOT201 General Botany
3 class and 3 lab hrs/wk, 4 cr.
Introduces the study of plant life, emphasizing principles, theories, and applications of plant biology. Includes the study of plant ecology, generalized plant cells, photosynthesis, and respiration. **Prerequisite:** High school biology and chemistry, or college equivalents recommended. **F**

BOT202 General Botany
3 class and 3 lab hrs/wk, 4 cr.
Introduces the study of plant life, emphasizing principles, theories, and applications of plant biology. Includes the study of genetics, evolution, diversity of prokaryotes, fungi, and algae. **Prerequisite:** High school biology and chemistry, or college equivalents recommended. **W**

BOT203 General Botany
3 class and 3 lab hrs/wk, 4 cr.
Introduces the study of plant life, emphasizing principles, theories, and applications of plant biology. Includes the diversity, growth, development, and structure of vascular plants, including the effects of light, hormones, water, and nutrients. Includes laboratory identification of flowering plants. **Prerequisite:** High school biology and chemistry, or college equivalents recommended. **Sp**

BT

Business Technology

BT061 Electronic Calculators
2 class hrs/wk, 2 cr.
Covers the use of electronic printing calculators to solve simple business and mathematical problems. Stresses speed and accuracy in touch operation of the calculator. **Prerequisite:** grade of "C" or better in MTH060. **F, Sp**

BT061A Electronic Calculators A
2 lab hrs/wk, 1 cr.
Introduces use of electronic calculators to solve problems involving addition, subtraction, multiplication, division, and fractions. Includes speed and accuracy in touch operation of the calculator. **F, W, Sp, Su**

BT061B Electronic Calculators B
2 lab hrs/wk, 1 cr.
Continues BT061A. Applies the functions of an electronic calculator to solve business problems. Covers the percentage formula, simple interest, trade discounts, payroll, and consumer installment buying. Stresses speed and accuracy in touch operation of the calculator. **Prerequisite:** grade of "C" or better in MTH060 and BT061A. **Offered as needed.**

BT084 Business English 1
3 class hrs/wk, 3 cr.
Emphasizes basic English skills including proper use of possessives, pronouns, verbs, spelling, parts of speech, sentence patterns, terminal punctuation, and the dictionary. Uses these skills in writing and saying clear, concise sentences. **F, W, Sp, Su**

BT085 Business English 2
3 class hrs/wk, 3 cr.
Emphasizes effective business writing by focusing on proper grammar, punctuation, and sentence structure. Covers the writing of business-related paragraphs. **Prerequisite:** grade of "C" or better in BT084 or consent of instructor based on proficiency exam. **F, W, Sp**

BT086 Personal and Professional Development
3 class hrs/wk, 3 cr.
Emphasizes the personal and professional strengths sought by employers in hiring and promoting employees. Promotes individual self-assessment as a tool to compare those traits with the student's own personal and professional strengths and weaknesses. Offers opportunities to develop step-by-step approaches toward enhancing professional marketability. **F, W**

BT099 Proofreading/Editing
3 class hrs/wk, 3 cr.
Presents effective proofreading techniques emphasizing punctuation, word division, spelling, grammar, numbers, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** grade of "C" or better in BT085. **W, Sp**

BT099A Proofreading/Editing A
1 class hr/wk, 1 cr.
Presents effective proofreading techniques emphasizing word division, spelling, capitalization, numbers, and abbreviations. Includes practical applications and use of an office reference manual while utilizing editing and pre-transcription skills. **Offered as needed.**

BT099B Proofreading/Editing B
1 class hr/wk, 1 cr.
Presents effective proofreading techniques, emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** grade of "C" or better in BT085 and BT099A, or equivalent as determined by instructor. **Offered as needed.**

BT099C Proofreading/Editing C
1 class hr/wk, 1 cr.
Presents effective proofreading techniques, emphasizing punctuation, word division, spelling, grammar, and abbreviations. Includes practical applications and use of an office reference manual while developing editing and pre-transcription skills. **Prerequisite:** grade of "C" or better BT085, BT099A and BT099B, or equivalent as determined by instructor. **Offered as needed.**

BT116 Office Procedures
3 class hrs/wk, 3 cr.
Introduces administrative support activities. Includes discussion of human relation issues, telephone usage, development of effective listening skills, mailing and shipping services, preparation of financial records, plans for meetings and conferences, travel arrangements, scheduling appointments, meeting with the public, supervision and leadership, and employment opportunities. **F, W, Sp, Su**

BT120 Professional Communication Skills
4 class hrs/wk, 4 cr.
Introduces principles of written, oral, and non-verbal communication. Includes composition of business documents (letters, memoranda, agendas, minutes); use of reference manuals; participation in small groups and business meetings (group dynamics, team building, short oral reports); and preparation of written reports with documentation. **Prerequisite:** grade of "C" or better in BT085 or placement through the proficiency exam. **W, Sp**

BT128 Introduction to Records Management
3 class hrs/wk, 3 cr.
Introduces principles and procedures for efficient organization and control of business records. Covers the creation, management, maintenance, storage, and disposition of records. Includes practice in alphabetic, numeric, subject, and geographic filing systems of correspondence and other papers. **F, Sp**

BT128A Introduction to Records Management A
1 class hr/wk, 1 cr.
Introduces basic principles used in the systematic planning of the classification, arrangement, and filing of alphabetic correspondence and the requisition, charge, and follow-up controls. **Offered as needed.**

BT128B Introduction to Records Management B
1 class hr/wk, 1 cr.
Presents various types of filing systems: color-coded, alphabetic, subject, numeric, and geographic. Emphasizes records control, transfer, storage, retrieval, and disposition of paper, recorded and special records filing. **Prerequisite:** grade of "C" or better in BT128A. **Offered as needed.**

BT128C Introduction to Records Management C
1 class hr/wk, 1 cr.
Covers principles and procedures for efficient organization and control of business records. Includes management of the creation, maintenance, storage, and disposition of records. Also covers automation and micrographics in the study of information resource management. **Prerequisite:** grade of "C" or better in BT128B. **Offered as needed.**

BT130 Customer Service
3 class hr/wk, 3 cr.
Covers various aspects of customer service including verbal communication, non-verbal communication, listening, using technology (telephone, voice mail, e-mail, fax, etc.), written messages, handling difficult encounters, understanding diversity, managing stress and time, and encouraging customer loyalty. **F, Sp**

BT280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

CA

Computer Applications

CA091 QuickBooks—Computerized Bookkeeping
3 class hrs/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:** grade of "C" or better in BT090 or BA211. **F, W**

CA091A QuickBooks Part A—Computerized Bookkeeping
1 class hr/wk, 1 cr.
Provides an overview of bookkeeping tasks that can be performed via the computer program QuickBooks. Includes introduction to setup, managing revenue, and expenses. **Prerequisite:** grade of "C" or better in BT090 or BA211, or consent of instructor. **Offered as needed.**

CA091B QuickBooks Part B—Computerized Bookkeeping
1 class hr/wk, 1 cr.
Provides an overview of bookkeeping tasks that can be performed via the computer program QuickBooks. Includes introduction to payroll, bank reconciliation, and inventory. **Prerequisite:** grade of "C" or better in BT090 or BA211, or consent of instructor. **Offered as needed.**

CA091C QuickBooks Part C—Computerized Bookkeeping
1 class hr/wk, 1 cr.
Provides an overview of bookkeeping tasks that can be performed via the computer program Quick-Books. Includes introduction to budgets, financial statements, graphs, year-end procedures, and file maintenance. **Prerequisite:** grade of "C" or better in BT090 or BA211, or consent of instructor. **Offered as needed.**

CA117 Microsoft Publisher
3 class hrs/wk, 3 cr.
Introduces Microsoft Publisher publication software. Includes formatting and enhancing text, working with art, using design gallery and drawing tools, and using the Catalog feature for creating publications. Includes using styles; flowing text into multiple columns; creating drop caps and reversed text; using BorderArt, WordArt, text wrap, and mail merge. Covers features for improving publications design, creating multiple-page publications, and creating a Web site. **Prerequisite:** computer literacy (prior experience with computer and mouse device) and touch keyboarding ability of 25 words per minute. **Offered as needed.**

CA117A Microsoft Publisher 1
1 class hr/wk, 1 cr.
Provides part one of a hands-on introduction to Microsoft Publisher publication software. Covers topics including formatting and enhancing text, working with art, Design Gallery and drawing tools, and using the Catalog feature for creating publications. **Prerequisite:** computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **Offered as needed.**

CA117B Microsoft Publisher 2
1 class hr/wk, 1 cr.
Presents part two of a hands-on introduction to Microsoft Publisher publication software. Includes using styles, flowing text into multiple columns, and creating drop caps and reversed text. Covers features for improving publications and creating multiple-page publications. **Prerequisite:** grade of "C" or better in CA117A or equivalent, computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **Offered as needed.**

CA117C Microsoft Publisher 3
1 class hr/wk, 1 cr.
Offers part three of a hands-on introduction to Microsoft Publisher publication software. Includes using special features such as BorderArt, WordArt, text wrap around objects, mail merge, and preparation for commercial printing. Covers features for working efficiently and creating a Web site. **Prerequisite:** grade of "C" or better in CA117B or equivalent, computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **Offered as needed.**

CA118A Microsoft Windows Basics
1 class hr/wk, 1 cr.
Introduces operating systems software currently used in business and industry. Includes exploring and managing disk organization and using the accessories. **Prerequisite:** computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **F, W, Sp, Su**

CA118B1 Excel Basics 1
1 class hr/wk, 1 cr.
Introduces building and editing worksheets, formatting and printing worksheets, working with formulas and functions, and charting using Microsoft Excel. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability, or consent of instructor. **F, W, Sp, Su**

CA118B2 Excel Basics 2
1 class hr/wk, 1 cr.
Covers use of special features including using and analyzing list data, using macros, enhancing charts, sharing Excel files, and saving as a Web page. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability, grade of "C" or better in CA118B1, or consent of instructor. **Offered as needed.**

CA118B3 Excel Basics 3
1 class hr/wk, 1 cr.
Focuses on "what-if" analysis, PivotTables, linking, embedding, and customizing using Microsoft Excel. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability, grade of "C" or better in CA118B2, or consent of instructor. **Offered as needed.**

CA118C1 Access Basics 1
1 class hr/wk, 1 cr.
Introduces database basics for tables design, forms design, simple queries, and reports. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability, or consent of instructor. **F, W, Sp, Su**

CA118C2 Access Basics 2
1 class hr/wk, 1 cr.
Introduces multiple table and advanced queries and reports; PivotTables and PivotCharts; forms and subforms; and importing, exporting, and linking data. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability, grade of "C" or better in CA118C1 or consent of instructor. **Offered as needed.**

CA118D Internet for the Office Environment
1 class hr/wk, 1 cr.
Introduces the Internet and demonstrates how this resource may be used effectively in a modern office. Emphasizes information currently needed by office professionals. **Prerequisite:** grade of "C" or better in CA118A or CIS101. **F, W, Su**

CA118E Outlook Basics
1 class hr/wk, 1 cr.
Introduces office software currently used in business and industry. The brands of software in this class may change as industry standards evolve. Covers electronic messaging, (e-mail management), use of the address book, calendar, and task management. **Prerequisite:** computer literacy (prior experience with computer and mouse device) and touch keyboarding ability. **F, W**

CA118F1 PowerPoint Basics 1
1 class hr/wk, 1 cr.
Introduces presentation software with an emphasis on designing and formatting business-related presentations. **Prerequisite:** computer literacy (prior experience with computer and mouse device), touch keyboarding ability or consent of instructor. **F, W, Su**

CA119 Office Desktop Publishing 1
3 class hrs/wk, 3 cr.
Introduces publication planning, typography, publication design principles, and hands-on desktop publishing preparation of office publications, including the features of text threading, layers, frames, kerning, and tracking. **Prerequisite:** touch keyboarding ability of 25 words per minute; computer literacy (prior experience with computer and mouse device). **F**

CA121 Keyboarding
2 class and 3 lab hrs/wk, 3 cr.
Presents basic touch keyboarding skills on standard microcomputer keyboard. Emphasizes speed and accuracy, the basic vocabulary of entering or retrieving information, and the formatting business letters and reports. **F, W, Sp, Su**

CA121A Keyboarding A
2 lab hrs/wk, 1 cr.
Covers basic touch keyboarding for the standard microcomputer keyboard or typewriter keyboard. **F, W, Sp, Su**

CA121B Keyboarding B
2 lab hrs/wk, 1 cr.
Reviews alphabetic keyboarding and emphasizes the development of speed and accuracy in touch keyboarding. Introduces number and symbol keys. **Prerequisite:** grade of "C" or better in CA121A or touch keyboarding ability of 15 words per minute. **Offered as needed.**

CA121C Keyboarding C
2 lab hrs/wk, 1 cr.
Emphasizes drills to increase speed and accuracy in touch keyboarding. Includes formatting different types of business letters and a short report. **Prerequisite:** grade of "C" or better in CA121A and CA121B or touch keyboarding ability of 20 words per minute. **Offered as needed.**

CA122 Keyboard Skillbuilding
1 class and 4 lab hrs/wk, 3 cr.
Uses exercises to improve keyboarding proficiency, speed and accuracy. **Prerequisite:** touch keyboarding ability of 25 words per minute; 30 wpm recommended. Course may be repeated for a maximum of six credits. **F,W,Sp,Su**

CA122A,B,C Keyboard Skillbuilding A, B, C
2 lab hrs/wk, 1 cr. each

Improves keyboarding skill, including keyboard proficiency, speed, and accuracy. May be taken any time after one has learned the keyboard and is keyboarding approximately 25 words per minute. **Prerequisite:** grade of "C" or better in CA121 or consent of instructor. Each course may be repeated for a maximum of two credits each. **Offered as needed.**

CA201D Microsoft Word Processing 1
3 class hrs/wk, 3 cr.

Presents basic word processing training in the operation of Microsoft Word software. **Prerequisite:** touch keyboarding ability of 30 words per minute. **F, W, Sp, Su**

CA201D1-D3 Microsoft Word Processing 1—Parts 1–3
2 lab hrs/wk, 1 cr. each

Offers basic to intermediate word processing training in the operation of Microsoft Word for Windows. **Prerequisite:** CA201D1: Touch keyboarding ability of 30 words per minute. CA201D2: Grade of "C" or better in CA201D1. CA201D3: Grade of "C" or better in CA201D2. **Offered as needed.**

CA202D Microsoft Word Processing 2
3 class hrs/wk, 3 cr.

Offers intermediate word processing training using Microsoft Word software for those with prior basic skills and knowledge of word processing. **Prerequisite:** grade of "C" or better in CA201D or equivalent and touch keyboarding ability of 35 words per minute. **F, W, Sp**

CA202D1-D3 Microsoft Word Processing 2—Parts 1–3
2 lab hrs/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: Grade of "C" or better in CA201D or equivalent and touch keyboarding ability of 35 words per minute. CA202D2: Grade of "C" or better in CA202D1. CA202D3: Grade of "C" or better in CA202D2. **Offered as needed.**

CA205 PageMaker 1
3 class hrs/wk, 3 cr.

Offers a hands-on microcomputer desktop publishing course providing beginning level training in the use of Adobe PageMaker desktop publishing software. Includes setting up and printing publications, importing and formatting text and graphics, using styles, using graphics tools, using spot color and tints, and using layers and frames. **Prerequisite:** touch keyboarding ability of 25 words per minute; computer literacy (prior experience with computer and mouse device). **Offered as needed.**

CA208 Workplace Presentations Using PowerPoint
3 class hrs/wk, 3 cr.

Introduces the production of computer presentations for the workplace. Includes software techniques, design and typography basics, and production techniques for slides, overheads, and/or screen shows. **Prerequisite:** grade of "C" or better in CIS101 or equivalent or consent of instructor. **F, W**

CA213 Integrating Office Procedures
3 class hrs/wk, 3 cr.

Brings together the knowledge, skills, and abilities required of one-year Business Technology students and serves as a review for students continuing for a degree. Uses a business simulation to reinforce and expand computer and other office skills. **Prerequisite:** grade of "C" or better in CIS101, CA118A, CA118B1, CA118C1, CA201D, BT116, and BT120 (or concurrent enrollment). **W, Sp**

CA219 Office Desktop Publishing 2
3 class hrs/wk, 3 cr.

Focuses on publication planning, typography, publication design principles, and hands-on desktop publishing preparation of office publications, including the features of color, graphics, tables, transparency, books, printing/print shops, and exporting to PDF files. **Prerequisite:** grade of "C" or better in CA119 or consent of instructor. **W**

CA225 Advanced Document Production
3 class hrs/wk, 3 cr.

Covers development of correct formats for business reports, letters, memos, tabbed columns, and forms. Uses a variety of input methods, such as CD ROM dictation, voice recognition software, and printed rough drafts. Develops basic skill in the transcription of recorded documents. Stresses application of language arts skills. Develops the skill to produce documents accurately within specified timed guidelines and touch type at a minimum of 40 words per minute on 3-minute timings (with specified error limits). **Prerequisite:** touch keyboarding ability of 35 words per minute (no penalty for errors; 3-minute timings) and grade of "C" or better in BT099 and CA202D. **Sp**

CA230 Executive Office Simulation
2 class and 2 lab hrs/wk, 3 cr.

Provides a work-flow simulation that gives students experience in working as team members with office co-workers. Includes practice in decision making, prioritizing, and time management. Brings together skills acquired in prerequisite courses. **Prerequisite:** grade of "C" or better in BA214 and CA213. **W, Sp**

CA232 Integrating Office Software Applications
3 class hrs/wk, 3 cr.

Emphasizes critical thinking skills to apply previous computer and business knowledge in the creation of individual and group projects. Studies and applies procedures for importing, exporting, linking, embedding, and merging. Uses electronic mail, peripheral equipment, and presentation software in the production of business documentation and oral reports. **Prerequisite:** grade of "C" or better in CA118A, CA118B1, CA118C1, CA202D, and CA213. **W**

CAM

Computer-Aided Manufacturing

CAM050 Orientation to Manufacturing Processes
24 hrs, 2 cr.

Provides basic knowledge of various manufacturing processes and materials. Covers processes involving hand tools, machine tools, measuring, inspection, and blueprints. Includes manufacturing procedures. Provides knowledge of industry standard roles in a manufacturing setting. **Offered as needed.**

CAM061 Practical Applications 1
3 lab hrs/wk, 1 cr.

Provides practice in the CAD/CAM program to refine previously learned skills. Includes projects or exercises as determined by the student and instructor. **Prerequisite:** consent of instructor. **F, W, Sp**

CAM062 Practical Applications 2
6 lab hrs/wk, 2 cr.

Provides practice in the CAD/CAM program to refine previously learned skills. Includes projects or exercises as determined by student and instructor. **Prerequisite:** consent of instructor. **F, W, Sp**

CAM063 Practical Applications 3
9 lab hrs/wk, 3 cr.

Provides practice in the CAD/CAM program to refine previously learned skills. Includes projects or exercises as determined by student and instructor. **Prerequisite:** consent of instructor. **F, W, Sp**

CAM100 Blueprint Reading and Sketching
1 class hr/wk, 1 cr.

Provides instruction and skill development in engineering print reading, sketching, basic drawing techniques, and geometric constructions. **F**

CAM105 Precision Measurement
1 class and 3 lab hrs/wk, 2 cr.

Covers the selection and application of linear English and metric measuring, inspection tools, and equipment used in manufacturing. **F**

CAM110A CNC/Manual Fundamentals
2 class and 6 lab hrs/wk, 4 cr.

Introduces the fundamentals of machining processes and measuring instruments. Covers the use of basic hand tools, drill presses, power saws, pedestal grinders, arbor presses, basic layout, and layout 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 CNC and working in teams. **F**

CAM111 Industrial Safety Seminar
1 class hr/wk, 1 cr.

Details the joint responsibility of the company and employee in complying with federal and state safety regulations pertaining to business and industry and basic first-aid training. **F**

CAM115 Geometric Dimensioning/Tolerancing
2 class hrs/wk, 2 cr.

Covers geometric dimensioning and tolerancing principles based on ANSI/ASME standards. Includes computation of tolerance values required to insure proper fit and function. Emphasizes measurement and inspection required to match design specifications. **Prerequisite:** DRF130, or CAM100 and CAM105, or consent of instructor. **W**

CAM116 Geometric Dimensioning/Tolerancing for CNC—Lab
3 lab hrs/wk, 1 cr.

Covers practical application of geometric concepts and practices related to surface plate and coordinate measuring machine technology. Emphasizes industry standard interpretation of geometric dimensioned engineering drawings and recognition of the correct setup method and procedure necessary to manufacture and inspect parts according to functional requirements. **Prerequisite:** CAM115, or concurrent enrollment in CAM115, or consent of instructor. **W**

CAM120 CNC/Manual Milling
2 class and 6 lab hrs/wk, 4 cr.

Covers basic milling processes; work-holding methods; cutter identification and selection; use, speeds, and feeds; adapters; tool holders; and applications. Includes operation of CNC Vertical Machining Center and vertical and horizontal manual milling machines, applying related operational theory. **Prerequisite:** CAM110A or consent of instructor. **W**

CAM121A CNC/Manual Lathe
2 class and 6 lab hrs/wk, 4 cr.

Introduces turning operations as related to CNC machining with emphasis on work holding methods and tool holding/selection methods. Covers related hole-making process, facing, tapping, grooving, and parting. Includes operation of CNC turning center and manual lathes, applying related operational theory. **Prerequisite:** CAM120 or consent of instructor. **Sp**

CAM130 CNC Machine Setup/Operation
2 class and 6 lab hrs/wk, 4 cr.

Focuses on application of the Computer Numerical Control (CNC) systems used in today's manufacturing environment. Includes hands-on experiences with both personal and manufacturing specific (CNC) computers to establish basic operational skills. **F**

CAM140 Metallurgy for Manufacturing
1 class and 3 lab hrs/wk, 2 cr.

Studies basic metallurgy as it relates to manufacturing processes. Covers the identification of ferrous and non-ferrous metals and other materials used in industry. Includes mechanical and physical properties, powder metallurgy, heat treatment, alloying, crystalline structures, effects of machining, casting processes, testing processes. **W**

CAM150 Cutting Tools and Materials
1 class and 6 lab hrs/wk, 3 cr.

Provides knowledge and skill development in the selection and application of product materials, tool coatings and cutting tool materials used in manufacturing. **Prerequisite:** CAM121A or concurrent enrollment or consent of instructor. **Sp**

CAM160 Programming CNC Mills
2 class and 6 lab hrs/wk, 4 cr.

Introduces Computer Numerical Control (CNC) programming for milling applications and operations related to manufacturing. **Prerequisite:** consent of instructor. **W**

CAM190 Programming CNC Lathes
2 class and 6 lab hrs/wk, 4 cr.

Introduces Computer Numerical Control (CNC) programming for lathe applications and operations related to manufacturing. **Prerequisite:** CAM130 or consent of instructor. **Sp**

CAM210A Production/Assembly Control Methods
2 class hrs/wk, 2 cr.

Emphasizes production and assembly methods in manufacturing of parts. Includes advanced instruction in vertical milling and basic instruction in horizontal milling. Covers setup, operation, tool selection and application, calculating proper feed, speeds, and depth of cuts in the production of parts. Also includes applications with CNC machinery. **Prerequisite:** CAM120 and CAM121A or consent of instructor. **F**

CAM210B Production/Assembly Control Methods—Lab
6 lab hrs/wk, 2 cr.

Uses computers and manufacturing equipment to plan for and carry out assigned projects. Provides advanced instruction in the setup, care, and use of manufacturing equipment, such as lathes, mills, grinders, inspection equipment, and peripherals. **Prerequisite:** concurrent with CAM210A or consent of instructor. **F**

CAM220A Advanced Lathe Processes
2 class hrs/wk, 2 cr.

Covers advanced lathe theory and operations. Includes lathe settings, boring, single-point, threading, knurling, calculations, controls, taper attachments, follower rests, steady rests, and advanced tooling, safety, and work-holding applications. **Prerequisite:** CAM121A or consent of instructor. **W**

CAM220B Advanced Lathe Processes—Lab
6 lab hrs/wk, 2 cr.

Provides practice for application of advance lathe theory and operations through assigned projects. Includes application of lathe settings, boring, single-point, threading, knurling, calculations, controls, taper attachments, follower rests, steady rests, and advanced tooling, safety, and work-holding applications. **Prerequisite:** CAM121A or consent of instructor. **W**

CAM230 CAM Applications/Mills
2 class and 3 lab hrs/wk, 3 cr.

Introduces the concepts and application of Computer Aided Manufacturing (CAM) software programs for creating CNC milling machine part programs. **Prerequisite:** CAM130 or CAM160 or CAM190 or consent of instructor. **F**

CAM260 CAM Applications/Lathes
2 class and 3 lab hrs/wk, 3 cr.

Introduces the concepts and applications of Computer Aided Manufacturing (CAM) software programs for creating CNC lathe part programs. **Prerequisite:** CAM130 or CAM160 or CAM190 or consent of instructor. **W**

CAM280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

CAM290A CAD/CAM Integrations
2 class and 20 lab hrs/wk, 8 cr.

Emphasizes production and assembly methods in manufacturing of parts utilizing manual and CNC milling/turning machines. Includes setup, including 4th axis rotary tables, operation, tool selection and application, calculating proper feed, speeds, and depth of cuts in the production of parts. Also includes 3-D and 4th axis generated parts and transfer of Computer Aided Design (CAD) generated 2-D drawings solids and parametric models to a Computer Aided Manufacturing (CAM) system for manufacturing purposes. **Prerequisite:** CAM110, CAM120, CAM121A, CAM130, CAM160, CAM230, CAM260, or consent of instructor. **Sp**

CG

Counseling and Guidance

CG090 Peer Assistance Training
3 class hrs/wk, 3 cr.

Provides training in implementing communication skills and referral techniques and in locating college and community-based resources and services as a peer assistant. Students serve as resource personnel to refer other students with personal, social, or academic concerns. **Offered as needed.**

CG100 Preparing for College
1 class hr/wk, 1 cr.
Introduces students to techniques, strategies, and information fundamental to success in the college environment. **Offered as needed.**

CG101 Planning College Finances
1 class hr/wk, 1 cr.
Explores issues involved in creating a personal plan for financing higher education. Includes types of financial aid, scholarship searching, student loans, financial planning, and financial decision making strategies. **Offered as needed.**

CG102A College Prep International 1A
1 class hr/wk, 1 cr.
Introduces international students to information, resources, and strategies to be successful in the U.S. educational environment. Designed for beginning and intermediate non-native English speakers attending the Language and Culture Institute.
F, W, Sp, Su

CG102B College Prep International 1B
1 class hr/wk, 1 cr.
Focuses on information, resources and strategies international students need to successfully transition from language study to college study. Designed for advanced non-native English speakers attending the Language and Culture Institute. **Prerequisite:** CG102A. **F, W, Sp, S**u

CG103 College Prep International 2
2 class hrs/wk, 2 cr.
Familiarizes international students with information, resources, and strategies to be successful in the U.S. educational environment. Designed for full-time, first-term college-level students. **F, W, Sp, Su**

CG105 On Course for College
1 class hr/wk, 1 cr.
Focuses on strategies for taking personal responsibility to create positive outcomes in college and in life. Covers developing self-acceptance, self-confidence, self-respect, self-love, and unconditional self-worth. **Prerequisite:** college-level reading and writing recommended. Experience with Internet. **F, W, Sp, Su**

CG110 Career and Life Planning
1 class hr/wk, 1 cr.
Introduces students to the strategies and procedures fundamental to the identification of career development. Provides an assessment of individual personality traits, interests, skills, and values. Students will be exposed to career related materials, methods, and activities. **F, W, Sp**

CG111 Introduction to Learning Communities
1 class hr/wk, 1 cr.
Provides a variety of challenging experiences requiring teamwork to solve problems and accomplish tasks in linked courses. **Offered as needed.**

CG112 Learning Communities
2 class hrs/wk, 2 cr.
Focuses on working together in a learning community. Provides instruction and discussion regarding topics related to course content of linked courses; teaches and utilizes team approaches to learning and problem solving; and explores topics related to developing college success. Course may be repeated for a maximum of six credits. **Offered as needed.**

CG114 Career and Life Development
3 class hrs/wk, 3 cr.
Provides strategies to integrate the personal, educational, and occupational elements of career and life development. Introduces the lifelong 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. College-level reading and writing skills; some computer and Internet experience recommended. **F, W, Sp, Su**

CG120 Focus on Careers
3 class hr/wk, 3 cr.
Focuses on the process for choosing an appropriate career direction by developing a personal profile, experiencing first-hand various career areas, and creating an effective educational/career plan. **F, W, Sp**

CG121 Student Mentor TRiO/CAMP
1 class and 3 lab hrs/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 six credits. **Prerequisite:** Must pass a criminal background check if working with middle or high school students. **Offered as needed.**

CG123 Community Service Leadership
2 class hrs/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. **Offered as needed.**

CG124 Student Representation 1
1 class hr/wk, 1 cr.
Prepares student leaders to serve the mission of the Associated Students of Chemeketa (ASC) program in a responsible, ethical, and professional manner. Introduces effective meeting tools, customer service skills, leadership, and teamwork concepts. **Prerequisite:** Must be a member of the Associated Students of Chemeketa (ASC Executive Board, ASC Student Council, or ASC Storm Front volunteer team) prior to enrollment. **W**

CG125 Student Representation 2
1 class hr/wk, 1 cr.
Prepares second-year lead ASC students to serve the mission of the program in a responsible, ethical, and professional manner while managing the goals of the whole membership. Introduces advanced skills and tools related to ASC tasks: training, evaluation, advocacy and recognition. **Prerequisite:** CG124 and be a member of the incoming Associated Students of Chemeketa (ASC) Executive Board. **Sp**

CG126 Student Representation 3
1 class hr/wk, 1 cr.
Prepares lead ASC students to serve the mission of the program in a responsible, ethical, and professional manner while managing the goals of the whole membership. Applies more advanced skills and tools related to ASC tasks, project evaluation, project management, customer service, leadership, conflict resolution, and problem solving. **Prerequisite:** CG125 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. **F**

CG127A Intercultural Leadership A
2 class hrs/wk, 2 cr.
Assists students to understand and respect people of other cultures and be understood and respected by them. **Prerequisite:** consent of instructor. **F**

CG128 Leadership Development
2 class hrs/wk, 2 cr.
Explores the definition of leadership and provides knowledge of basic leadership skills. Develops and enhances leadership abilities through practical skill building in teambuilding, goal-setting, role modeling, public speaking, time management, ethics, diversity, and customer service. Inspires cultivation of a personal leadership vision. **Prerequisite:** consent of instructor. **W**

CG129 Student Life Leadership
1 class hr/wk, 1 cr.
Introduces techniques, strategies, and information fundamental to success in a college/work environment. Explores leadership qualities, meeting facilitation skills, planning and organizational skills, and college and office policies and procedures. **Prerequisite:** Must be hired in a Student Life Leadership position. **F**

CG130A Career Exploration and Planning
1 class hr/wk, 1 cr.
Uses an individualized study approach to provide information and resources needed in the career exploration process. Explores and assesses how interests, skills, values, and personality type influence career choice. Includes career research references as well as job and labor market trends. **Prerequisite:** college-level reading and writing skills. **Offered as needed.**

**CG130B Career Exploration
and Planning**
2 class hrs/wk, 2 cr.
Uses an individualized study approach to provide,
select, and explore career identification. Includes
evaluation of individual personality types, interests,
skills, values, and work-related preferences. **Pre-
requisite:** college-level reading and writing skills.
Offered as needed.

**CG130C Career Exploration
and Planning**
3 class hrs/wk, 3 cr.
Uses an individualized study approach to provide
information, instruments, and procedures used
in exploring and determining career and life deci-
sions. Offers a personal framework for career or
life planning. Includes selection of various career
components involving assessment, research, plan-
ning, decision process, and educational or training
objectives. **Prerequisite:** college-level reading and
writing skills. **Offered as needed.**

CG140 Student Services Leadership 1
1 class hr/wk, 1 cr.
Prepares student leaders to represent the college in
a responsible, ethical, and professional manner. In-
troduces customer service and teamwork concepts.
Prerequisite: consent of instructor. **F**

CG141 Student Services Leadership 2
1 class hr/wk, 1 cr.
Continues to build professional customer service
skills. Introduces personal/professional develop-
ment tools such as public speaking, conflict styles,
and time and stress management. **Prerequisite:**
grade of "C" or better in CG140. **W**

CG217 Career Development Facilitator 1
4 class hrs/wk, 4 cr.
Presents an overview of career development theory
and practice. Includes application of the career de-
velopment facilitator's role/scope of practice, career
development theorists, adult development, and
legal/ethical issues. Covers working with diverse
populations, the career development interview, and
helping skills. **Prerequisite:** consent of instructor.
Offered as needed.

CG218 Career Development Facilitator 2
4 class hrs/wk, 4 cr.
Presents overview of assessment and labor market
information in relation to career development.
Includes hands-on use of formal and informal as-
sessment instruments, selection criteria, admin-
istration, and interpretation. Covers assessment
of obstacles/opportunities and research of labor
market information. **Prerequisite:** CG217 or
consent of instructor. **Offered as needed.**

CG219 Career Development Facilitator 3
4 class hrs/wk, 4 cr.
Presents an overview of career decision making and
goal setting, job search strategies and techniques,
and workshop facilitation skills. Includes program
design and promotion, and professional develop-
ment options. **Prerequisite:** CG217, CG218, or
consent of instructor. **Offered as needed.**

**CG225 Understanding the Four-Year
College Transition**
2 class hrs/wk, 2 cr.
Identifies criteria to use in selecting a college and
major, and the connection between the transfer
student's previous collegial institution and that of
four-year colleges. Provides strategies and informa-
tion critical to both academic development and
adjustment to the four-year college systems. **F, W,
Sp. Offered summer as needed.**

CH

Chemistry

CH104 Chemistry for Allied Health
4 class and 2 lab hrs/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 bonding; gas laws;
chemical reactions. First term of a three-term
sequence dealing with the molecular basis for life.
Prerequisite: completion of, or concurrent enroll-
ment in, MTH095. **F, W**

CH105 Chemistry for Allied Health
4 class and 2 lab hrs/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 solu-
tions and colloids; reaction rates and equilibrium;
acids and bases and their regulation in the body;
saturated and unsaturated hydrocarbons; alcohols,
ethers, aldehydes, ketones, carboxylic acids and
esters, amines and amides. Second term of a three-
term sequence. **Prerequisite:** CH104. **W, Sp**

CH106 Chemistry for Allied Health
4 class and 2 lab hrs/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 carbo-
hydrates; lipids; proteins; enzymes, vitamins, and
hormones; pathways of metabolism; and nucleic
acids. Third term of a three-term sequence.
Prerequisite: CH105. **F, Sp**

**CH110 Foundations of General, Organic
and Biochemistry**
4 class and 2 lab hrs/wk, 5 cr.
A one-term survey course of basic general, organic,
and biochemistry designed to introduce the chem-
istry needed for understanding the functions of
living organisms. **Prerequisite:** completion of, or
concurrent enrollment in, MTH095. No previous
background in chemistry is required. **F, W, Sp, Su**

CH115 Consumer Chemistry
3 class and 2 lab hrs/wk, 4 cr.
Provides a general education approach to chemis-
try. Emphasizes the meaning of science and how
chemistry is connected to other disciplines and to
students' lives. Covers science versus technology,
scientific method, atomic structure and theory,
nuclear chemistry, chemical bonding, nomencla-
ture, chemical reactions, acids and bases, oxidation
and reduction, and chemistry of the earth. First of
a three-term sequence for the non-science major. **F**

CH116 Consumer Chemistry
3 class and 2 lab hrs/wk, 4 cr.
Covers organic chemistry, polymers, energy and
the future, air and its pollution, water and its
pollution, agricultural chemistry, and the starving
Third World. Second of a three-term sequence for
the non-science major. **Prerequisite:** CH115 or
consent of instructor. **W**

CH117 Consumer Chemistry
3 class and 2 lab hrs/wk, 4 cr.
Covers carbohydrates, fats, proteins, vitamins,
brewing, baking, food additives, household chemi-
cals, chemotherapy, drugs, and chemical toxicology.
Third of a three-term sequence for the non-science
student. **Prerequisite:** CH116 or consent of
instructor. **Sp**

CH121 College Chemistry
4 class and 2 lab hrs/wk, 5 cr.
Introduces the fundamentals of chemistry for
students majoring in fields other than chemistry.
Examines the interrelationships of chemistry to all
disciplines of science. Covers scientific method,
atomic theory, stoichiometry, energy, periodicity,
atomic structure, and bonding. First of a three-
term sequence. **Prerequisite:** completion of, or
concurrent enrollment in, MTH095. **F, W**

CH122 College Chemistry
4 class and 2 lab hrs/wk, 5 cr.
Provides basic understanding of molecular
compound formations, changes of state, solutions
and reaction rates. Covers quantitative composi-
tion; stoichiometry; the gaseous state; acids, bases
and salts; oxidation-reduction reactions; nuclear
chemistry; chemical equilibrium; and introduc-
tion to organic chemistry. Second of a three-term
sequence. **Prerequisite:** CH121. **W, Sp**

CH123 College Chemistry
4 class and 2 lab hrs/wk, 5 cr.
Continues organic chemistry including aliphatic,
aromatics, function groups and their reactions,
structure and chemistry of carbohydrates, lipids,
proteins, and nucleic acids. Third of a three-term
sequence. **Prerequisite:** CH122. **F, Sp**

**CH172 Chemical Methods for Analysis of
Musts and Wines**
2 class hrs and 2 lab hrs/wk, 3 cr.
Introduces vineyard and winery laboratory prac-
tices. Covers basic chemical principles, laboratory
techniques, and analytical procedures for musts
and wines. **Prerequisite:** CH123 or equivalent
or concurrent enrollment in CH123. **Offered as
needed.**

CH201 Chemistry for Engineers
3 class and 3 lab hrs/wk, 4 cr.
Provides the first course in a two-term sequence designed for engineering majors who intend to transfer to Oregon State University's engineering program. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, bonding models, solutions, redox, gas laws, and chemical thermodynamics: heat, work, and energy. **Prerequisite:** MTH095. **F**

CH202 Chemistry for Engineers
3 class and 3 lab hrs/wk, 4 cr.
Provides the second course in a two-term sequence. Covers Lewis structures, VESPR theory, shapes and polarity of molecules, intermolecular forces, crystal structure, reaction rates, rate laws, reaction mechanisms, acids and bases, chemical equilibrium, spontaneous changes, free energy, voltaic and electrolytic cells, coordination compounds, organic structure, and polymer chemistry. **Prerequisite:** CH201. **W**

CH211 Chemistry for Engineers Prep 1
1 class hr/wk, 1 cr.
Provides guided study in topics and problem solving skills beyond that provided in CH201. Covers definitions, measurements, atomic nucleus, elements, compounds, binary nomenclature, gas laws, and chemical thermodynamics: heat, work, and energy. **Prerequisite:** MTH095. **Corequisite:** CH201. **F**

CH212 Chemistry for Engineers Prep 2
1 class hr/wk, 1 cr.
Provides guided study in topics and problem solving skills beyond that provided in CH202. Covers Lewis structures, VESPR theory, shapes and polarity of molecules, intermolecular forces, crystal structure, reaction rates, rate laws, reaction mechanisms, acids and bases, chemical equilibrium, spontaneous changes, free energy, voltaic and electrolytic cells, coordination compounds, organic structure, and polymer chemistry. **Prerequisite:** CH201. **Corequisite:** CH202. **W**

CH221 General Chemistry
4 class and 3 lab hrs/wk, 5 cr.
Introduces chemical concepts and experimental techniques to students majoring in scientific, engineering, and medical fields. Covers the history of chemical developments, measurements and their uncertainty, components of matter, chemical periodicity, chemical calculations using the mole concept, chemical reactions, kinetic-molecular theory of gases, energy flow, experiments on chemical systems, and atomic structure. **Prerequisite:** MTH111 or consent of instructor. **F**

CH222 General Chemistry
4 class and 3 lab hrs/wk, 5 cr.
Covers periodic properties; molecular bonding, hybridization, and resonance; solutions and solids; intermolecular forces; rates of reactions; and organic polymers. Second of a three-term sequence designed for students majoring in scientific, engineering, and medical fields. **Prerequisite:** CH221. **W**

CH223 General Chemistry
4 class and 3 lab hrs/wk, 5 cr.
Covers the rates and mechanisms of chemical reactions; fundamentals of chemical equilibrium; acid-base equilibria; ionic equilibria in aqueous systems; free energy concepts; voltaic/electrolytic cells; and metallurgical processes. Third of a three-term sequence designed for students majoring in scientific, engineering and medical fields. **Prerequisite:** CH222. **Sp**

CH241 Organic Chemistry
4 class hrs/wk, 4 cr.
Introduces the principles of organic chemistry for students majoring in the physical or life sciences. Emphasizes structure, nomenclature, physical properties, and chemical reactivities of organic molecules. Stresses bonding, functional groups, alkanes and cycloalkanes, conformational analysis, stereochemistry, alkenes, and alkynes. **Prerequisite:** CH123 or CH223. **F**

CH241B Organic Chemistry Lab
3 lab hrs/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 recrystalization, extraction, melting and boiling point determination, IR spectroscopy, extraction, chromatography, and synthesis. Students requiring lecture and lab credit for transfer must take CH241 and CH241B. **Prerequisite:** CH123 or CH223. **F**

CH242 Organic Chemistry
4 class hrs/wk, 4 cr.
Introduces the principles of organic chemistry for students majoring in the physical or life sciences. Emphasizes structure, nomenclature, physical properties, and chemical reactivities of organic molecules. Stresses alcohols, ethers, free-radical reactions, aromatic compounds, spectroscopy, oxidation-reduction, aldehydes, and ketones. **Prerequisite:** CH241. **W**

CH242B Organic Chemistry Lab
3 lab hrs/wk, 1 cr.
Offers a laboratory course to accompany CH242 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory experiments related to reaction mechanisms, kinetics, spectroscopy, gas chromatography, and synthetic techniques. Students requiring lecture and lab credit for transfer must take CH242 and CH242B. **Prerequisite:** CH241B. **W**

CH243 Organic Chemistry
4 class hrs/wk, 4 cr.
Introduces the principles of organic chemistry for students majoring in the physical or life sciences. Emphasizes structure, nomenclature, physical properties, and chemical reactivities of organic molecules. Stresses carboxylic acids and their derivatives, amines, condensation reactions, carboxylics, lipids, amino acids, proteins, and nucleic acids. **Prerequisite:** CH242 or consent of instructor. **Sp**

CH243B Organic Chemistry Lab
3 lab hrs/wk, 1 cr.
Offers a laboratory course to accompany CH243 Organic Chemistry for students majoring in physical and life sciences. Emphasizes microscale laboratory synthesis, spectroscopy, covering biological activity of organic compounds, and qualitative analysis of unknowns. Students requiring lecture and lab credit for transfer must take CH243 and CH243B. **Prerequisite:** CH242B or consent of instructor. **S**

CIS

Computer Information Science

CIS060 Techniques of User Training
2 class hrs/wk, 2 cr.
Introduces teaching methods, materials, and instructional design as related to training computer users. **Prerequisite:** second-year standing in the Computer Programming program. **Sp**

CIS101 Introduction to Microcomputer Applications
3 lab hrs/wk, 3 cr.
Introduces the basic microcomputer hardware/software system. Covers the concepts of system software and application software, including word processing, spreadsheet, database, presentation and introduction to Internet. **Prerequisite:** touch keyboarding ability and college textbook reading (RD090 or equivalent) recommended. **F, W, Sp, Su**

CIS102A Cyber Security and Safety
3 class hrs/wk, 3 cr.
Provides the basic knowledge of the security, political and social issues, and human factors concerning the use of current computer technologies and 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. Covers how to protect yourself from malicious computer activities. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **Offered as needed.**

CIS105 Introduction to MS Windows
3 class hrs/wk, 3 cr.
Introduces the Graphical User Interface (GUI) environment with an emphasis on the operation of Microsoft Windows. Focuses on the multitasking environment, including multiple window interface, common user access (CUA) pull-down menus, and the interaction of RAM memory and PC hardware. **Prerequisite:** CIS101 or CIS120. **F, W, Sp, Su**

CIS120A Computer Information Sciences Pathway
1 class hr/wk, 1 cr.
Exposes students to many different career opportunities in computer information sciences and computer technology, and assists with planning an academic pathway at Chemeketa Community College. **F, W, Sp, Su**

CIS120 Computer Information Science 1
4 class hrs/wk, 4 cr.

Introduces terminology and overview of the historical development of computer and information science. Focuses on the basic concepts of computer hardware and software systems, the science of information representation, and the fundamental elements of program design and computer language. Concepts are reinforced in a laboratory environment. First in a three-course sequence. **Prerequisite:** MTH070 and RD115, or equivalent level of skill as demonstrated by satisfactory score on placement test. **F, W, Sp**

CIS121 Computer Information Science 2
4 class hrs/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 a program. Second of the three core CIS courses and is applicable to non-CS majors. **Prerequisite:** CIS120 or concurrent enrollment, or consent of instructor. **F, W**

CIS122 Computer Information Science 3
4 class hrs/wk, 4 cr.

Introduces software and languages used in today's network environment. Covers features of object-oriented design and programming concepts and contrasts them with structured methodology and related language. Third in a three-course sequence. **Prerequisite:** CIS121 or consent of instructor. **Sp, Su**

CIS125A Micro Database Software—Access
3 class hrs/wk, 3 cr.

Focuses on microcomputer database software using Microsoft Access. Includes navigation through Windows and Access menus; PC relational database concepts; creation and updating of a relational database; simple queries, reports, and forms; complex queries, reporting, and forms. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W, Sp**

CIS125E Excel—Workbooks
4 class hrs/wk, 4 cr.

Presents electronic spreadsheets in a multi-worksheet environment using Excel. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W, Sp, Su**

CIS125G Introduction to Computer Game Development
4 class hrs/wk, 4 cr.

Surveys the field of computer game development, including a study of the history and business of computer gaming, computer game categories and platforms, and computer game technologies. Covers an overview of the game development process and introduces game graphics. Provides complete game development lifecycle using a high-level game development framework to design and develop a computer game. **Prerequisite:** computer literacy; CIS120 or CIS101 recommended. **F, W, Sp**

CIS133CS Programming for the Internet
4 class hrs/wk, 4 cr.

Provides hands-on experience using Visual Studio using ASP.NET Framework using the C# programming language. Covers the essentials of the C# programming language, introducing built-in data types, operators, control structures, classes, and methods. **Prerequisite:** CIS121 and any first-term programming course including CIS133J, CS133U, or CS161, or consent of instructor. **Offered as needed.**

CIS133J Fundamentals of Java Programming 1
4 class hrs/wk, 4 cr.

Introduces Java programming language. Provides a conceptual understanding of object-oriented programming using Java. Covers the structure of the language, the manipulation of data and arrays, how to handle input and output, and how to create classes, objects, and applications. **Prerequisite:** MTH060; CIS101 or CIS120; or consent of instructor. **F**

CIS133JS JavaScript Web Programming 1
4 class hrs/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, or CIS195, or CIS178I, and any first-term programming course including CIS133J, CS133U, or CS161, or consent of instructor. **Offered as needed.**

CIS133SC Fundamentals of Scripting Languages
4 class hrs/wk, 4 cr.

Provides the knowledge and skills necessary to write and maintain scripts that automate aspects of system administration for computers running the Microsoft Windows operating system. Covers scripting languages, hosts, and libraries, and the interfaces built into the Windows operating system. **Prerequisite:** CIS121 or consent of instructor. **F**

CIS133VB Visual Basic—Event-Driven Programming
4 class hrs/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 programs. **Prerequisite:** CIS121 or equivalent VB programming experience as determined by the instructor. **W, Sp**

CIS140B Microcomputer Operating Systems
3 class hrs/wk, 3 cr.

Studies operating systems currently used on larger microcomputers and small minicomputers. Includes experience in using these operating systems to access files and communicate with other microcomputers. **Prerequisite:** CIS101 or CIS120, or equivalent. **W**

CIS140S Solaris—UNIX Operating Systems
3 class and 4 lab hrs/wk, 5 cr.

Covers the basic concepts of the Solaris Operating System and provides practical experience using UNIX components. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **Offered as needed.**

CIS140U Unix/Linux
3 class hrs/wk, 3 cr.

Covers the Unix operating system using Linux. Includes experience in using the Unix operating system to run a microcomputer, access files and communicate with other microcomputers. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, Sp**

CIS145 Microcomputer Hardware
3 class and 2 lab hrs/wk, 4 cr.

Studies the hardware concepts necessary to install and maintain computers and computer peripherals. Explains the interface between software and hardware and incorporates the requirements for A+ certification. **Prerequisite:** CIS240 or concurrent enrollment, or CIS140B, or NET123. **W**

CIS178I Introduction to the Internet/World-Wide Web
3 class hrs/wk, 3 cr.

Introduces the use and history of the global computer network known as the Internet or information superhighway. Explores the philosophy of the Internet, as well as its use as a tool for research, communication, and entertainment. Students will develop and publish a simple Web page on the World-Wide Web. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W, Sp, Su**

CIS178W Fundamentals of Web Design
3 class and 4 lab hrs/wk, 5 cr.

Covers fundamentals of Web design using Adobe Systems software. Focuses on the overall production processes surrounding Web design. Emphasizes design elements involving layout, navigation, and interactivity. Includes hands-on Web design exercises using Adobe PhotoShop, Adobe Illustrator, Adobe GoLive, Adobe LiveMotion, and Adobe Premiere. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F, W**

CIS179 Introduction to Client-Server Networks
4 class hrs/wk, 4 cr.

Introduces computer networks from an end-user perspective. Provides experience installing, administering, and managing network software and resources, including user accounts, in a client-server environment. **Prerequisite:** CIS140B or NET123. **F, Sp**

CIS186 Computer Forensics
4 class hrs/wk, 4 cr.

Provides the basics of computer forensics as they apply to personal computers and workstations, including how to obtain and analyze digital information for use as evidence in civil, criminal, or administrative cases. **Prerequisite:** CIS102A, CIS120, CIS140B, CIS179, or consent of instructor. **Offered as needed.**

CIS195 Web Site Development
4 class hrs/wk, 4 cr.

Covers Web site planning, organization, and implementation. Explores Web development applications. Discusses XHTML, XML, style sheets, and basic scripting. Addresses accessibility, browsers compatibility, and globalization issues. **Prerequisite:** CIS178I or consent of instructor. **F, Sp**

CIS233J Fundamentals of Java Programming 2
4 class hrs/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.lang, java.util, java.applet, java.awt and java.io packages to create program code. Includes documenting program code using the Javadoc interface and creating a Graphical User Interface (GUI) application using a visual Interface Development Environment (IDE). **Prerequisite:** CIS133J or consent of instructor. **W**

CIS234J Fundamentals of Java Programming 3
4 class hrs/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 or consent of instructor.

CIS240 Advanced Operating Systems
3 class hrs/wk, 3 cr.

Studies advanced operating systems. Incorporates the use of third-party utility programs, hard disk management concepts, MS/DOS in a network environment, and MS/DOS-OS-AIX migration considerations. **Prerequisite:** CIS140B or consent of instructor. **W**

CIS240U Advanced Unix/Linux
4 class hrs/wk, 4 cr.

Offers an advanced course covering the concepts used for installing, administering, and maintaining a UNIX/LINUX system. Includes installing and managing a version of LINUX in the laboratory experience. **Prerequisite:** CIS140U or consent of instructor.

CIS244 Systems Analysis 1
3 class hrs/wk, 3 cr.

Covers basic administrative procedures. Includes principles of organizing, planning, and administering a procedure program. Presents methods of carrying out individual systems and procedures studies. Also includes procedures analysis and improvement techniques, the role of systems and procedures in business management, systems charting, work simplification, and measurement. **Sp**

CIS244A Computer Systems Capstone
1 class hr/wk, 1 cr.

Brings together project elements and milestones using industry best practices to create specifications for an information systems project. Students will develop a project that is closely related to their focused area of study and complete all of the CIS244 milestones under the guidance of a CIS instructor. Requires concurrent enrollment in CIS244 during the final year of the program. **Prerequisite:** concurrent enrollment in CIS244. **Sp**

CIS246 Systems Analysis 2
3 class hrs/wk, 3 cr.

Presents the fundamentals of automated systems and procedures. Includes techniques and principles of top-down systems analysis and design, data gathering, feasibility studies, problem analysis, systems economics, forms design and control, procedure writing, and the planning involved in the installation of electronic data processing systems. **Prerequisite:** CIS244. **Offered as needed.**

CIS276A Introduction to Oracle: SQL
4 class hrs/wk, 4 cr.

Offers an extensive introduction to data server technology. Examines the concepts of both relational and object relational databases and the Structured Query Language (SQL) programming language. Covers creating and maintaining database objects and storing, retrieving, and manipulating data. Also covers retrieving data by using advanced techniques such as ROLLUP, CUBE, set operators, and hierarchical retrieval. Includes writing SQL and SQL*Plus script files using the iSQL*Plus tool to generate report-like output. **Prerequisite:** CS275 or consent of instructor. **W**

CIS276B Oracle: Program with PL/SQL
4 class hrs/wk, 4 cr.

Introduces Procedural Language/Structural Query Language (PL/SQL) and the benefits of this Oracle programming language. Covers creating PL/SQL blocks of application code that can be shared by multiple forms, reports, and data management applications. Also covers creating procedures, functions, packages, and database triggers. Uses iSQL*Plus to develop program units. Includes managing PL/SQL program units and database triggers, managing dependencies, manipulating large objects, and using some of the Oracle-supplied packages. **Prerequisite:** CIS121 or equivalent and CIS276A, or consent of instructor. **Sp**

CIS276C Oracle Reports Developer/ Building Reports
4 class hrs/wk, 4 cr.

Focuses on designing and building a variety of standard and custom Internet Web and paper reports using Oracle Reports Developer, Tool for Oracle Application Developers (TOAD), and Crystal Reports. Covers working in the declarative environment of Reports Builder, TOAD, and Crystal Reports. Includes how to retrieve data from a data source, display it in readable format, and publish the output. **Prerequisite:** CIS276A, CIS276B or consent of instructor. **Offered as needed.**

CIS277A Oracle Database Administration Fundamentals 1
4 class hrs/wk, 4 cr.

Offers a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Covers how to create an operational database and properly manage the various structures in an effective and efficient manner. **Prerequisite:** CIS276A or consent of instructor. **Offered as needed.**

CIS277B Oracle Database Administration Fundamentals 2
4 class hrs/wk, 4 cr.

Covers transporting data between databases and the utilities used to perform these activities. Introduces networking concepts and configuration parameters, as well as solving some common network problems. Also addresses backup and recovery techniques, and examines various backup, failure, restore, and recovery scenarios. Examines backup methodologies based on business requirements in a mission-critical enterprise. Covers multiple strategies and Oracle Recovery Manager to perform backups, and restore and recovery operations. **Prerequisite:** CIS277A or consent of instructor. **Offered as needed.**

CIS277C Oracle Database Performance Tuning
4 class hrs/wk, 4 cr.

Focuses on database and instance tuning of the Oracle database. Uses the available Oracle tools such as Oracle Enterprise Management (with the Diagnostics and Tuning Packs) and STATSPACK. Covers how to recognize, troubleshoot, and resolve common performance-related problems in administering an Oracle database. **Prerequisite:** CIS277B or consent of instructor. **Offered as needed.**

CIS278 Data Communications
3 class hrs/wk, 3 cr.

Covers fundamental concepts in data communication, including definition of terms, communicating concepts, comparison of voice and data communication (analog vs. digital signals), medium access, elementary data ling protocols, topologies, servers, and operating system standards implemented in local area networks (LAN). **Prerequisite:** second-year standing in the Computer Systems and Information Technology program. **W**

CIS279 Network Management
3 class and 4 lab hrs/wk, 5 cr.

Covers the Local Area Network Systems (LANS) and Wide Area Network Systems (WANS) using Novell's operating system. Focuses on the design, construction, operation, maintenance, and management of a network, including the installation of software packages, printers, and adding new users. **Prerequisite:** CIS145, and CIS278 or NET151. **Sp**

CIS280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

CIS285 Introduction to Structured Query Language—SQL
3 class hrs/wk, 3 cr.

Introduces new users of relational databases to Structured Query Language (SQL). Covers building a database and accessing stored information by performing queries. Includes retrieving, adding, and deleting data from an SQL-compliant database. **Prerequisite:** CS275 or consent of instructor. **Offered as needed.**

CIS286 Web Server Configuration and Management
3 class and 2 lab hrs/wk, 4 cr.

Explains the process to design and build an Internet system. Includes establishing a multi-server environment that requires Web services, common gateway interfaces, e-mail services, database services, and other Web-based applications. **Prerequisite:** CIS140U and CIS288. **Sp**

CIS288 Advanced Client-Server Networks
4 class hrs/wk, 4 cr.

Provides experience installing, configuring, customizing, administering, and maintaining a server and its resources in a client-server network. **Prerequisite:** CIS179. **F, Sp**

CIS289 Advanced Network Application Support
3 class and 2 lab hrs/wk, 4 cr.

Focuses on software and hardware troubleshooting and support required in a Local Area Network environment. **Prerequisite:** concurrent enrollment in CIS279, or consent of instructor. **Sp**

CIS295 Web Application Development
4 class hrs/wk, 4 cr.

Covers the development of Web applications using various scripting languages. Explains the process of Web application development. Stresses proper coding practices and documentation and implementation of databases for dynamic Web content. **Prerequisite:** CIS178I or CIS195 or VC237 or consent of instructor. **W**

CJ

Criminal Justice

CJ100 Survey of the Criminal Justice System
3 class hrs/wk, 3 cr.

Reviews court systems and procedures from criminal violation to final disposition. Covers six primary functional areas of administration of justice and reviews principles of federal, state, criminal, and civil laws as they apply to and affect law enforcement. **F, W, Sp, Su**

CJ101 Criminology
3 class hrs/wk, 3 cr.

Covers the development and conceptualization of crime, including historical perspective, social and legal definitions, and classifications. Includes an overview of criminology, research, data gathering, and analysis. Introduces major theoretical perspectives on the nature of crime, criminals, and victimization. Identifies current trends and patterns of crime typologies as well as societal and institutional responses. **F, W, Sp, Su**

CJ102 Survey of the Juvenile Justice System
3 class hrs/wk, 3cr.

Reviews the juvenile justice system, including juvenile court processes and procedures from criminal violation to final disposition. Identifies juvenile justice administrative functions and reviews the principles of federal, state, and local statutes as they apply to and affect the juvenile offender. **F, Sp**

CJ110 Introduction to Law Enforcement
3 class hrs/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. **F**

CJ112 Field Operations and Patrol Procedures
3 class hrs/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 bloodborne pathogens. Covers equipment, technology, and vehicle operation. Identifies gangs, drug-use indicators, threat groups, and responses to civil disturbances. Emphasizes report document, courtroom testimony, and police tactical communications. **W**

CJ123 Spanish for Law Enforcement Personnel
3 class hrs/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. Coursework in CJ110 or CJ112 recommended unless already have prior practical experience as a cadet, reserve, or certified law enforcement officer. **Offered as needed.**

CJ130 Introduction to Corrections Process
3 class hrs/wk, 3 cr.

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

CJ132 Introduction to Parole and Probation
3 class hrs/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. **F, W, Sp, Su**

CJ134 Contraband and Search
1 class hr/wk, 1 cr.
Focuses on the proper forms and processes for conducting searches of persons such as staff, volunteers, contractors, and visitors; living, common access, and work areas; and vehicles. **F, Sp**

CJ136 Transportation, Escorting, and Restraints
1 class hr/wk, 1 cr.
Covers practical techniques for the transportation, restraint, and escorting of inmates within a facility or in the general public. Reviews management concepts for the classification and risk criteria factors for inmates that determine custody level. Includes the importance of the safety, security, and orderly operation of facilities, and the safety and welfare of staff and the general public. **F, Sp**

CJ138 Security Threat Groups
1 class hr/wk, 1 cr.
Explores the criminal subcultures of security threat groups (STGs) and gangs. Includes the management concepts for individuals at risk of involvement in STGs or gangs, the identifying characteristics of involvement, intervention strategies, and the importance of interagency networking and information sharing. Outlines some concepts of covert communications used by STGs and gangs in communicating within facilities, jail, and on the streets. **W**

CJ142A Managing the Mentally Ill Offender
1 class hr/wk, 1 cr.
Focuses on understanding and supervising youthful and adult offenders in confinement by developing an awareness of the dynamics, basic behaviors, and interpersonal interactions commonly found among offenders exhibiting these serious mental disorders: anxiety, dissociative, mood, personality, psychotic (schizophrenia), and mental retardation. **W**

CJ144 Suicide Prevention and Intervention Skills
2 class hrs/wk, 2 cr.
Presents a suicide prevention and intervention practice-dominated course designed to help individuals, criminal justice, juvenile, and social service caregivers recognize and review risk, and to intervene to prevent the immediate risk of suicide. **F, Sp**

CJ145 Managing Long-Term Offenders
1 class hr/wk, 1 cr.
Addresses management strategies for long-term offenders. Covers inmate perception about serving longer sentences, their views of establishing relationships, and accountability challenges. Includes management of death row inmates, the elderly inmate population with unique special needs, and the security risk posed by lifers attempting to escape. **Sp**

CJ146 Officer Survival Mindset
3 class hrs/wk, 3 cr.
Provides the student a historical review of issues and scenarios related to officer survival and provides insight from the 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, and new intervention pathways, as well as the courageous spirit. **Offered as needed.**

CJ147 Criminal Personality and Errors in Thinking
1 class hr/wk, 1 cr.
Introduces personality disorders as defined by the Diagnostic and Statistical Manual (DSM). Addresses errors in thinking which are uniquely present in criminal behavior. Reviews the foundational work of Yochelson and Samenow on the criminal mind. **F**

CJ150 Unarmed Private Security Operations and Procedures
3 class hrs/wk, 3 cr.
Introduces a historical perspective on unarmed private security, types of personnel, and physical and procedural controls. Covers types of security, such as computer, industrial, retail, commercial, institutional, and specialized security. Includes future development and needs of private security. **Sp**

CJ170 Juvenile Justice Ethics and Boundaries
3 class hrs/wk, 3 cr.
Provides 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. **F, W, Sp, Su**

CJ175 Juvenile Law
3 class hrs/wk, 3 cr.
Provides a historical overview of the legal rights of juveniles, including landmark Supreme Court cases that applied constitutional protections to juveniles. Covers the requirements and responsibilities of professionals in the juvenile justice system. Introduces the Oregon Juvenile Code and statutory guidelines for operating the Oregon Youth Authority. **W**

CJ200 Family Violence and Deviancy
3 class hrs/wk, 3 cr.
Discusses the role of criminal justice practitioners in maintaining community relations, networking, and multi-disciplinary approaches to crimes of family violence. Examines the role expectations of involved agencies and covers "red flag" behaviors and detection of family-related crimes and their patterns of escalation. **F**

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, defusing 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. **F, W, Sp**

CJ206 Crime and Delinquency
3 class hrs/wk, 3 cr.
Introduces the historical development of childhood and the legal concepts of delinquency. Studies crime and delinquency rates and typologies focusing on data variations impacted by age, sex, race/ethnicity, socio-economic and educational status, urbanization, and other key factors as independent variables. Introduces major theoretical perspectives and their application in the study of juvenile delinquency. Covers key concepts affecting juvenile victimization. **F, W, Sp, Su**

CJ207 Diversity Issues in Criminal Justice
3 class hrs/wk, 3 cr.
Introduces the civil rights of citizens related to religion, ethnicity, culture, race, gender, age, disability, and sexual preference. Explores the legal and societal responsibilities of criminal justice professionals to the protection of those rights in the course of public safety duties. Involves creative, critical, and solution-oriented thinking throughout the course. **Prerequisite:** Current enrollment in Criminal Justice program with personal history clearance or consent of instructor. **Sp**

CJ209 Introduction to Victimology
3 class hrs/wk, 3 cr.
Traces the criminal justice system's historic and current response to crime victims. Provides a comprehensive overview of the offender-victim relationship, while addressing victim support policies and programs. Presents a realistic approach to understanding the process of victimization and the broad range of coping mechanisms that victims employ to deal with their particular experience. **F**

CJ210 Introduction to Criminal Investigations 1: Crimes vs. Persons
3 class hrs/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 confidentially reliable informants. **F, W, Sp**

CJ211 Property Crimes: Behavior and Evidence
3 class hrs/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 and current trends in cyber, terrorism, identity, and narcotics investigations. **Sp**

CJ212 Police Report Writing
3 class hrs/wk, 3 cr.

Provides the necessary information to become a knowledgeable and successful writer 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. CJ110 or CJ112 recommended. **W**

CJ215 Criminal Justice Administration
3 class hrs/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. **Sp**

CJ217 Interviewing and Interrogation in Criminal Justice
3 class hrs/wk, 3 cr.

Focuses on becoming a knowledgeable interviewer and interrogator. Introduces REID Interview and FBI PERSPECTIVE techniques. Includes brief review of constitutional constraints and professional ethics specific to interviewing and/or interrogation of suspects, witnesses, complainants, and victims. Covers interview and interrogation objectives, preparation, approaches, and technical aids. Presents the importance of listening and documentation. Includes practical scenarios/role playing. **W**

CJ220 Introduction to Substantive Law and Oregon Criminal Code
3 class hrs/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 that 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, criminal court procedures, criminal law case reading, federal and state law, and selected Oregon criminal code sections. **F, Sp**

CJ222 Profiling Serial Killers
3 class hrs/wk, 3 cr.

Analyzes a specific offender type, the serial killer. Includes historical perspective, motives, and killer phases. Emphasizes the methodology of profiling, crime scene analysis, and modus operandi as developed by the FBI Investigative Support Unit to assist law enforcement. Covers victimologies, VI-CAP, and Oregon H.I.T.S. systems. Uses individual case studies. **Sp**

CJ224 Missing and Abducted Children
1 class hr/wk, 1 cr.

Provides specialized training regarding child abductions and missing children. Includes victimology, motives, custodial vs. non-custodial, kidnap murder, cult murder, "grooming" techniques, crime scene indicators, and forensic evidence. Introduces notification and training systems including National Center for Missing and Exploited Children (NCMEC), Amber Alert Plan, FBI's Child Abduction and Serial Murder Investigative Resource Center (CASMIRC), Violent Criminal Apprehension Program (VICAP), K-9 usage, and A Child is Missing (ACIM) Plan. Emphasizes the first four hours investigative tasks. **W**

CJ225 Stalking, Predatory Behaviors, and Personal Safety
2 class hrs/wk, 2 cr.

Provides information regarding stalking and related behaviors. Covers types of stalkers, current anti-stalking statutes, and personal and professional security measures. Emphasizes the necessity of documenting and reporting this crime. Describes prohibited behavior, threat levels, and the effects of stalking on victims. Discusses current trends in cyberstalking, including the use of electronic communication devices such as the Internet, e-mail, cell phones, fax machines, and pagers. **F**

CJ226 Introduction to Constitutional Law
3 class hrs/wk, 3 cr.

Presents an intensive study and analysis of the U.S. Constitution and court decisions that interpret the Constitution. Studies court decisions that determine the admissibility of evidence in criminal cases and affect police procedures. Considers the criminal procedure process with an emphasis on the role of law enforcement in this process. **F, W, Sp, Su**

CJ230 Introduction to Juvenile Corrections
3 class hrs/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 versus punishment philosophies in the juvenile justice system, especially as it relates to safety/security issues and public concerns. **W, Sp**

CJ232 Introduction to Corrections Casework
3 class hrs/wk, 3 cr.

Presents an overview of casework in corrections settings. Includes introduction to behavior modification theories and methods, contemporary counseling methods, assessment processes, and the development of officer-client relations. Emphasizes observation skills, perception issues, information gathering, interpersonal communication skills, and interviewing strategies and techniques as part of corrections casework. **F, Sp**

CJ235 Youth, Drugs and Corrections
3 class hrs/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. **W, Sp**

CJ236 Public Safety Leadership and Ethics 1: Philosophy of Leadership
4 class hr/wk, 4 cr.

Introduces philosophies and ethics for public safety leadership. Focuses on core values, ethics, and decision making. Explores developing a personal leadership philosophy. Includes defining the difference between leadership and management, and completing self-assessments in an effort to gain insight into personal leadership styles and characteristics. **Offered as needed.**

CJ237 Public Safety Leadership and Ethics 2: Leading Others
4 class hr/wk, 4 cr.

Explores the various roles of leadership as they relate to being a team builder, delegator, conflict resolution facilitator, coach, and mentor. Focuses on gaining an understanding of communication processes, empowerment, and leading in a diverse environment. Explores various theories of leadership including situational leadership, transformational leadership, and servant leadership. **Offered as needed.**

CJ238 Public Safety Leadership and Ethics 3: Organizational Leadership
4 class hr/wk, 4 cr.

Explores the leadership process and the leader-follower relationship within an organizational setting. Covers the influence of organizational culture, values, and societal issues on leadership effectiveness. Introduces the concepts of learning organizations, organizational health, defenses, and change. Examines how a leader moves an organization from vision to action. **Offered as needed.**

CJ239 Public Safety Leadership and Ethics 4: Ethics and the Challenge of Leadership
4 class hr/wk, 4 cr.

Correlates the personal core values and characteristics to ethical decisions and behaviors. Explores ethical and principle-centered leadership, including ethical systems, dilemmas, and decision making. Examines the challenges and develops strategies for leading in public safety organizations serving diverse and dynamic communities. **Offered as needed.**

CJ253 Introduction to Penology
3 class hrs/wk, 3 cr.
Introduces the theories and practices of punishment. Includes processes devised and practiced for the repression and prevention of crime. Covers a historical overview of society's choices of punishment, the evolutionary process of punishment reform in the United States, and the continual dilemma of balancing the punishment of offenders and the expectation of rehabilitation. **F, W**

CJ255 How to Prepare for Oral Boards and Multi-Assessment
2 class hrs/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, as well as 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. **Sp**

CJ280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

CLA

Chicano/Latino Studies

CLA201 Introduction to Chicano/Latino Studies 1: Historical Overview
4 class hrs/wk, 4 cr.
Introduces Latino history in the United States beginning with Spanish colonization and continuing with the Mexican-American War. Covers the Mexicans' role in American labor, economics, Bracero Program, and the Chicano Movement. **F**

CLA202 Introduction to Chicano/Latino Studies 2: Political and Economic Overview
4 class hrs/wk, 4 cr.
Introduces the social, educational, political, and economic status of Latinos in the context of United States institutions and structures. Examines demographic profiles and current issues from a Chicano/Latino perspective. **W**

CLA203 Introduction to Chicano/Latino Studies 3: Cultural Overview
4 class hrs/wk, 4 cr.
Provides an overview of the cultural heritage of Chicanos and Latinos in the United States. Draws from anthropology, folklore, literature, and linguistics. Examines folk and popular culture, as well as the integration of various traditions. **Sp**

COM

Communication Skills

See also HD—Human Development, RD—Reading, SSP—Study Skills, WR—Writing.

COM051 Communication Skills 1
3 class hrs/wk, 3 cr.
Improves writing skills. Focuses on writing intended to replicate projects in occupational and technical fields. **F, W, Sp, Su**

COM052 Communication Skills 2
3 class hrs/wk, 3 cr.
Focuses on improving reading, writing, speaking, and listening skills using a variety of oral and written formats. **Prerequisite:** COM051 or equivalent as determined by instructor. **W, Sp**

COM053 Technical Report Writing
3 class hrs/wk, 3 cr.
Serves as the report writing class for students following a vocational (non-transfer) track of study. Features the writing of a variety of reports, emphasizing clarity, coherence, conciseness, and accuracy, with a specific audience addressed. Includes memos, laboratory reports, narration reports, description and definition reports, process reports, and research reports. **Prerequisite:** COM051 or equivalent as determined by instructor. **Sp**

CPL

Credit for Prior Learning

CPL120 Prior Learning Résumé
3 class hrs/wk, 3 cr.
Provides means to obtain credit hours for prior learning. Focuses on identifying career and educational goals; defining college-level learning; identifying, documenting and describing prior learning; writing competency statements; and preparing a résumé for credit evaluation. **F, W, Sp**

CS

Computer Science

CS100 Beginning Microcomputer Use
1 class hr/wk, 1 cr.
Introduces the use of microcomputers in an office. Presents a brief overview of necessary hardware and software, proper use of the equipment, operation of a microcomputer, use of purchased programs, and maintenance of computer files. **Offered as needed.**

CS133U C++ Language
4 class hrs/wk, 4 cr.
Introduces the C++ programming language. Covers the structure of the language, manipulation of data and arrays. Includes how to handle input and output functions. **Prerequisite:** CIS121 or consent of instructor. **Sp**

CS160 Introduction to Computer Science
3 class hrs/wk, 3 cr.
Presents the history of, as well as the current and future trends in, computer science and hardware and software development. Surveys campus computing resources, and introduces use of Internet facilities and network basics. Computer Science transfer students should co-enroll in CS161. **Prerequisite:** CIS101 or CIS120 or consent of instructor. **F**

CS161 Computer Science 1
4 class hrs/wk, 4 cr.
Introduces computer science concepts for computer science majors and other students desiring a foundation in computer programming. **Prerequisite:** grade of "C" or better in MTH111 or equivalent, and concurrent enrollment in CS160. **F**

CS162 Computer Science 2
4 class hrs/wk, 4 cr.
Includes searching and sorting algorithms, stacks, queues, linked lists, dynamic memory allocation, and file I/O. Presents the second term of computer science concepts emphasizing the appropriate use of style and algorithms. **Prerequisite:** grade of "C" or better in CS161 or equivalent as determined by instructor. **W**

CS233U Advanced C
4 class hrs/wk, 4 cr.
Continues CS133U. Studies features and instructions of the C language. Emphasizes application-oriented programs that produce printed reports, maintain files and modify an operating system. **Prerequisite:** CS133U. **Offered as needed.**

CS260 Computer Science 3: Data Structures
4 class hrs/wk, 4 cr.
Presents a further analysis of topics in CS162 with additional concepts in recursion, binary trees and object-oriented programming. **Prerequisite:** grade of "C" or better in CS162 or equivalent as determined by the instructor. **Sp**

CS271 Principles of Computer Organization
3 class and 3 lab hrs/wk, 4 cr.
Introduces the organization of a digital computer. Covers historical development, number systems, data encoding, Boolean and digital logic fundamentals, processor components, instruction execution, and addressing. Presents an introduction to Assembler language programming and the Assembler process, RISC machines, and parallel architectures. **Prerequisite:** MTH105. **W**

CS275 Database Management
4 class hrs/wk, 4 cr.

Designed to be broader than teaching specific database products or fourth generation languages. Addresses database development, a concept which includes data modeling, database design, and database implementation, and basic architecture and administration of Oracle, SQL Server and MySQL databases. Identifies the entity-relationship and object data modeling techniques, and the importance of normalizing data models. Presents techniques of implementing these models into a relational database scheme. Discusses SQL. **Prerequisite:** CIS101 or CIS120, or consent of instructor. **F**

Cultural Studies
See CLA—Chicano/Latino Studies, SSC—Social Science.

CVL

Civil Technology

CVL130 Work Zone Safety and First Aid
1 class hr/wk, 1 cr.

Covers signage and cone set-up standards related to basic traffic control for short-term work zones. Presents introductory flagging procedures with additional coursework in basic first aid and CPR. **Prerequisite:** consent of instructor. **F**

CVL143 Introduction to Civil Survey
2 class and 3 lab hrs/wk, 3 cr.

Introduces a broad variety of office- and field-based activities associated with the work of a professional land surveyor. Emphasizes career and technical education development and working as a member of a team. **Prerequisite:** concurrent enrollment in MTH070 or consent of instructor. **F, W**

CVL161A Plane Surveying 1—Lecture
2 class hrs/wk, 2 cr.

Covers plane survey theory and practice. Includes measurement techniques associated with taping, leveling, and field measurements with advanced electronic survey equipment. Emphasizes career and technical education development and teamwork skills. Introduces a basic understanding of metes and bounds descriptions. **Prerequisite:** CVL143 and concurrent enrollment in MTH082 or higher, and concurrent enrollment in CVL161B, or consent of instructor. **W**

CVL161B Plane Surveying 1—Lab
6 lab hrs/wk, 2 cr.

Covers field practices and application of equipment utilized in professional land surveying. Emphasizes tactile learning with strong team orientation. **Prerequisite:** CVL143 and concurrent enrollment in CVL161A, or consent of instructor. **W**

CVL162A Plane Surveying 2—Lecture
2 class hrs/wk, 2 cr.

Continues Plane Surveying 1. Studies distance and direction measurement, employing total stations with external data collectors, traversing and associated office computations, areas and volumes, circular and vertical curves, and outlines of public land surveys. **Prerequisite:** CVL161A, CVL161B, and concurrent enrollment in CVL162B, or consent of instructor. **Sp**

CVL162B Plane Surveying 2—Lab
6 lab hrs/wk, 2 cr.

Incorporates field survey with a focus on data gathering for computerized mapping. Introduces American Land Title Association specification standards and the use of GPS equipment. **Prerequisite:** DRF131, CVL161A, CVL161B, and concurrent enrollment in CVL162A, or consent of instructor. **Sp**

CVL230 Applied Statics
3 class hrs/wk, 3 cr.

Analyzes the forces induced in structures and machines by various types of loading. **Prerequisite:** MTH082 or MTH112, and PH121, or consent of instructor. **F, W**

CVL231 Applied Strength of Materials
4 class hrs/wk, 4 cr.

Analyzes internal stresses, deflections, and deformations of structured members when subjected to external forces. Covers how to design structures based on structural analysis. **Prerequisite:** CVL230 or consent of instructor. **W, Sp**

CVL240A Construction Surveying—Lecture
2 class hrs/wk, 2 cr.

Covers office-based calculations for construction surveying of a typical residential street, including curbs, storm and waste water sewers, and building site layouts. Applies state plane coordinate system to construction surveying and building site layouts. Introduces Global Positioning Systems (GPS) theory and writing legal descriptions for utility easements and street right-of-way. **Prerequisite:** CVL162A and CVL162B and concurrent enrollment in CVL240B, or consent of instructor. **F**

CVL240B Construction Surveying—Lab
6 lab hrs/wk, 2 cr.

Covers construction surveying for a typical residential street, including curbs, storm and waste water sewers, and building site layouts. Introduces Global Positioning Systems (GPS) field measurement practices and equipment care and use requirements. **Prerequisite:** CVL162A and CVL162B and concurrent enrollment in CVL240A, or consent of instructor. **F**

CVL260 Survey Project Planning
1 class and 6 lab hrs/wk, 3 cr.

Covers advanced research of deed and survey data and development of a "map of record." Emphasizes preparation of equipment and labor requirement plans needed for field survey project planning. **Prerequisite:** CVL162A, CVL162B and DRF245, or consent of instructor. **W**

CVL261 Environmental and Sanitary Technology
2 class and 6 lab hrs/wk, 4 cr.

Introduces elementary concepts of hydraulics, hydrology, storm collection and detention, sanitary sewer and domestic water supply designs. Applies concepts to typical design documentation. **Prerequisite:** DRF245 and MTH082, or consent of instructor. **W**

CVL263A Topographic Surveying—Lecture
2 class hrs/wk, 2 cr.

Covers importing "survey point files" of topographic points previously surveyed using electronic survey equipment into AutoCAD engineering/surveying software to produce a base map (topographic map) depicting the area surveyed. **Prerequisite:** CVL162A and CVL162B; and concurrent enrollment in CVL263B; and DRF245; or consent of instructor. **Sp**

CVL263B Topographic Surveying—Lab
6 lab hrs/wk, 2 cr.

Reviews field practices and applies survey techniques to field survey data collection. Covers advanced responsibilities of a team leader in a field crew situation with additional equipment care and use requirements. Includes topographic surveying using electronic surveying equipment, including setting up horizontal and vertical control networks. **Prerequisite:** CVL162A and CVL162B; and concurrent enrollment in CVL263A; and DRF245; or consent of instructor. **Sp**

CVL280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

CWE

Cooperative Work Experience

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

Places students in a business, industry, or agency for on-the-job training and experience related to instruction. Field experience supervised by college instructors and work experience coordinators. See program advisors. **Offered as needed.**

Dance
See PE—Physical Education

DEN

Dental Assisting

DEN150 Dental Sciences
3 class hrs/wk, 3 cr.

Focuses on a study of the sciences associated with the practice of dentistry. Includes oral microbiology, oral pathology, sterilization and disinfection principles, OSHA bloodborne pathogen and hazard communication standards, anesthesia, and pharmacology. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN151 Introductory Concepts in Dental Assisting
2 class and 3 lab hrs/wk, 3 cr.

Provides a basic study of the dental assistant's role with emphasis on terminology, instruments and equipment, professional regimen, chairside techniques, and patient communication. Emphasizes the qualifications necessary for success in the dental assistant field. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN153 Dental Materials 1
2 class and 3 lab hrs/wk, 3 cr.
Introduces the various materials and laboratory equipment used in the dental office. Includes the chemical and physical properties, manipulation and uses of restorative materials, medications, impression materials, and dental cements. Includes an overview of restorative and crown preparation procedures. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN154 Preventive Dentistry
1 class hr/wk, 1 cr.
Introduces the basic techniques and information relevant to prevention of plaque-related disease. Includes causative factors, nutritional influences, prevention products and their uses, patient motivation, and public health programs. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN156 Dental Anatomy
4 class hrs/wk, 4 cr.
Introduces dental anatomy. Particular attention is directed toward the oral cavity and its associated structures and anatomical terminology. Includes identification, form and function of the adult dentition, and deciduous dentition. Also includes dental charting for conditions of the oral cavity. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN160 Dental Specialties
3 class hrs/wk, 3 cr.
Studies the various fields of specialized dentistry recognized by the American Dental Association. Includes principles and armamentarium related to each dental specialty, as well as the role of the dental auxiliary during specialty procedures. **Prerequisite:** second-term standing in the Dental Assisting program. **W**

DEN161 Dental Assisting Practicum 1
1 class and 7 lab hrs/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 and Sciences University School of Dentistry. **Prerequisite:** second-term standing in the Dental Assisting program and proof of current health care provider CPR card. **W**

DEN162 Intermediate Clinical Skills
1 class and 3 lab hrs/wk, 2 cr.
Presents the theory and practice of intermediate clinical responsibilities delegated to dental auxiliary personnel. Includes discussion, demonstration, and practical application of the following: intra- and extra-oral examination, alginate impressions, bite registration, oral hygiene instruction, dietary analysis, and rubber dam placement and removal. **Prerequisite:** second-term standing in the Dental Assisting program. **W**

DEN163 Dental Materials 2
2 class and 3 lab hrs/wk, 3 cr.
Introduces the principles of laboratory procedures related to fixed and removable prosthetics. The utilization of appropriate laboratory equipment by the student will be supplemented by instructional demonstration of additional laboratory techniques and materials. **Prerequisite:** second-term standing in the Dental Assisting program. **W**

DEN164 Dental Radiology 1
2 class and 3 lab hrs/wk, 3 cr.
Provides information pertinent to the principles of dental radiology and legal aspects regarding the use of radiation. Includes the history of dental radiology; terminology; radiation physics; machine operation and equipment use; biological effects of x-rays; principles of radiation health, safety, and protection; anatomical landmarks; dental films and darkroom processing techniques. Students use x-ray manikins to practice film placement and exposure techniques. One patient full-mouth radiographic series is required and exposed films are processed and evaluated. **Prerequisite:** second-term standing in the Dental Assisting program. **W**

DEN165 Dental Office Emergency Management
1 class hr/wk, 1 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. **Prerequisite:** enrollment in the Dental Assisting program or consent of instructor. **F**

DEN170 Dental Office Management
2 class hrs/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. **Prerequisite:** second-term standing in the Dental Assisting program. **W**

DEN171 Dental Assisting Practicum 2
1 class and 24 lab hrs/wk, 9 cr.
Consists of observation and practice in an ethical dental office. Students develop communication rapport with the dental team and patients; perform specified basic, intermediate, and expanded function chairside procedures; complete reception and business office tasks; apply skills in laboratory procedures; and expose and process patient x-rays as directed by the dentist. **Prerequisite:** third-term standing in the Dental Assisting program. **Sp**

DEN172 Expanded Functions
2 class and 3 lab hrs/wk, 3 cr.
Presents the theory and practice of legal expanded functions for dental assistants. Includes discussion, demonstration, and practical application of the following: coronal polish, topical fluoride, amalgam polish, provisional coverage, suture removal, cement removal, and pit and fissure sealant placement. **Prerequisite:** third-term standing in the Dental Assisting program. **Sp**

DEN174 Dental Radiology 2
1 class and 3 lab hrs/wk, 2 cr.
Continues DEN164 Dental Radiology 1. Allows students to take additional adult and pediatric (pedodontic) manikin films using low-dose technique. Students develop skills in patient management and perfect radiographic techniques by completing two full mouth patient x-ray series. Includes information in taking pediatric films, films in edentulous areas, films taken while the patient is in a supine position, endodontic films, occlusal films, and extra-oral films. Students learn utilization of the panoramic x-ray unit, film duplicators, and automatic film processors and process, and evaluate all exposed films and are eligible to take the state x-ray examination upon successful completion of DEN164 and DEN174. **Prerequisite:** third-term standing in the Dental Assisting program. **Sp**

DEN180 Dental Assistant Seminar
2 class hrs/wk, 2 cr.
Prepares students for the Dental Assisting National Board Certification Examination. Also prepares students for successful employment by incorporating résumé writing, completion of a job application, and interview techniques. **Prerequisite:** third-term standing in the Dental Assisting program. **Sp**

DRF

Drafting Technology
See also CAM—Computer-Aided Manufacturing.

DRF051 Technical Graphics
1 class and 6 lab hrs/wk, 3 cr.
Covers fundamentals of graphics communication. Includes multiview and pictorial representation, dimensioning, and section and auxiliary views. **Prerequisite:** DRF130 or consent of instructor. **Offered as needed.**

DRF054 Drafting 1
1 class and 3 lab hrs/wk, 2 cr.
Introduces fundamentals of drafting and basic drawing techniques. Emphasizes use of drafting instruments, standard orthographic projections, layout procedures, ASA-approved lettering techniques, geometric construction, selection of views, sectional auxiliary views, and standard dimensioning practices, including metrics. **Offered as needed.**

DRF095A,B,C Special Projects in Drafting and Design
Variable hours/1-3 credits
Allows student and instructor to identify a drafting project or problem and jointly draw up a contract. The contract sets forth a proposal to complete the project or solve the problem. Identifies objectives, procedures, and equipment needed, together with key checkpoints for student-instructor conferences. Intended for, but not limited to, second-year drafting or mechanical design students as an elective. Potential areas of consideration include community development projects, computer programming and applications, machine design, mapping, civil engineering drafting, or any drafting-related field. Provides consideration and encouragement to an interdisciplinary team of students working on a common problem. **Prerequisite:** consent of instructor. **F, W, Sp, Su**

DRF101 Basic CAD for Electronics
1 class and 3 lab hrs/wk, 2 cr.
Covers the use of AutoCAD, schematic drawings, chassis design, block diagrams, and PC board layout drawings, in addition to basic CAD operations in the field of electronic drafting. **F**

DRF110 Applied Engineering Computations
2 class hrs/wk, 2 cr.
Covers computation and presentation of technical data to solve typical problems found in mechanical, civil, architectural and related areas. **Prerequisite:** MTH070 or consent of instructor. **F, W**

DRF112 Sketching
3 lab hrs/wk, 1 cr.
Covers basic technical sketching and measurement skills and techniques used in the drafting process and practical pictorial communication. **F**

DRF114 Drafting Orientation
1 class and 3 lab hrs/wk, 2 cr.
Introduces drafting as a career option. Offers field trips to offices and job sites, guest lecturers, Internet and periodical research on cutting-edge technology. **F**

DRF130 CAD 1
2 class and 3 lab hrs/wk, 3 cr.
Incorporates hands-on experience with CAD (computer-aided drafting) software. Introduces standard graphics commands for two-dimensional drawings. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **F, W, Sp, S**u

DRF131 CAD 2
2 class and 3 lab hrs/wk, 3 cr.
Incorporates hands-on experience with CAD. Covers more complex graphics commands for two-dimensional drawings. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **Prerequisite:** DRF130 or consent of instructor. **F, W, Sp, S**u

DRF132 CAD 3
2 class and 3 lab hrs/wk, 3 cr.
Incorporates hands-on experience with CAD. Covers advanced graphics commands for two-dimensional drawings. Introduces elementary customization techniques. Covers three-dimensional models created from surfaces and solids. Most students will use AutoCAD, but other general-purpose CAD software can also be used. **Prerequisite:** DRF131 or consent of instructor. **F, W, Sp**

DRF140 Advanced Technical Graphics
1 class and 6 lab hrs/wk, 3 cr.
Covers fundamentals of graphics communication. Includes multi-view drawings, dimensioning, section views, auxiliary views, and descriptive geometry concepts. **Prerequisite:** DRF131 or consent of instructor. **Sp**

DRF150 Architectural Drafting 1
1 class and 6 lab hrs/wk, 3 cr.
Covers basic architectural drafting techniques and methods. Includes dimensioning, layout, symbols, and conventional construction methods used in residential buildings. Uses AutoCAD to draft a partial set of construction drawings. **Prerequisite:** DRF131 or consent of instructor. **F, W, Sp**

DRF155 Mapping and Platting
1 class and 6 lab hrs/wk, 3 cr.
Covers map components, legal descriptions, plot plans, and contours. Introduces Geographic Information Systems (GIS) and Global Positioning Systems (GPS). **Prerequisite:** DRF131 or consent of instructor. **Sp**

DRF160 Technical Software Applications
2 class and 3 lab hrs/wk, 3 cr.
Covers engineering applications of purchased software packages, focusing on Excel. Includes the use of spreadsheets to store and manipulate data, design structural members, and aid in statistical analysis and parametric design. **Prerequisite:** CIS101; MTH081 or MTH111; and concurrent enrollment in DRF131; or consent of instructor. **Sp**

DRF165 CAD System Administration
2 class and 3 lab hrs/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 or consent of instructor. **Sp**

DRF170 AutoCAD Certification Preparation
1 class and 2 lab hrs/wk, 2 cr.
Presents preparation for Level 1 AutoCAD Certification Exam. **Prerequisite:** DRF132 or consent of instructor. **Sp**

DRF210 Parametric Design
1 class and 6 lab hrs/wk, 3 cr.
Uses parametric design software to create models of parts. Produces detail and assembly drawings for a simple machine. Applies precision dimensioning and tolerancing to current manufacturing standards. **Prerequisite:** DRF132 or consent of instructor. **F, W**

DRF220 GIS 1
1 class, 3 lab hrs/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. **F, W**

DRF221 GIS 2
1 class and 6 lab hrs/wk, 3 cr.
Uses GIS and CAD software in GIS applications and projects. Studies advanced GIS concepts and covers basic CAD mapping commands and operations. **Prerequisite:** DRF131 and DRF220, or consent of instructor. **Sp**

DRF230 Introduction to MicroStation PC
2 class and 3 lab hrs/wk, 3 cr.
Introduces the MicroStation drafting software. Covers basic drawing, editing and display commands. Contrasts operations with AutoCAD. **Prerequisite:** DRF131 or consent of instructor. **W, Sp**

DRF231 Advanced MicroStation
1 class and 6 lab hrs/wk, 3 cr.
Uses MicroStation software to produce building construction drawings. Emphasizes creating master drawings containing all building data. Includes manipulation of file contents to produce multiple drawings. Introduces 3-D modeling tools. **Prerequisite:** DRF230 or consent of instructor. **Sp**

DRF240 Architectural Drafting 2
1 class and 6 lab hrs/wk, 3 cr.
Covers advanced architectural drafting techniques and methods. Incorporates a full set of working drawings, shearwall details, advanced construction details, building process, and current building codes used in residential buildings. Uses AutoCAD to draft a full set of construction drawings. **Prerequisite:** DRF150 or consent of instructor. **W**

DRF241 Structural Drafting
1 class and 6 lab hrs/wk, 3 cr.
Introduces light commercial construction practices. Covers production of working drawings using AutoCAD software. Also covers drafting practices applied with the building materials of steel and concrete. **Prerequisite:** DRF131 or consent of instructor. **W**

DRF242 3-D Presentations
1 class and 6 lab hrs/wk, 3 cr.
Covers production of objects and scenes as 3-D computer images, incorporating various materials and lights. **Prerequisite:** DRF132 or consent of instructor. **F**

DRF243 Architectural Design
1 class and 6 lab hrs/wk, 3 cr.
Covers elements and principles of aesthetic design. Applies 3-D design and model to assigned projects. Develops light commercial/residential project with emphasis on specific design criteria. **Prerequisite:** DRF240 or consent of instructor. **Sp**

DRF245 Civil Drafting and Design
1 class and 9 lab hrs/wk, 4 cr.
Introduces AutoCAD Land Development Desktop. Develops residential subdivision and typical utility design documentation. **Prerequisite:** DRF131 and DRF155 or consent of instructor. **F**

DRF246 Project Development
1 class and 6 lab hrs/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:** CVL261. **Sp**

DRF251 Power Transmission Design
3 class hrs/wk, 3 cr.
Focuses on the design of power transmission systems. Incorporates hydraulics, pneumatics, electric motors, chains, belts, bearings, and speed reducers. Covers analysis of system requirements, sizing of machine elements, and selection of components from industrial catalogs. **Prerequisite:** MTH082 or consent of instructor. **W**

DRF255 Technical Illustration
1 class and 6 lab hrs/wk, 3 cr.
Presents pictorial presentation methods for 3-D models using a variety of software. Focuses on creating exploded view drawings, blended raster and vector images, and computer rendering. Covers plotting to Web and paper format. **Prerequisite:** DRF132 or consent of instructor. **Sp**

DRF256 AutoLISP Programming
2 class and 3 lab hrs/wk, 3 cr.
Introduces AutoLISP functions. Focuses on development of programs to increase AutoCAD productivity. **Prerequisite:** DRF131. **W**

DRF260 Tool Design
1 class and 6 lab hrs/wk, 3 cr.
Introduces the principles of tool design, focusing on gauging, locating, clamping, and fixture design. Incorporates high production techniques and tooling. **Prerequisite:** DRF210 or consent of instructor. **W**

DRF262 Machine Design
1 class and 6 lab hrs/wk, 3 cr.
Presents practical design situations related to the drafting room. Selected design project(s) demonstrate a comprehensive study of parts relationships, materials application and product design. **Prerequisite:** DRF210. **Sp**

DRF280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

EC

Economics
EC200 Introduction to Economics
3 class hrs/wk, 3 cr.
Introduces the economic concepts and analysis in the process of studying important issues in modern society: poverty, income distribution, health care systems, and development strategies. **Prerequisite:** MTH070. **F, W, Sp, Su**

EC201 Introduction to Microeconomics
4 class hrs/wk, 4 cr.
Introduces microeconomic theories of how a capitalist society operates. Covers the concepts of surplus product, commodity production, price elasticity, revenue, production and cost, profit, competitive and imperfectly competitive markets, market power, antitrust, externalities, (de)regulation of business, income distribution, poverty, and labor (factor) markets. **Prerequisite:** MTH095 and EC202. **F, W, Sp, Su**

EC202 Introduction to Macroeconomics
4 class hrs/wk, 4 cr.
Introduces macroeconomic theories of how a capitalist society operates. Covers the concepts of aggregate supply and demand, fiscal and monetary policies, international trade, money and banking, the Federal Reserve, business cycles, poverty, unemployment, and inflation. **Prerequisite:** MTH095. **F, W, Sp, Su**

EC203 Applications to Economic Issues
3 class hrs/wk, 3 cr.
Emphasizes such global issues as economic growth, environmental protection, rent, interest and profit, international trade and finance, and international development. **Sp**

ECE

Early Childhood Education
See also ED—Education, HDF—Human Development and Family Studies.

ECE068A, B, C Observing Preschool Experiences
1 class hr/wk, 1 cr. each
Observes various aspects of a preschool. In ECE068A, students observe children's development; ECE068B focuses on observing guidance; ECE068C emphasizes the classroom environment and curriculum. Each course may be repeated for a maximum of two credits. **Prerequisite:** consent of instructor. ECE068A: **F**; ECE068B: **W**; ECE068C: **Sp**

ECE150 Introduction and Observation in Early Childhood Education
3 class hrs/wk, 3 cr.
Focuses on the history of early childhood education and the value and usage of objective observations as a teaching tool. Includes weekly lecture-discussion and weekly observations. **F**

ECE151 Observing and Guiding Behavior
3 class hrs/wk, 3 cr.
Continues observing experiences. Emphasizes the role of the teacher and techniques of individual and group guidance and management. **Prerequisite:** ECE150 or consent of instructor. **W**

ECE152 Creative Activities
2 class and 2 lab hrs/wk, 3 cr.
Focuses on understanding and implementing a developmental approach to creative activities for the young child. Involves hands-on experience with a wide variety of activities. Discusses presentation and methods of evaluation. Includes art activities, use of natural materials, cooking experiences, puppet making, and the development of new art. **W**

ECE153 Music and Movement for Young Children
3 class hrs/wk, 3 cr.
Emphasizes music as a pleasurable medium of expression while learning why and how to provide music and movement activities for the young child. Presents the value of music in the preschool setting, the role of the teacher, environments that support music and movement experiences, basic music theory and terminology, and the use of spontaneous and planned activities for young children. **Sp**

ECE154 Children's Literature and Literacy
3 class hrs/wk, 3 cr.
Offers an overview of what is available in quality children's literature, along with a rationale for the purposes of such literature, ways to implement its use, and ways to evaluate its appropriateness in a given school situation. Includes the evaluation and reading of children's books and holding groups with children. Explores in depth how children develop literacy. **Sp**

ECE155 Child Nutrition
2 class hrs/wk, 2 cr.
Introduces human nutrition and health with emphasis on the nutritional needs and food experiences of the young child. Includes practical application in the day care setting, planning snacks and meals for preschool children. **W**

ECE161 Infant/Toddler Practicum
1 class and 6 lab hrs/wk, 3 cr.
Provides experience working with infants and toddlers in a laboratory setting and assisting with supervision of the various daily activities. **Prerequisite:** concurrent enrollment in HDF249 or consent of instructor. **W, Sp**

ECE162 Early Childhood Educator Orientation
1 class and 3 lab hrs/wk, 2 cr.
Emphasizes the roles and responsibilities of the early childhood educator. Offers experience in working with young children in an organized setting and assisting with supervision of the various daily activities in a preschool program. **Prerequisite:** concurrent enrollment in ECE151 or consent of instructor. **F, W, Sp**

ECE163 Preschool Practicum
1 class and 9 lab hrs/wk, 4 cr.
Provides experience working with young children in a laboratory preschool setting. Assists with supervision of the various activities in a preschool program. Includes some planning, executing, and evaluating of curriculum materials appropriate for the young child. **Prerequisite:** grade of "C" or better in ECE151, ECE162, HDF225, HDF247, HDF249, and consent of two ECE faculty. **F, W, Sp**

ECE251 Environments for Young Children
3 class hrs/wk, 3 cr.
Focuses on planning, implementing, and evaluating environments for preschool children. Includes how to facilitate play in the environment, room arrangements, outdoor areas, equipment selection and sources, children's furniture, and scrounging for materials usable in the preschool environment. **Prerequisite:** second-year standing in the Early Childhood Education program or consent of instructor. **F**

ECE261 Student Teaching 1, Early Childhood Education
2 class and 12 lab hrs/wk, 6 cr.
Offers supervised teaching of young children in a laboratory setting. **Prerequisite:** grade of "C" or better in ECE163, second-year standing in the Early Childhood Education program, and consent of instructor. **F, W, Sp**

ECE262 Student Teaching 2, Early Childhood Education
2 class and 12 lab hrs/wk, 6 cr.
Offers supervised teaching of young children in a laboratory preschool and in a community setting. **Prerequisite:** grade of "C" or better in ECE261 and consent of instructor. **F, W, Sp**

ECE280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

ECE295 Administration of Early Childhood Programs
3 class hrs/wk, 3 cr.
Covers areas of administrative responsibility: finances and budget and sources of income; selection and purpose of materials and equipment; standards (local, state, federal) and regulatory agencies in regard to health, nutrition and safety. Computer simulations and software will be used to experience administrative functions. **Prerequisite:** second-year standing in Early Childhood Education program or consent of instructor. **Sp**

ED

Paraeducator, Education
See also SLP—Speech-Language Pathology Assistant.

ED100 Introduction to Education
2 class and 3 lab hrs/wk, 3 cr.
Examines teaching as a profession. Provides opportunities for direct experience with, and analysis of, educational settings. Explores current issues in education and characteristics of effective schools. **F, W, Sp**

ED113 Instruction Strategies in Language Arts and Reading
3 class hrs/wk, 3 cr.
Introduces the nature of the reading process and presents a systematic approach to language arts instruction. Students learn to link literacy instruction and assessment to state content standards.
Prerequisite: ED100 or consent of instructor. **Sp**

ED114 Instructional Strategies in Mathematics and Science
3 class hrs/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, or consent of instructor. **W**

ED125 Techniques for Tutoring Adults
1 class and 4 lab hrs/wk, 3 cr.
Presents basic tutoring theory and techniques to prepare tutors to work with adult learners primarily in career and technical education content areas. **Offered as needed.**

ED130 Comprehensive Classroom Management
3 class hrs/wk, 3 cr.
Provides current theory and methodology for managing small and large groups of students so that students choose to be productively involved in instructional activities. Covers the four major factors or skill areas of effective classroom management: 1) understanding students' personal/psychological and learning needs; 2) establishing positive adult-student and student-student relationships; 3) implementing instructional methods that facilitate optimal learning; and 4) using organizational and group management methods that maximize positive student behavior and learning. **Prerequisite:** ED100 or consent of instructor. **F, Sp**

ED131 Instructional Strategies
3 class hrs/wk, 3 cr.
Focuses on the components of effective instruction. Covers design of standards-based activities that integrate multiple content areas, address the instructional needs of diverse learners, and include appropriate strategies for assessment. **Prerequisite:** ED100 or consent of instructor. **Sp**

ED133 Instructional Media and Materials
3 class hrs/wk, 3 cr.
Covers the preparation and use of instructional media and materials commonly found in public schools. Includes an introduction to computers and other new learning technologies and how to design lessons using these materials. Develops an understanding of the place and importance of these instructional tools. **Offered as needed.**

ED169 Overview of Students with Special Needs
3 class hrs/wk, 3 cr.
Introduces the disabling conditions of students with special needs and their implications in school settings. Defines and identifies intervention strategies for disabilities covered under federal law. **Prerequisite:** ED100 or consent of instructor. **W, Sp, Su**

ED200 Foundations of Education
3 class hrs/wk, 3 cr.
Provides an overview of the American educational system, including historical, legal, and philosophical foundations. Explores the governance of local schools and districts, and considers the roles and ethical obligations of professional educators. **Prerequisite:** ED100 or consent of instructor. **F, W, Sp**

ED205A Tutoring Principles and Practices
1 class and 2 lab hrs/wk, 2 cr.
Teaches principles and practices of effectively tutoring adult learners in skill areas of basic reading, writing, and English as a Second Language. Includes additional instruction in tutoring basic math, advanced grammar, conversation, and pronunciation following completion of basic course. **Offered as needed.**

ED205B Tutoring Principles and Practices
1 class and 4 lab hrs/wk, 3 cr.
Presents the principles and practices of tutoring basic reading, writing, and English as a Second Language skills to adult learners. Following completion of course basics, additional options provide instruction in tutoring basic math, advanced grammar, conversation, and pronunciation. Also considers learning styles and tutoring with the aid of a computer. **Offered as needed.**

ED209B Practicum: Introductory Observation and Experience
1 class and 6 lab hrs/wk, 3 cr.
Introduces the field of education to students exploring education as a career. **Offered as needed.**

ED209C Professional Technical Practicum 1
1 class and 15 lab hrs/wk, 6 cr.
Prepares students for extended teaching responsibilities in career and technical education in a public school setting. Students assess, plan, and implement a five-day unit of instruction at the practicum placement site. **Prerequisite:** ED209B. **W**

ED209D Professional Technical Practicum 2
2 class and 21 lab hrs/wk, 9 cr.
Prepares students for full teaching responsibility in career and technical education in a public school setting. Students assess, plan, and implement all instructional programs for a period of four weeks at the practicum placement site. **Prerequisite:** ED209B and ED209C. **Sp**

ED209V1-V4 Advanced Education Practicum
1 class and 6-16 lab hrs/wk, variable 3-6 cr.
Provides an educational field experience in a classroom setting for students pursuing careers in instructional assisting, professional-technical, or education settings. **Prerequisite:** consent of instructor. **Offered as needed.**

ED210 Professional Portfolio
3 class hrs/wk, 3 cr.
Focuses on professional portfolio development to document educational experience and expertise. Provides an opportunity to develop a professional portfolio that will document experience and effectiveness as an educator. Includes portfolio demonstrations in seeking a certified position. **Offered as needed.**

ED213 Advanced Instructional Techniques in Reading
3 class hrs/wk, 3 cr.
Covers the use of a variety of instructional strategies, which build upon the foundations of reading, developed in ED113. Compares and contrasts current instructional strategies and explores the interactive nature of language, reading, writing, and spelling. **Prerequisite:** ED113. **Offered as needed.**

ED214 Advanced Instructional Techniques in Mathematics and Science
3 class hrs/wk, 3 cr.
Covers the use of a variety of instructional strategies, which build upon the foundations of mathematics in ED114. Explores manipulative mathematics across the curriculum, as well as the integration of science into the curriculum. **Prerequisite:** ED114. **Offered as needed.**

ED229 Learning and Development
3 class hrs/wk, 3 cr.
Addresses current theory regarding human development, intelligence, motivation, and the learning process. Applies strategies and techniques derived from these theories. **Prerequisite:** ED100 or consent of instructor. **F, W, Sp, Su**

ED235 Education Technology
3 class hrs/wk, 3 cr.
Introduces current advanced technology available in education. Emphasizes the tools to evaluate, select, and implement appropriate technology in the instructional setting. **W, Su**

ED254 Strategies for ELL Students
3 class hrs/wk, 3 cr.
Examines the pedagogical and cultural approaches that lead to successful acquisition of English language skills and content knowledge. **Prerequisite:** ED100 or consent of instructor. **Sp**

ED255 Teaching English as a Foreign Language
4 class and 6 lab hrs/wk, 6 cr.
Presents the knowledge and foundation skills necessary to teach English as a foreign language. Includes awareness of English language components, development of student profiles, teaching techniques, observation, and teaching practice. Covers development of contextualized materials that support communicative language practice. Provides awareness of the cultural and professional behaviors required in teaching practice. **Prerequisite:** advanced English language proficiency/TOEFL score of 500. **Offered as needed.**

ED256 Bilingual Methodology
3 class hrs/wk, 3 cr.
Covers the philosophy, techniques, activities, and materials used in bilingual/bicultural education programs. Examines the philosophy, rationale, and legal implications of bilingual/bicultural programs, and management and use of English and Spanish reading in a bilingual classroom. **Prerequisite:** ED100 or consent of instructor. **Offered as needed.**

ED258 Multicultural Education
3 class hrs/wk, 3 cr.
Covers the philosophy, activities, and techniques appropriate to a culturally sensitive classroom. Students will develop an understanding of the impact of culture on individual perception and learning and on group dynamics. **Prerequisite:** ED100 or consent of instructor. **F, W, Su**

ED266 Current Issues in Special Education
3 class hrs/wk, 3 cr.
Explores, in more depth, current issues in special education. Includes current philosophical frameworks, legislative changes, emerging conditions, and technological advances. **Prerequisite:** ED169 or consent of instructor. **Offered as needed.**

ED269 Educating the Mildly and Severely Disabled
3 class hrs/wk, 3 cr.
Presents the theory and techniques of working with students with disabilities. Studies services and funding provided for mildly and severely disabled students. **Prerequisite:** ED169 or consent of instructor. **Offered as needed.**

ED270 Practicum 1
1 class and 6 lab hrs/wk, 3 cr.
Offers a supervised practicum in a school setting. Uses and develops knowledge, skills, and attitudes relevant to working in a school and with children. **Prerequisite:** ED100 or equivalent experience and current First Aid Card. **W**

ED271 Practicum 2
1 class and 12 lab hrs/wk, 5 cr.
Focuses on field experience in a variety of classroom settings closely paralleling duties regularly assigned to an instructional assistant on a school team. Applies in-depth knowledge, methods, and skills gained from prior education courses. Seminars cover classroom experience and problem-solving techniques. **Prerequisite:** consent of instructor and current First Aid Card. **Sp**

ED282 Teaching at the Community College
3 class hrs/wk, 3 cr.
Assists new, continuing, or adjunct instructors to develop and refine the skills necessary to apply successful strategies in a community college classroom. Addresses shifting paradigms in teaching/learning related to diversity, brain-based teaching, and student-centered instruction. In addition, participants will gain an understanding of the historical and current perspective of the role of community colleges in a seamless education system. **Offered as needed.**

ED291 Natural Resource Institute
5 class hrs and 35 lab hrs, 2 cr.
Studies natural resource education for teachers interested in establishing a natural resource program at their high schools. Involves instruction in ecosystem-based management and sustainability in natural resource education. Field experiences are provided by experts in natural resource management and connections are made toward program development at schools. **Offered as needed.**

ED292 Occupational Analysis, Curriculum and Evaluation
3 class hrs/wk, 3 cr.
Provides students with the opportunity to analyze their professional-technical specialty area in order to develop curriculum and evaluation strategies for professional-technical programs. Includes community surveys, occupational advisory committees, occupational analysis, program goals and objectives, and evaluation. **Prerequisite:** ED209B **Offered as needed.**

ED293 Applied Integrated Academics
3 class hrs/wk, 3 cr.
Prepares professional-technical teachers to integrate mathematics, language arts, and science content into their professional-technical courses. **Offered as needed.**

EGR

Engineering
See also GE—General Engineering.

EGR201 Electrical Fundamentals 1
3 class and 2 lab hrs/wk, 4 cr.
Studies basic electrical circuit theory, including voltage, current and power relationships, and circuit parameters of resistance, inductance, and capacitance. Covers basic DC and natural responses of circuits. Also includes operational amplifier theory and an introduction to AC analysis. **Prerequisite:** MTH252 or consent of instructor. **F**

EGR202 Electrical Fundamentals 2
3 class and 2 lab hrs/wk, 4 cr.
Covers sinusoidal steady-state analysis, the basic operation of three-phase circuits, and how to analyze electric circuits containing mutually-coupled coils. Also covers transformer function in circuits and the characteristics of resonant circuits. **Prerequisite:** MTH252 and EGR201, or consent of instructor. **W**

EGR203 Electrical Control Fundamentals
3 class and 2 lab hrs/wk, 4 cr.
Covers Fourier series, LaPlace Transforms, and their uses in electrical control theory. Includes the Bode diagram, Boolean algebra, and basic logic gates. **Prerequisite:** MTH252, MTH256 and EGR201, or consent of instructor. **Offered as needed.**

EGR211 Statics
3 class and 2 lab hrs/wk, 4 cr.
Analyzes the forces induced in structures and machines by various types of loading. **Prerequisite:** MTH252 or consent of instructor. **F**

EGR212 Dynamics
3 class and 2 lab hrs/wk, 4 cr.
Studies kinematics, Newton's laws of motion, work energy relations, and impulse-momentum relationships applied to engineering systems.
Prerequisite: EGR211, MTH252, and PH211, or consent of instructor. **W**

EGR213 Strength of Materials
3 class and 2 lab hrs/wk, 4 cr.
Covers properties of structural materials and analysis of stress and deformation in axially loaded members, circular shafts, beams, and statically indeterminate systems. **Prerequisite:** EGR211 and MTH252 or consent of instructor. **Sp**

EGR214 Introduction to Statistics for Engineers
3 class hrs/wk, 3 cr.
Covers probability, common probability distributions, sampling distributions, estimation, hypothesis testing, control charts, regression analysis, and experiment design. **Prerequisite:** MTH252 **Sp**

EGR248 Graphics and 3-D Modeling
1 class hr and 6 lab hrs/wk, 3 cr.
Covers graphic communication, multi-view and pictorial representation, conceptual design, spatial analysis, and engineering design representation through use of advanced level computer tools. **Prerequisite:** DRF130 or consent of instructor. **F, W**

ELT

Electronics Technologies
See also MT—Industrial and NET—Network Technology.

ELT100 Electronics Fundamentals for Non-Majors
3 class and 2 lab hrs/wk, 4 cr.
Introduces the fundamental theories, circuits, and devices used in electronics. Covers direct and alternating current theory, test equipment, semiconductor devices, motors, and generators. Emphasizes practical concepts in both lectures and laboratories. Suitable for those desiring a general knowledge of electronics or exploring electronics as a career.
Prerequisite: MTH070, high school Algebra 2 or instructor consent. **F**

ELT111 Electronics Orientation
2 lab hrs/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. **F, W**

ELT113 Electronic Problems 1
2 lab hrs/wk, 1 cr.
Introduces electronic problem-solving techniques with an emphasis on calculations, scientific and engineering notations, formula manipulation, and use of the calculator in solving problems associated with electronics. **Prerequisite:** enrollment in the Electronics Technologies program and concurrent enrollment in MTH081 or MTH111, or consent of instructor. **Offered as needed.**

ELT121 Programming Concepts 1
3 class and 2 lab hrs/wk, 4 cr.
Offers the first course in the Programming Concepts sequence. Introduces computer programming and computer operating systems using C++ language. **Prerequisite:** MTH081 or consent of instructor. **F**

ELT131 Electronic Concepts 1
3 class and 4 lab hrs/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. **Prerequisite:** MTH070, high school algebra and concurrent enrollment in an advanced algebra class, such as MTH111 or MTH081, or consent of instructor. **F, W**

ELT132 Electronic Concepts 2
3 class and 4 lab hrs/wk, 4 cr.
Covers atomic and alternating current (AC) electrical theory applicable to resistors, capacitors, and inductors. Stresses reactive circuit theorems used for circuit analysis. **Prerequisite:** ELT131 or consent of instructor and concurrent enrollment in a trigonometry class. **W, Sp**

ELT133 Electronic Concepts 3
3 class and 3 lab hrs/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. **Prerequisite:** ELT132. **Sp, Su**

ELT141 Transistor Fundamentals
3 class and 6 lab hrs/wk, 5 cr.
Introduces semiconductor physics and covers the fundamental principles of diodes and bipolar transistors. **Prerequisite:** concurrent enrollment in ELT132. **W, Sp**

ELT142 Semiconductor Devices
2 class and 3 lab hrs/wk, 3 cr.
Covers the fundamentals of basic diode rectifier, multiplier, transistor voltage regulators, and current limiting circuits. Introduces the operating principles of solid-state devices such as unijunction transistors, special purpose diodes, thyristors, and optoelectronic devices. **Prerequisite:** ELT141 or consent of instructor. **Sp, Su**

ELT143 Pulse Circuit Fundamentals
2 class and 3 lab hrs/wk, 3 cr.
Introduces the theory, analysis, and operation of discrete pulse waveform circuits. **Prerequisite:** ELT141 or consent of instructor. **Sp, Su**

ELT151 Digital Fundamentals
3 class and 2 lab hrs/wk, 4 cr.
Introduces digital logic theories: number systems and conversions, Boolean algebra, simplification theorems, combinational logic, and arithmetic. **Prerequisite:** ELT131 or consent of instructor. **W, Sp**

ELT161 Linear IC Fundamentals
3 class and 3 lab hrs/wk, 4 cr.
Introduces linear integrated circuit amplifiers. Emphasizes device parameters and basic circuit operating characteristics. Includes linear integrated circuit amplifying devices for comparison and evaluation through laboratory experiments. **Prerequisite:** ELT132 and ELT141. **Corequisite:** ELT133 and ELT142. **Sp, Su**

ELT222 Programming Concepts 2
3 class and 2 lab hrs/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. **Prerequisite:** ELT111, ELT121, ELT132, ELT151. **Sp**

ELT244 Electronic Circuit Analysis
2 class and 6 lab hrs/wk, 4 cr.
Covers basic electronic devices and circuit designs. Emphasizes verifying and analyzing the designs, using the "R" parameters. Includes small-signal amplifiers, bipolar circuits, FET circuits, oscillators, and power amplifiers. Some circuits are analyzed using simulation software, while other circuits are constructed and analyzed using laboratory test equipment. **Prerequisite:** ELT141 and ELT133 or consent of instructor. **F**

ELT252 Digital Circuit Applications
2 class and 3 lab hrs/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. **Prerequisite:** ELT151. **F**

ELT253 Microprocessor Systems
3 class and 6 lab hrs/wk, 5 cr.
Covers hardware and software concepts used with microcomputers. Stresses theory and laboratory application of interfacing criteria, hardware and software troubleshooting techniques, writing machine language programs, and using programs for testing hardware and system interface. **Prerequisite:** ELT244 and ELT252. **W**

ELT254 Computer Hardware
3 class and 3 lab hrs/wk, 4 cr.
Covers hardware concepts fundamental to all computers and computer peripherals. Explains the interface between software and hardware. Also covers troubleshooting techniques. **Prerequisite:** CIS140B or NET123. **W**

ELT255 Advanced Data Communication
3 class and 6 lab hrs/wk, 5 cr.
Covers theory of data communications and concepts of information exchange between computers, via data networks. Emphasizes configuration, maintenance, and management of data communication network systems. Constructs and tests multiple network hardware configurations using the Novell NetWare Operating System. **Prerequisite:** ELT253, CIS278, DOS and a high level programming language or consent of instructor. **Sp**

ELT256 Advanced Computer Architecture
3 class and 3 lab hrs/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. **Prerequisite:** ELT253. **Sp**

ELT262 Linear IC Applications
2 class and 3 lab hrs/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. **Prerequisite:** ELT161 and ELT244. **W**

ELT280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

ELT281 Antennas and Transmission Lines
2 class hrs/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. **Prerequisite:** ELT244 and ELT252. **W**

ELT282 Telecommunications
2 class hrs and 3 lab hrs/wk, 3 cr.

Covers communications theory and systems. Develops practical skills and reinforces theoretical concepts through laboratory experiments and field trips. **Prerequisite:** concurrent enrollment in ELT281. **W**

ELT283 Logical Troubleshooting
3 class and 6 lab hrs/wk, 5 cr.

Introduces and applies industry recognized standards, procedures, and practices for logical-troubleshooting and analysis of electronic systems. Includes lab activities such as system-level, board-level, and component-level troubleshooting and diagnosis, using live systems and real world circuit faults. **Prerequisite:** ELT244 and ELT161, or equivalent with consent of instructor. **Sp**

ELT291 Advanced Industrial Electronics
3 class and 3 lab hrs/wk, 4 cr.

Covers principles and concepts of electronic and electrical control and sensing devices used in industry. Introduces electric motors, three-phase electricity, control devices and circuits, process control systems and servos, measurement transducers, and programmable controllers (PLCs). **Prerequisite:** ELT142 and ELT262, or consent of instructor. **Sp**

ELT293 Flexible Manufacturing Systems
2 class and 3 lab hrs/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. **Prerequisite:** MTH082 and concurrent enrollment in PH121. **Sp**

EMT

Emergency Medical Technology

EMT151 Emergency Medical Technician Basic, Part 1
4 class and 3 lab hrs/wk, 5 cr.

Provides instruction at the level of Emergency Medical Technician Basic. Includes all skills necessary to provide emergency medical care as outlined by scope of practice established by the Oregon Medical Board. Serves as the first of a two-part course in a series of courses making up a national and state EMS training program. Failure of this course will require retaking the full sequence of EMT-Basic courses. **Prerequisite:** completion of placement testing for writing skills at WR049 or higher, reading at RD090 or higher, and math at MTH020 or higher. Must have a high school diploma, GED, or equivalent. Must become certified in CPR for BLS Health Care Provider as issued in accordance with current national standard curriculum by the end of the term. Must meet standards as set by the Oregon State EMS Office for certification, which includes health, driving, immunization, and criminal record check. **F, Offered as needed.**

EMT152B Emergency Medical Technician Basic, Part 2
4 class and 3 lab hrs/wk, 5 cr.

Continues instruction at the level of Emergency Medical Technician Basic, a vital link in the chain of the health care system. Includes all skills necessary for the individual to provide emergency medical care as outlined by scope of practice established by the Oregon Board of Medical Examiners. Serves as the second in a series of courses making up a national and state EMS training program. Failure of this course will require retaking the full sequence of EMT-Basic courses. **Prerequisite:** successful completion of EMT151. Must meet standards as set by the Oregon State EMS Office for certification, which includes health, immunizations, and criminal record check. **W**

EMT167A Emergency Medical Technician Intermediate, Part 1
4 class and 2 lab hrs/wk, 5 cr.

Covers EMT-Intermediate emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (EKG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations, such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and EKG monitoring, defibrillation, pharmacology, and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an urgent care clinic. Students successfully completing this course will be recommended to the Department of Health Services/Emergency Medical Services (DHS-EMS) for the certification process. Failure of this course will require retaking the full EMT-Intermediate sequence. **Prerequisite:** completion of placement testing with writing skills at WR049 or higher, reading at RD090 or higher, and math at MTH020 or higher. Entry at these levels ensures that students will have an increased chance of passing the course, as well as certification exams. Must meet standards as set by the Oregon State EMS Office for certification, which includes health, driving, immunization, and criminal record check. Current Oregon EMT-Basic certification, letter of endorsement from medical advisor, verification of EMT-Basic skills, and 80% or better on pre-test. **Offered as needed.**

EMT167B Emergency Medical Technician Intermediate, Part 2
4 class and 2 lab hrs/wk, 5 cr.

Covers EMT-Intermediate emergency medical procedures. Introduces the roles and responsibilities of the technician, emergency pharmacology, venous access and medication administration, electrocardiogram (EKG) monitoring and management of dysrhythmias, airway management and ventilation, and advanced airway techniques. Includes medical patient assessment and management; trauma assessment and management; and special considerations such as pediatrics, geriatric, and environmental emergencies. Emphasizes clinical decision making. Covers procedures related to airway, oxygen, ventilation, shock, intravenous, intraosseous, and ECG monitoring, defibrillation, pharmacology and field protocols in the laboratory component. The clinical experience requires the student to observe patient assessment and evaluation in either an emergency department or an urgent care clinic. Students successfully completing this course will be recommended to the Department of Health Services/Emergency Medical Services (DHS/EMS) for the certification process. Failure of this course will require retaking the full EMT-Intermediate sequence. **Prerequisite:** Satisfactory completion of EMT167A. **Offered as needed.**

EMT169 EMT Rescue
2 class and 3 lab hrs/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. **Prerequisite:** EMT151, EMT152B, current EMT Basic certification, or consent of instructor. **Offered as needed.**

EMT175 Introduction to Emergency Medical Service
3 class hrs/wk, 3 cr.
Covers the roles and responsibilities of the paramedic, emergency medical services systems, medical-legal considerations, major incident response, hazardous materials awareness, and stress management. **Offered as needed.**

EMT176 Emergency Response Patient Transportation
1 class and 2 lab hrs/wk, 2 cr.
Covers ambulance operations, laws, maintenance and safety, emergency response driving, and route planning. **Offered as needed.**

EMT177 Emergency Response Communication/Documentation
2 class hrs/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 communication techniques. **Sp**

EMT280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

EMT296 EMT Paramedic, Part 1
12 class and 4 lab hrs/wk, 16 cr.
Offers first term of a three-term course, which includes EMT296, EMT297, and EMT280F. Focuses on patient assessment; airway/ventilation; pathophysiology of shock; general pharmacology; and respiratory, cardiovascular, neurological, behavioral, and acute abdominal emergencies. Applies didactic knowledge to campus-based laboratory skills practice and clinical patient care in the hospital setting. Failure of this course will require retaking the full sequence of Paramedic courses (EMT296, EMT297 and EMT280F). **Prerequisite:** fourth-term standing in the Emergency Medical Technology program. **F, Sp**

EMT297 EMT Paramedic, Part 2
7 class and 9 lab hrs/wk, 16 cr.
Offers second part of a three-term course, which includes EMT296, EMT297, and EMT280F. Focuses on anaphylactic, toxicological, environmental, geriatric, pediatric, obstetric, gynecologic, neonatal, and endocrine emergencies; infectious diseases; 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, and EMT280F). **W, Su**

English

ENG104 Introduction to Fiction
3 class hrs/wk, 3 cr.
Features critical analysis and appreciation of fiction through the reading of narratives originally written in English as well as works in translation. Employs a selection of chronological, genre, stylistic, or thematic approaches to content to introduce the short story, the novel, novella, and basic literary terminology and concepts. **F, W, Sp, Su**

ENG105 Introduction to Dramatic Literature
3 class hrs/wk, 3 cr.
Features critical analysis and appreciation of drama from the classical Greek to contemporary periods written by an international range of playwrights. Introduces concepts and types of dramatic literature, including comedy and tragedy, as well as the elements and conventions of drama as both a literary and performing art. **F, W, Sp, Su**

ENG106 Introduction to Poetry
3 class hrs/wk, 3 cr.
Features critical analysis and appreciation of poetry originally written in English as well as works in translation by major poets from various cultural backgrounds. Introduces poetic terminology, concepts and principles, and explores a variety of the poetry's structures and types. **F, W, Sp, Su**

ENG107 Introduction to World Literature
3 class hrs/wk, 3 cr.
Features discussion and analysis of histories, stories, poems, and plays of the Western and non-Western world between 2000 B.C.E. and 1450. **F**

ENG108 Introduction to World Literature
3 class hrs/wk, 3 cr.
Features discussion and analysis of literary works of the Western and non-Western world between 1450-1850. **W**

ENG109 Introduction to World Literature
3 class hrs/wk, 3 cr.
Features discussion and analysis of works of the 19th, 20th, and 21st centuries. **Sp**

ENG201 Introduction to Shakespeare
3 class hrs/wk, 3 cr.
Surveys selected Shakespearean tragedies, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to explore these plays and to provide background on the nature of tragedy. **F**

ENG202 Introduction to Shakespeare
3 class hrs/wk, 3 cr.
Surveys selected Shakespearean comedies, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to provide background on the nature of comedy. **W**

ENG203 Introduction to Shakespeare
3 class hrs/wk, 3 cr.
Surveys selected Shakespearean history plays, emphasizing dramatic structure, characterization, imagery, and theme. Uses critical essays to provide background on the nature of historical drama. **Sp**

ENG204 Introduction to English Literature
3 class hrs/wk, 3 cr.
Covers the development of English literature from its beginnings in the Anglo-Saxon period through the early Renaissance (to c.1600). Focuses on literary works as products of a historical period and on the analysis and interpretation of these works. **F**

ENG205 Introduction to English Literature
3 class hrs/wk, 3 cr.
Covers the development of English literature from the time of Shakespeare (c. 1600) to the end of the 18th century. Focuses on literary works as products of a historical period and on the analysis and interpretation of these works. **W**

ENG206 Introduction to English Literature
3 class hrs/wk, 3 cr.
Covers the development of English literature from late 18th century (Romanticism) to the late 20th century. Focuses on literary works as products of a historical period and on the analysis and interpretation of these works. **Sp**

ENG214 Literature of the Northwest
3 class hrs/wk, 3 cr.
Studies fictional and non-fictional works by Northwest writers from the time of early exploration of the territory. Emphasizes the relationship between Northwest writing and the unique Northwest social, cultural, and physical environments. **Offered as needed.**

ENG221 Topics in British Literature
4 class hrs/wk, 4 cr.
Examines a special topic in British Literature in depth. Includes content organized around one of the following: an author, a movement, a genre, a period, a theme, or some other coherent focal point. Course may be repeated for a maximum of twelve credits. **Offered as needed.**

ENG222 Images of Women in Literature
3 class hrs/wk, 3 cr.
Focuses on the portrayal of the feminine in mythology, conventional images in Western literature, literature of non-Western cultures, or that of other groups within the Western world in relation to specific themes, or a combination of any of these. Analyzes and interprets images of women in the works of literature assigned. **Offered as needed.**

ENG232 Topics in American Literature
4 class hrs/wk, 4 cr.
Examines a special topic in American Literature in depth. Includes content organized around one of the following: an author, a movement, a genre, a period, a theme, or some other coherent focal point. Course may be repeated for a maximum of twelve credits. **Offered as needed.**

ENG250 Introduction to Mythology and Folklore
3 class hrs/wk, 3 cr.

Introduces folklore and some of its various forms: myths, legends, and folktales. Explores the nature and functions of folklore through examples from the classical world, from the native cultures of the Americas, and from at least one other area of the world, such as the Near East, the Orient, the Pacific, Africa, Australia, or Northern Europe. Also examines folklore in contemporary life. WR121 and ENG104 recommended. **Offered as needed.**

ENG253 Introduction to American Literature
3 class hrs/wk, 3 cr.

Focuses on the literature of the Native Americans, European explorers, settlers, chroniclers, missionaries, and American contributors to the character of a new nation, the United States of America, from 1492-1800. Genres include story, chant, journal, letter, report, biography, autobiography, chronicle, narrative, dictionary, satire, poetry, song, sermon, novel, drama, essay, and political document. **F**

ENG254 Introduction to American Literature
3 class hrs/wk, 3 cr.

Focuses on the literature of the 19th century, with attention given to the themes and issues of slavery, abolition, Native American and women's rights, the Civil War, westward expansion, and industrial and urban growth. Genres include journal, narrative, speech, poetry, short story, novel, and essay. **W**

ENG255 Introduction to American Literature
3 class hrs/wk, 3 cr.

Focuses on the literature of the 20th century, with attention given to the eras and events of the World Wars, Civil Rights, labor movements, and political parties. Addresses American-European interconnections, modernism, the decade of the twenties (including Harlem Renaissance), the Depression, post-World War II issues and realities, the Sixties, environmentalism, post-modernism and contemporary life, multiculturalism, and global perspectives. Recognizes literary works as products of history, as well as culture, and addresses the complexity and variety of voices and perspectives that make up American literature. Genres include a representative sampling from several of the following: poetry, short story, novel, drama, autobiography, letters, journals, biography, speech, essay, and lyrics. WR121 recommended. **Sp**

ENG256 African-American Literature
3 class hrs/wk, 3 cr.

Surveys the literature of the African-American people, including the influence of African origins, oral tradition, the diaspora, slavery, the post-Civil War era, the Harlem Renaissance, the Civil Rights Movement, and recent and contemporary periods. Focuses on oral and written texts representing interests, aspirations, and experiences of African-Americans. Includes a selection of works taken from slave narratives, early literary publications, novels, short stories, poems, autobiographies, and plays. Uses a chronological or thematic approach. **F**

ENG257 Native American Literature
4 class hrs/wk, 4 cr.

Surveys a wide spectrum of Indian verbal arts from oral narratives to contemporary fiction, poetry to cinema. Explores the ways Native writers from many distinct cultures engage thematic issues such as identity, stereotypes, tribal sovereignty, or cultural continuity. Also looks at ways writers incorporate humor, ceremony, and traditional narratives into the structure of their contemporary works. Improves critical reading, thinking, and writing skills while introducing academic literary study. **Offered as needed.**

ENG258 Latin American Literature
3 class hrs/wk, 3 cr.

Features reading and analysis of works by Latin American writers, giving attention to literary styles, historical background, and the unique voices and perspectives of authors from this region. A chronological, regional, or thematic approach may be taken. **Sp**

ENG260 Introduction to Women Writers
3 class hrs/wk, 3 cr.

Focuses on the achievements and perspectives of women writers through critical analysis of their literary works and literary strategies. Uses a chronological, thematic, or stylistic approach. **Offered as needed.**

ENG261 Introduction to Science Fiction
3 class hrs/wk, 3 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. **Offered as needed.**

ENG262 The American Western
3 class hrs/wk, 3 cr.

Features the critical reading and analysis of western fiction to determine the conventions and the variety of the genre. Focuses primarily on the novel, but includes short stories, essays, and poetry. Considers the western in its historical context and may also take a thematic, and/or stylistic approach. **Offered as needed.**

ENG263 Introduction to Detective Fiction
3 class hrs/wk, 3 cr.

Focuses on the genre of detective fiction, its history and conventions through reading and critical analysis of representative works and authors. Uses a chronological, thematic, or stylistic approach. **Offered as needed.**

ENG269 Environmental Literature
4 class hrs/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. **Offered as needed.**

ENL

English as a Non-Native Language

ENL030P English Vowels and Consonants
1 class hr/wk, 1 cr.

Focuses on pronunciation of English vowels and consonants and using a phonetic alphabet to sound out vocabulary. Designed for non-native English speakers at the low intermediate level. **Prerequisite:** placement by ESOL program specialist. **Offered as needed.**

ENL030T Computer Basics for ESL
1 class hr/wk, 1 cr.

Introduces basic computer operations to intermediate and high level non-native speakers of English. Covers using a computer operating system and basic tasks such as starting up, shutting down, navigating through folder hierarchies, inserting and using removable media, and locating and running applications. **Prerequisite:** a score of 34 or higher on the CELSA or placement by an ESOL specialist. **F, W, Sp**

ENL031G ESL Intermediate Grammar 1
3 class hrs/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for intermediate non-native speakers of English. **Prerequisite:** a score of 34 or higher on the CELSA or placement by an ESOL specialist after assessment. **Offered as needed.**

ENL031L Intermediate Listening 1
3 class hrs/wk, 3 cr.

Develops listening skills and strategies for everyday situations, the workplace and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** successful completion of XELL0722L or placement by ESOL program specialist. **F, W, Sp**

ENL031P Basic English Pronunciation 1
3 class hrs/wk, 3 cr.
Introduces basic principles of American English pronunciation. Focuses on developing a pronunciation plan, using a dictionary to pronounce words, pronouncing English vowels and consonants, syllables, word endings, and word stress. Designed for non-native English speakers at the intermediate level. **Prerequisite:** placement by ESOL program specialist. **F, W**

ENL031R Intermediate Reading 1
3 class hrs/wk, 3 cr.
Develops reading skills for everyday situations, the workplace and the academic environment. Reviews and broadens the use of grammar, vocabulary, and strategies for reading. Designed for intermediate non-native speakers of English. **Prerequisite:** placement by ESOL program specialist. **F, W, Sp**

ENL031S Intermediate Speaking 1
3 class hrs/wk, 3 cr.
Develops speaking skills and strategies for everyday situations, the workplace and the academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** completion of assessment and orientation procedures or placement by ESOL program specialists. **F, W, Sp**

ENL031T Word Processing for ESL
1 class hr/wk, 1 cr.
Introduces word processing basics. Covers setting up and formatting basic documents, using document templates, and introduces more advanced word processing features such as tables and clip art. Designed for intermediate to high level non-native speakers of English. **Prerequisite:** a score of 34 or higher on the CELSA or placement by an ESOL specialist. **F, W, Sp**

ENL031V Vocabulary for Medical Careers
3 class hrs/wk, 3 cr.
Introduces vocabulary used in the medical and health care areas. Covers developing an understanding of body systems, their locations, and how each is used in the body. Reviews surgical procedures and pharmacological terms and abbreviations. Includes correct pronunciation for medical terms. **Prerequisite:** placement by ESOL program specialists. **Offered as needed.**

ENL031W Intermediate Writing 1
3 class hrs/wk, 3 cr.
Introduces the writing of short paragraphs using chronological order, transition words, correct spelling, and punctuation. Designed for intermediate non-native speakers of English. **Prerequisite:** placement by ESOL program specialists. **F, W, Sp**

ENL032G ESL Intermediate Grammar 2
3 class hrs/wk, 3 cr.
Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for intermediate non-native speakers of English. **Prerequisite:** successful completion of ENL-31G, a score of 42 or higher on the CELSA or placement by an ESOL specialist. **Offered as needed.**

ENL032L Intermediate Listening 2
3 class hrs/wk, 3 cr.
Continues to develop listening skills and strategies for everyday situations, the workplace, and academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** completion of assessment and orientation procedures. Successful completion of ENL031L Intermediate Listening 1 or placement by ESOL program specialist. **F, W, Sp**

ENL032P Basic English Pronunciation 2
3 class hrs/wk, 3 cr.
Introduces basic principles of U.S. American English pronunciation. Focuses on using a pronunciation key, pronouncing English vowels and consonants, rhythm in sentences, intonation in discourse, and comprehending connected or rapid speech. Designed for non-native English speakers at the intermediate level. **Prerequisite:** successful completion of ENL031P or placement by an ESOL program specialist. **Offered as needed.**

ENL032R Intermediate Reading 2
3 class hrs/wk, 3 cr.
Continues to develop reading skills for everyday situations, the workplace, and academic environment. Reviews and broadens the use of grammar, vocabulary, and strategies for reading. Designed for intermediate non-native speakers of English. **Prerequisite:** successful completion of ENL031R or placement by ESOL program specialist. **F, W, Sp**

ENL032S Intermediate Speaking 2
3 class hrs/wk, 3 cr.
Continues to develop speaking skills and strategies for everyday situations, the workplace, and academic environment. Designed for intermediate non-native speakers of English. **Prerequisite:** successful completion of ENL031S or placement by ESOL program specialist. **F, W, S**

ENL032T Internet for ESL
1 class hr/wk, 1 cr.
Introduces basic Internet skills and concepts to low intermediate to high level non-native speakers of English. Includes an overview of the Internet and related vocabulary, basic Web searching and resource evaluation skills, and beginning and intermediate e-mail skills. **Prerequisite:** successful completion of ENL031T, a score of 34 or higher on the CELSA, or placement by an ESOL program specialist after assessment. **F, W, Sp**

ENL032W Intermediate Writing 2
3 class hrs/wk, 3 cr.
Continues to focus on writing simple narrative and descriptive paragraphs about daily activities and personal experiences. Designed for intermediate non-native speakers of English. **Prerequisite:** successful completion of ENL031W or placement by ESOL program specialist. **F, W, Sp**

ENL033T Technology for ESL
3 class hrs/wk, 3 cr.
Introduces basic computer operations to intermediate and advanced non-native speakers of English. Covers using a computer operating system, word processing basics, and basic Internet skills and concepts. **Prerequisite:** placement by an ESOL program specialist. **Offered as needed.**

ENL040A Introduction to Academic Listening and Speaking
3 class hrs/wk, 3 cr.
Focuses on the development of advanced writing skills for college transition. Reviews paragraph writing and provides continued practice of editing skills. Focuses on academic essay writing and introduces use of outside source material. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL032L or placement by ESOL program specialist. **Offered as needed.**

ENL041G Introduction to College Grammar 1
3 class hrs/wk, 3 cr.
Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL032G, a CELSA score of 47 or higher, or placement by an ESOL program specialist. **Offered as needed.**

ENL041L Introduction to Academic Listening 1
3 class hrs/wk, 3 cr.
Focuses on simple work- and community-related listening and introduces simple academic listening. Designed for non-native English speakers at the high intermediate level. **Prerequisite:** successful completion of XELL0732L or placement by ESOL program specialists. **Offered as needed.**

ENL041P Introduction to English Pronunciation 1
3 class hrs/wk, 3 cr.
Develops principles of U.S. American English pronunciation. Focuses on creating a pronunciation plan, using a dictionary, pronouncing English vowels and consonants, sound and spelling patterns, syllables and word endings, and stress patterns in words. Designed for non-native English speakers at the high intermediate level. **Prerequisite:** successful completion of ENL032S and ENL032L, or placement by ESOL program specialist. **F**

ENL041R Introduction to College Reading 1
3 class hrs/wk, 3 cr.
Provides continued development of reading for the transition from life skills reading to academic reading. Broadens the use of grammar, vocabulary, and more complex strategies for reading. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** completion of assessment and orientation procedures; successful completion of ENL032R or placement by ESOL program specialists. **Offered as needed.**

ENL041S Introduction to Academic Speaking 1
3 class hrs/wk, 3 cr.
Focuses on work- and community-related speaking skills and introduces simple academic speaking. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL032S or placement by ESOL program specialists. **Offered as needed.**

ENL041W Introduction to College Writing 1
3 class hrs/wk, 3 cr.

Provides an introduction to academic writing in English. Focuses on the continued development of paragraph writing and editing. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL032W or placement by ESOL program specialists. **Offered as needed.**

ENL042G Introduction to College Grammar
3 class hrs/wk, 3 cr.

Focuses on improving grammatical accuracy in oral and written communication and on improving reading and listening comprehension through greater understanding of grammatical structures. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** a score of 50 or above on the CELSA, successful completion of ENL041G, or placement by an ESOL program specialist. **Offered as needed.**

ENL042L Introduction to Academic Listening 2
3 class hrs/wk, 3 cr.

Focuses on routine work-related, social, and simplified academic listening. Designed for non-native English speakers at the high intermediate level. **Prerequisite:** successful completion of ENL041L or placement by ESOL program specialist. **Offered as needed.**

ENL042P Introduction to English Pronunciation 2
3 class hrs/wk, 3 cr.

Reviews vowels, consonants, syllabication, and word stress. Focuses on rhythm in sentences, intonation patterns in phrases and sentences, thought groups, pausing, phrasing, and comprehending rapid, connected speech. Designed for non-native English speakers at the high intermediate level. **Prerequisite:** successful completion of ENL041P or placement by ESOL program specialist. **Offered as needed.**

ENL042R Introduction to College Reading 2
3 class hrs/wk, 3 cr.

Provides development of reading for the transition from life skills reading to academic reading. Broadens the use of grammar, vocabulary, and more complex strategies for reading. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL041R or placement by ESOL program specialists. **Offered as needed.**

ENL042S Introduction to Academic Speaking 2
3 class hrs/wk, 3 cr.

Focuses on speaking skills essential for conversation management in academic and work settings. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL041S or placement by ESOL program specialists. **Offered as needed.**

ENL042W Introduction to College Writing 2
3 class hrs/wk, 3 cr.

Builds on basic academic writing, emphasizing paragraph development and editing in tasks requiring several linked paragraphs. Introduces basic academic essays. Designed for non-native speakers of English at the high intermediate level. **Prerequisite:** successful completion of ENL041W or placement by ESOL program specialist. **Offered as needed.**

ENL046I TOEFL Test Preparation Workshop
1 class hr/wk, 1 cr.

Provides an overview of the Internet-based Test of English as a Foreign Language (TOEFL-iBT). Includes taking a practice test and developing an individual academic plan. Designed for non-native English speakers at the high intermediate level. **Offered as needed.**

ENL056I TOEFL Test Preparation: Listening
1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the listening portion of the Internet-based Test of English as a Foreign Language (TOEFL-iBT). Designed for non-native speakers of English at the low advanced level. **Offered as needed.**

ENL057I TOEFL Test Preparation: Speaking
1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the speaking portion of the Internet-based Test of English as a Foreign Language (TOEFL-iBT). Designed for non-native speakers of English at the low advanced level. **Offered as needed.**

ENL058I TOEFL Test Preparation: Reading
1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the reading portion of the Internet-based Test of English as a Foreign Language (TOEFL-iBT). Designed for non-native speakers of English at the low advanced level. **Offered as needed.**

ENL059I TOEFL Test Preparation: Writing
1 class hr/wk, 1 cr.

Prepares students for English proficiency testing on the writing portion of the Internet-based Test of English as a Foreign Language (TOEFL-iBT). Designed for non-native speakers of English at the low advanced level. **Offered as needed.**

ENL150A Academic Listening and Speaking
3 class hrs/wk, 3 cr.

Develops listening and speaking skills needed in academic and social settings. Focuses on strategies, formal language, note-taking, and presentations. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL040A or placement by ESOL program specialist. **Offered as needed.**

ENL151A Jumpstart Your Academic Language Skills
3 class hrs/wk, 3 cr.

Develops the U.S. American academic skills of note-taking, vocabulary and reading skills, and knowledge of American academic culture needed to understand college lectures and textbooks. Designed for non-native speakers of English at the low advanced level who plan to enter college but need to improve their academic language to be successful. **Prerequisite:** placement by ESOL program specialist. **Offered as needed.**

ENL151G ENL College Grammar 1
3 class hrs/wk, 3 cr.

Focuses on the written and oral use of discrete grammar structures in English. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL042G, or placement by an ESOL program specialist. A score of 55 or above on the CELSA. **Offered as needed.**

ENL151L ENL Academic Listening 1
3 class hrs/wk, 3 cr.

Develops listening skills needed in social and some simplified academic settings. Addresses vocabulary development and pronunciation needed to understand speech at a normal speed. Designed for non-native English speakers at the advanced level. **Prerequisite:** placement by ESOL program specialist or successful completion of ENL042L. **Offered as needed.**

ENL151P Advanced English Pronunciation 1
3 class hrs/wk, 3 cr.

Focuses on development of the principles of U. S. American English pronunciation including correct production of English vowels and consonants, word stress, and rhythm. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL042P or placement by ESOL program specialist. **Offered as needed.**

ENL151R ENL College Reading 1
3 class hrs/wk, 3 cr.

Introduces extended reading in an academic context. Builds academic vocabulary, reading strategies, and cultural knowledge to prepare students for college transition. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL042R or placement by ESOL program specialist. **Offered as needed.**

ENL151S ENL Academic Speaking 1
3 class hrs/wk, 3 cr.

Develops speaking skills needed in some academic and occupational settings. Focuses on skills needed to gather, synthesize, present, and critique information. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL042S or placement by ESOL program specialist. **Offered as needed.**

ENL151W ENL College Writing 1
3 class hrs/wk, 3 cr.

Focuses on the development of advanced writing skills for college transition. Reviews paragraph writing and provides continued practice of editing skills. Focuses on academic essay writing and introduces use of outside source material. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL042W or placement by ESOL program specialist. **Offered as needed.**

ENL152G ENL College Grammar 2
3 class hrs/wk, 3 cr.

Continues focus on the written and oral use of discrete grammar structures in English. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151G or consent of instructor or placement by ESOL program specialist. **Offered as needed.**

ENL152L ENL Academic Listening 2
3 class hrs/wk, 3 cr.

Develops note-taking and listening skills in academic and occupational/professional settings. Focuses on skills required to follow speech between native speakers and take notes on extended discourse. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151L or placement by ESOL program specialist. **Offered as needed.**

ENL152P Advanced English Pronunciation 2
3 class hrs/wk, 3 cr.

Focuses on further applying and adapting the principles of U. S. American English pronunciation to the student's occupational and academic communication. Reviews stress, rhythm, vowels, and consonants. Introduces intonation, pitch, and thought groups. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151P or placement by ESOL program specialist. **Offered as needed.**

ENL152R ENL College Reading 2
3 class hrs/wk, 3 cr.

Develops higher-level academic vocabulary, reading strategies, and cultural knowledge for college transition. Focuses on extended readings in an academic context. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151R or placement by ESOL program specialist. **Offered as needed.**

ENL152S ENL Academic Speaking 2
3 class hrs/wk, 3 cr.

Develops speaking skills used in academic and occupational/professional settings. Focuses on using questioning strategies, formal language, and presentation skills. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151S or placement by ESOL program specialist. **Offered as needed.**

ENL152W ENL College Writing 2
3 class hrs/wk, 3 cr.

Focuses on expository writing for college. Covers essay writing process, note taking, outlines, summarizing, paraphrasing, citation, editing, and word choice. Continues practice in the use of outside source material to support main ideas in essays. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL151W or placement by ESOL program specialist. **Offered as needed.**

ENL160A Applied Listening and Speaking for College
3 class hrs/wk, 3 cr.

Focuses on listening and speaking demands of a college course to develop communication skills, language and academic success strategies. Designed for non-native speakers of English at the advanced level concurrently enrolled in non-ESL/ENL courses at the 100 level or above. **Prerequisite:** successful completion of ENL150A, COMPASS placement score of 69 or more in Reading and 64 or more in Writing. **Offered as needed.**

ENL161L Advanced Listening for College
3 class hrs/wk, 3 cr.

Focuses on comprehending increasingly complex and lengthy oral discourse and taking notes in academic or occupational/professional contexts. Develops socio-cultural knowledge of American academic and occupational/professional settings. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL152L or placement by ESOL program specialist. **Offered as needed.**

ENL161R Advanced Reading for College 1
3 class hrs/wk, 3 cr.

Focuses on the development of strategies and techniques for improving reading comprehension in academic contexts. Develops advanced reading skills to prepare for college transition. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL152R or placement by ESOL program specialist. **Offered as needed.**

ENL161S Advanced Speaking for College
3 class hrs/wk, 3 cr.

Prepares students for speaking demands of college-level coursework or occupational/professional settings. Develops strategies for group work, discussion, presentations, and interviews. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL152S or placement by ESOL program specialists. **Offered as needed.**

ENL161W Advanced Writing for College 1
3 class hrs/wk, 3 cr.

Covers the process of writing cause/effect and argumentative essays with a focus on using outside sources to support main ideas. Covers locating and evaluating sources, summarizing, paraphrasing, quoting, and documenting source information. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL152W or placement by ESOL program specialist. **Offered as needed.**

ENL162L Applied Listening for College
3 class hrs/wk, 3 cr.

Applies the necessary listening, note-taking, and self-monitoring strategies to enable success in a college-level course. Designed for non-native speakers of English at the advanced level transitioning to college-level, non-ESL/ENL courses at the 100 level or above. **Prerequisite:** successful completion of ENL161L or placement by ESL program specialist. **Offered as needed.**

ENL162R Advanced Reading for College 2
3 class hrs/wk, 3 cr.

Focuses on reading extended texts using a range of strategies to monitor and enhance comprehension. Applies advanced reading skills to academic and professional-technical curricula. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL161R or placement by ESOL program specialist. **Offered as needed.**

ENL162S Applied Speaking for College
3 class hrs/wk, 3 cr.

Focuses on speaking demands of a college course to develop communication skills, language, and academic success strategies. Designed for non-native speakers of English at the advanced level transitioning to non-ESL/ENL courses at the 100 level or above. **Prerequisite:** successful completion of ENL161S or placement by ESOL program specialist. **Offered as needed.**

ENL162W Advanced Writing for College 2
3 class hrs/wk, 3 cr.

Introduces the process of writing a research paper. Covers locating and evaluating sources; recording and organizing information; summarizing, paraphrasing, quoting, and synthesizing information; and documenting sources. Designed for non-native speakers of English at the advanced level. **Prerequisite:** successful completion of ENL161W or placement by ESOL program specialist. **Offered as needed.**

ES

Emergency Services

ES071 Workplace Safety Skills
3 lab hrs/wk, 1 cr.
Combines first aid, CPR, and hazardous materials awareness to meet minimum federal and state occupational safety requirements. Students completing the course will receive American Red Cross first aid certification. Meets OSHA requirements. **F, W, Sp, Su**

ES115 Crisis Intervention
3 class/wk, 3 cr.
Provides a theoretical background for understanding crisis intervention and offers an arena to experience a variety of crisis management styles. Assists the emergency service worker or health care provider to evaluate their emotional reactions and methods of coping in order to stay healthy on the job. **F, Sp, Offered as needed.**

ES172 Introduction to Emergency Services
4 class hrs/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 résumé. **Offered as needed.**

FA

Film Arts

FA255 Understanding Movies: Film Styles
3 class and 2 lab hrs/wk, 4 cr.
Introduces the art of cinema. Emphasizes the feature-length film. Focuses on ways in which a person can come to understand the meaning of a movie. Includes a weekly film screening lab that accompanies the lecture. **F**

FA256 Understanding Movies: The Great Film Directors
3 class and 2 lab hrs/wk, 4 cr.
Analyzes films from the standpoint of the director as creator. Highlights the films of one or two directors in an effort to understand and critique the individual films as the work of an artist, especially within the context of viewing the films as an evolving body of work expressing a particular and unique view of the world. Includes a weekly film screening lab that accompanies the lecture. Course may be repeated for a maximum of 12 credits. **W**

FA257 Understanding Movies: Themes and Genres
3 class and 2 lab hrs/wk, 4 cr.
Explores the meanings a film conveys within the context of a specific film genre, national movement, or thematic topic. Includes a weekly film screening lab that accompanies the lecture. This course may be repeated for a maximum of 12 credits total. **Sp**

FE

Field Experiences

FE185 Service Learning Seminar
1 class hr/wk, 1 cr.
Provides structured activities for students enrolled in service learning options to share, evaluate, and reflect on their experiences while examining the larger dimensions of community service. **Prerequisite:** linked to other courses offering a service learning option. **F, W, Sp**

FE205B Résumés and Job Search Correspondence
1 class hr/wk, 1 cr.
Shows you how to apply for the job you want. Covers composition and analysis of all written correspondence used in applying for employment, including applications, résumés, and other employment-related communications. **F, W, Sp, Su**

FE205C Interviewing for Success
1 class hr/wk, 1 cr.
Focuses on how to prepare and interview for a desired job. Covers follow-up techniques. **F, W, Sp, Su**

FE220 Preparing for the Changing Workplace
3 class hrs/wk, 3 cr.
Explores issues of Difference, Power, and Responsibility (DPR) in the workplace. Focuses on skills, values, and social and cultural work issues, including workplace communication. Offers experience working on a service-learning project. **F, W, Sp**

FE280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

FN

Foods and Nutrition
See Nutrition and Food Management.

FR

French

FR100 French Life and Culture
4 class hours/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.

FR101, 102, 103 First Year French, Terms 1, 2, 3
4 class hrs/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. Uses French as the primary language of the class. **Prerequisite:** these classes are to be taken sequentially. FR101: None; FR102: FR101, one year of high school French, or consent of instructor; FR103: FR102, two years of high school French, or consent of instructor. FR101, **F;** FR102, **W;** FR103, **Sp**

FR131 Intermediate French Conversation
4 class hrs/wk, 4 cr.
Provides an increased level of French conversation for intermediate learners whose primary goal is greater ease and advanced communication in the language. Focuses on continued listening, speaking, reading, and writing skills within the context of examining Francophone cultures and social issues, historically to the present, and drawing parallels from them to contemporary American culture. Emphasizes conversation, facilitated by vocabulary and structures as needed. Instructor and students use French as the primary language of the class. **Prerequisite:** FR103, completion of three years of high school French or the equivalent, or consent of instructor. **Offered as needed.**

FR201, 202, 203 Second Year French, Terms 1, 2, 3
4 class hrs/wk, 4 cr. each
Provides practice in all four language skills (reading, writing, speaking, listening). Includes cultural and literary readings and an in-depth review and expansion of basic French grammar and vocabulary, as well as a broadening of the student's understanding of Francophone culture. Uses French as the primary language of the class. **Prerequisite:** these classes are to be taken sequentially. FR201: FR103, three years of high school French, or consent of instructor; FR202: FR201 or consent of instructor; FR203: FR202 or consent of instructor. FR201, **F;** FR202, **W;** FR203, **Sp**

FRP

Fire Protection Technology

FRP150 Introduction to Fire Protection
3 class hrs/wk, 3 cr.
Introduces the philosophy and history of fire protection. Covers the history of loss of life and property by fire; responsibilities of fire departments in a community; organization and function of fire protection agencies and allied organizations; sources of professional literature; survey of professional career opportunities and requirements; and development of a résumé. **Offered as needed.**

FRP151 Fire Incident Related Experience 1
9 lab hrs/wk, 3 cr.
Provides an introductory orientation to Fire Incident Related Experience that fulfills the requirements of OR-OSHA and the Department of Public Safety Standards and Training for Entry Level Firefighter. These standards must be met prior to an individual responding to emergency incidents. **Prerequisite:** admission restricted to the students chosen through an application process. Consent of instructor required. **Offered as needed.**

FRP152 Fire Incident Related Experience 2
9 lab hrs/wk, 3 cr.
Provides continuing information about large-diameter hose uses, attack hose procedures, ICS and passport information, firefighter responsibilities, and ISI SCBA procedures. Includes SCBA use under extreme working loads, refilling SCBA bottles, the use of cascade systems, live-fire attack practices, salvage operations, overhaul practices, fire cause investigation, the firefighter's responsibility, district familiarization, map book use, radio procedures, driving laws and practices, power tool operation and maintenance, ventilation principles, and vertical ventilation. Includes a practicum for "Driver" certification and driving portions of "Pumper Operator." **Prerequisite:** FRP151. **Offered as needed.**

FRP153 Fire Incident Related Experience 3
9 lab hrs/wk, 3 cr.
Introduces new skills and a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for Firefighter 1. Includes a practicum for "Driver" and "Pumper Operator" certification. Students completing the course will take written and task performance tests for "Driver." **Prerequisite:** FRP152. **Offered as needed.**

FRP154 Water Supply Operations
3 class hrs/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 the DPSST "Firefighter 2" and "Pumper Operator." **Prerequisite:** FRP152, MTH070, or consent of instructor. **Offered as needed.**

FRP157 Hazardous Materials Operations
3 class hrs/wk, 3 cr.
Provides knowledge and skills necessary to safely respond to and manage the defensive operations involved in a chemical emergency. Also provides skills to operate in offensive fashion for some common flammables (gasoline, propane, etc.). **Prerequisite:** concurrent enrollment in FRP150. **Offered as needed.**

FRP158 Fire Pump Construction and Operation
2 class and 2 lab hrs/wk, 3 cr.
Covers the theory of pump operation, types and features of various pumps, practical operation of fire pumps, and accessories. Includes drafting, hydrant and tanker operations, and rule-of-thumb fire ground hydraulic calculations. **Prerequisite:** FRP151, FRP152, or consent of instructor. **Offered as needed.**

FRP160 Incident Safety Officer
1 class hr/wk, 1 cr.
Covers N.F.P.A. 1521 and OSHA regulations regarding utilization of an on-scene safety officer. Prepares officers and firefighters to work together to promote safety at every emergency scene. **Offered as needed.**

FRP161 Fire Management Practices
1 class hr/wk, 1 cr.
Covers the concept of fire management including the role of departments and districts in local government, funding, and selection methods for providing fire protection. **Offered as needed.**

FRP162 Managing Fire Personnel
1 class hr/wk, 1 cr.
Introduces fire department human resource management techniques. Includes hiring, supervision, and performance review procedures. **Offered as needed.**

FRP163 Planning Fire Protection
1 class hr/wk, 1 cr.
Covers the tools needed to plan a community's fire protection system. Includes analyzing a community's fire risk, establishing types of protection, and developing implementation and evaluation plans. **Offered as needed.**

FRP164 Fire Department Budgets
1 class hr/wk, 1 cr.
Covers the preparation, adoption and filing of public law, and management of a fire district budget. Includes district budget analysis methods, use of levies, budget management, and appropriation of expenditures. **Offered as needed.**

FRP165 Public Relations, Public Information and Public Education
1 class hr/wk, 1 cr.
Introduces the role of public relations, public information, and public education as tools to provide and enhance public safety awareness. **Offered as needed.**

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. **Offered as needed.**

FRP169 Fire Department Leadership
3 class hrs/wk, 3 cr.
Emphasizes the role of fire service leaders in managing the daily operations of a fire company. Covers leadership concepts such as types of supervisors, including attitudes, cooperation, individual differences, motivation, communications, and counseling as part of the management cycle. **Prerequisite:** FRP150 or ES172. **Offered as needed.**

FRP170 Fire Fighting Tactics and Strategy
3 class hrs/wk, 3 cr.
Covers the development of systematic action plans for emergency situations. Includes recognizing and prioritizing emergency scene needs and developing related strategies, tactics, and contingencies. Describes how resources should be deployed to implement those plans. **Offered as needed.**

FRP171 Fire Protection Systems and Extinguishers
3 class hrs/wk, 3 cr.
Covers types and uses of portable fire extinguishers, as well as care, inspection, and recharging procedures. Includes various types of sprinklers and special extinguishing systems, standpipe systems, and systems designed to detect and report fires. **Offered as needed.**

FRP172 International Fire Codes
3 class hrs/wk, 3 cr.
Interprets the International Building Code, International Fire Codes, State Fire Marshal Fire Safety Regulations and related Oregon revised statutes, N.F.P.A., and other codes relating to fire prevention and life safety. **Offered as needed.**

FRP173 Law for Emergency Services
3 class hrs/wk, 3 cr.
Covers emergency services' legal responsibilities related to driving, inspections, emergency operations, communications, fire prevention, and provision of ambulance services. Includes employee and member's rights, duties, liabilities, and preparation for presentations in court. **Offered as needed.**

FRP174 Fire Investigation
3 class and 2 lab hrs/wk, 4 cr.
Emphasizes the importance of determining the cause of fire. Studies the burning characteristics of combustibles and the effects of fire on materials, interpreting burn patterns and isolating the area and point of origin, identifying incendiary indications, sources of ignition and materials ignited, and preservation of fire scene and evidence. **Prerequisite:** FRP150 or consent of instructor. **Offered as needed.**

FRP175 Crash/Rescue for Non-Commercial Aircraft
1 class hr/wk, 1 cr.
Provides basic knowledge of aircraft types and systems, rescue equipment, airfield characteristics, and aircraft rescue and firefighting procedures (ARFF) for general aviation/non-commercial type aircraft. Emphasizes structural firefighters responding to accidents at non-indexed airports and procedures to follow in the event of a downed aircraft within a fire district. Course does not meet the training requirement for FAA firefighter position at indexed airports. **Offered as needed.**

FRP179 Wildland Urban Interface
3 class hrs/wk, 3 cr.

Studies causes, standard firefighting orders, urban interface problems, fire suppression methods, fire ground management, and structure triage. Designed to meet some of the competencies as set forth by DPSST for Wildland Interface Engine Boss. **Prerequisite:** FRP151, FRP152, FRP153 or consent of instructor. **Offered as needed.**

FRP256 Fire Service Rescue Practices
2 class and 4 lab hrs/wk, 4 cr.

Presents technical information on various fire department rescue situations. Covers tools and equipment, ropes and knots, trench rescue, shoring, warehouse searches, outdoor searches, rescue in situations involving elevation differences, package patients, water and ice rescues, and vehicle extrication. **Prerequisite:** FRP151, FRP152, or consent of instructor. **Offered as needed.**

FRP257 Hazardous Materials for Inspectors
3 class hrs/wk, 3 cr.

Covers how to handle inspections involving hazardous materials. Also covers the requirements for handling, storing, and reporting on various hazardous materials. **Prerequisite:** consent of instructor. **Offered as needed.**

FRP259 Major Emergency Strategy and Tactics
3 class hrs/wk, 3 cr.

Covers major emergencies and applies principles relating to incident priorities, resource management, and tactical operations to make judgments about the management of major emergencies. **Prerequisite:** FRP150, FRP151, FRP152, FRP153, FRP170, or consent of instructor. **Offered as needed.**

FRP260 Fundamentals of Fire Prevention
3 class hrs/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. **Offered as needed.**

FRP261 Fire Incident Related Experience 4
9 lab hrs/wk, 3 cr.

Introduces additional skills and provides a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for "Firefighter 1." Includes a practicum for "Driver" and "Pumper Operator" certifications. Students completing the course will take written and task performance tests for "Firefighter 1" and "Pumper Operator." **Prerequisite:** FRP153. **Offered as needed.**

FRP261H Fire Incident Related Experience 4 Honors
9 lab hrs/wk, 3 cr.

Introduces additional skills and provides a practicum to function safely and effectively as an integral member of a firefighting team and successfully pass testing for NFPA Firefighter I. Includes a practicum for NFPA Driver and NFPA Pumper Operator certifications. Students completing the course will take written and task performance tests for NFPA Firefighter I and NFPA Pumper Operator. Provides a practicum for leadership, supervisory, and management skills. **Prerequisite:** FRP153. **Offered as needed.**

FRP262 Fire Incident Related Experience 5
9 lab hrs/wk, 3 cr.

Introduces new skills and provides a practicum for "Firefighter 2," "Driver," and "Pumper Operator" certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. **Prerequisite:** FRP261. **Offered as needed.**

FRP262H Fire Incident Related Experience 5 Honors
9 lab hrs/wk, 3 cr.

Introduces new skills and provides a practicum for "Firefighter 2," "Driver," and "Pumper Operator" certifications. Assists with entering the job market and in becoming more successful in competitive fire service entry processes. Provides a practicum for leadership, supervisory, and management skills. **Prerequisite:** FRP261. **Offered as needed.**

FRP263 Fire Incident Related Experience 6
9 lab hrs/wk, 3 cr.

Offers additional skills and provides a practicum for "Firefighter 2," "Driver," and "Pumper Operator" certifications. Prepares students for entering the job market and assists them in becoming more successful in competitive fire service entry processes. Introduces contemporary issues regarding the furnishing of emergency services. Students completing the course will take written and task performance tests for "Firefighter 2." **Prerequisite:** FRP262. **Offered as needed.**

FRP263H Fire Incident Related Experience 6 Honors
9 lab hrs/wk, 3 cr.

Offers additional skills and provides a practicum for "Firefighter 2," "Driver," and "Pumper Operator" certifications. Prepares students for entering the job market and assists them in becoming more successful in competitive fire service entry processes. Introduces contemporary issues regarding the furnishing of emergency services. Students completing the course will take written and task performance tests for "Firefighter 2." Provides a practicum for leadership, supervisory, and management skills. **Prerequisite:** FRP262. **Offered as needed.**

FRP266 Building Construction for Fire Suppression
3 class hrs/wk, 3 cr.

Focuses on fire problems inherent in structural elements of buildings. Includes inspection of various building types as a basis for applying effective extinguishment practices with adequate safeguards for personnel. **Offered as needed.**

FRP272 International Fire Codes 2
3 class hrs/wk, 3 cr.

Studies the International Fire Code, State Fire Marshal Fire Safety Regulations and related Oregon revised statutes, N.F.P.A., and other codes relating to fire prevention and life safety. **Offered as needed.**

FRP277 NFPA Fire Instructor 1
3 class hrs/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 1. **Offered as needed.**

FRP278 NFPA Fire Instructor 2
3 class hrs/wk, 3 cr.

Provides training to instructor candidates from multi-discipline activities found within Public Safety (fire, law enforcement, wildland, emergency medical services, etc.). Uses an intensive instructional methodology program to prepare the participant for planning and developing all aspects of course curriculum. Includes needs analysis, task analysis, course goals and objectives, lesson plan development, instructional support materials, and evaluation instruments. **Offered as needed.**

FRP280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

FRP281 Fire Prevention Inspection
3 class hrs/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, FRP266, or consent of instructor. **Offered as needed.**

FRP282 Juvenile Fire-Setters Intervention
3 class hrs/wk, 3 cr.

Covers methods of contemporary fire prevention inspection practices. Provides basic information regarding the purpose and scope of a juvenile fire-setter intervention program and how it should be structured; legal aspects of dealing with juveniles; child development; the continuum of juvenile fire-setting; effective communication, interviewing, and questioning techniques; screening juvenile fire-setters; and education and referral intervention processes. **Offered as needed.**

FRP284 Public Information for the Fire Service
3 class hrs/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, FRP174, or consent of instructor. **Offered as needed.**

FRP286 Advanced Detection and Protection Systems
3 class hrs/wk, 3 cr.

Provides training in the design of fire protection systems and the evaluation of existing systems with regard to fire codes, fire code standards, and National Fire Protection Standards. **Prerequisite:** FRP171 or consent of instructor. **Offered as needed.**

FRP288 Fire Prevention Education Programs
3 class hrs/wk, 3 cr.

Uses fire data to analyze the prevention needs in a community and to design a public fire education program directed to preventing or mitigating certain fires in that community. **Offered as needed.**

Food Service
See HTM—Hospitality Management.

FT

Forest Management Transfer

FT111 Introduction to Forest Resources
3 class and 6 lab hrs/wk, 5 cr.

Introduces the functions, structure, and management of forests in the U.S. Includes multiple field labs that focus on landowner goals and objectives of forests in northwest Oregon. **Offered as needed.**

FT141A Oregon Tree and Shrub Identification 1
2 class and 3 lab hrs/wk, 3 cr.

Examines conifer and evergreen shrub species indigenous to Oregon using a dichotomous key and weekly field trips to identify species and learn taxonomic names. **Offered as needed.**

FT141B Oregon Tree and Shrub Identification 2
2 class and 3 lab hrs/wk, 3 cr.

Examines hardwood trees and deciduous shrub and tree species indigenous to Oregon and introduced using a dichotomous key and weekly field trips to identify species and learn taxonomic names. **Offered as needed.**

FT150 Forest Seminar
1 class hr/wk, 1 cr.

Covers the basic steps in organizing and presenting forestry career and work experience. Presents informative elements of career/work experience in an audio/visual presentation. Focuses on use of audio/visual techniques including computer generated graphics and text. **Offered as needed.**

FT210A Forest Surveying 1
2 class and 3 lab hrs/wk, 3 cr.

Covers basic forest surveying techniques including fundamentals of horizontal and vertical measurements. Provides field and office procedures for forest mapping. **Offered as needed.**

FT210B Forest Surveying 2
3 class and 6 lab hrs/wk, 5 cr.

Continues study of distance and direction measurement, employing transit, theodolites, electronic distance measuring (EDM), and global positioning systems (GPS). **Prerequisite:** FT210A or consent of instructor. **Offered as needed.**

FT220 Forest Photo Interpretation
2 class and 3 lab hrs/wk, 3 cr.

Introduces the basic principles of photogrammetry and photo interpretation with particular emphasis on the uses of vertical aerial photographs in forest resources management. **Offered as needed.**

FT223 Timber Cruising/Log Scaling
3 class and 4 lab hrs/wk, 5 cr.

Introduces measurement and appraisal of individual trees, stands, and forest sites for volume and value. Introduces the theory and principles of log scaling. **Offered as needed.**

FT270A Silviculture 1
1 class and 3 lab hrs/wk, 2 cr.

Provides an initial analysis of forest ecology, tree growth, and silvicultural practices in the management of forest lands in the Pacific Northwest. Focuses on overview of even-aged silvicultural systems, harvesting methods, and the application of uneven-aged silvicultural systems. **Offered as needed.**

FT270B Silviculture 2
2 class and 3 lab hrs/wk, 3 cr.

Analyzes forest ecology, tree growth, and silvicultural practices in the management of forest lands in the Pacific Northwest. Focuses on detailed analysis of traditional even-aged management practices and the associated thinning regimes. **Prerequisite:** FT270A or consent of instructor. **Offered as needed.**

FT280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

GE

General Engineering
See also EGR—Engineering.

GE101 Engineering Orientation
2 class and 2 lab hrs/wk, 3 cr.

Introduces the engineering profession and engineering problem solving. **Prerequisite:** MTH111 or consent of instructor. **F**

GE102 Engineering Computations
2 class and 2 lab hrs/wk, 3 cr.

Acquaints engineering students with the use and operation of the microcomputer. Programs will be developed and used in the solution of typical engineering problems. Emphasizes structured programming techniques. **Prerequisite:** MTH111 or consent of instructor. **W**

GE103 Engineering Computations
2 class and 2 lab hrs/wk, 3 cr.

Develops a systematic approach to engineering problem solving using computers. Includes applications in computer analysis, graphing, and database operations using spreadsheet software. **Prerequisite:** GE101 or consent of instructor. **Sp**

GEG

Geography

GEG100 Exploring Geography
1 class hr/wk, 1 cr.

Introduces the discipline and tools of geography, including careers in geography, what geographers study, how they think, and how knowledge of geography is helpful in any career field. Also examines basic geographic concepts and themes. **F, W, Sp, Su**

GEG105 Physical Geography
3 class and 2 lab hrs/wk, 4 cr.

Focuses on the physical subsystems of the earth (atmosphere, biosphere, hydrosphere, and lithosphere), with emphasis on human-environment relations. Includes basic map skills, latitude/longitude, weather, climate, biogeography, volcanism, erosion, and desert landscapes. **F, W, Offered as needed.**

GEG106 Cultural Geography
3 class hrs/wk, 3 cr.

Introduces the cultural elements of geography, including the study of human population, migration, language, religion, cultural landscapes, and geopolitics. Emphasizes the unequal distribution of power in the U.S. with regard to religion, ethnicity, and language. **W, Sp, Offered as needed.**

GEG107 Global Lands and Livelihoods
3 class hrs/wk, 3 cr.

Introduces economic geography, including the study of development and under-development, agriculture, industry, settlement, urban landscapes, and natural resource problems. **F, Sp, Offered as needed.**

GEG140 Map Reading and Interpretation
3 class hrs/wk, 3 cr.

Introduces basic concepts in reading, interpreting, and analyzing information from a variety of maps. Topics include map projections, map misuse, grid systems, map scale, route planning, global positioning system (GPS), geographic information system (GIS), contour reading, satellite imagery, and computer-based mapping. **Offered as needed.**

GEG190 Geography of Natural Hazards
3 class hrs/wk, 3 cr.
Studies the causes, characteristics, and geographic distribution of natural hazards, as well as various means of preparing for and minimizing the negative effects of hazards affecting the Pacific Northwest including earthquakes, volcanoes, debris flows, floods, forest fires, and drought. **Offered as needed.**

GEG201 World Regional Geography: The Developed World
3 class hrs/wk, 3 cr.
Introduces the physical and cultural geography of the developed world (Europe, Russia, Japan, North America, and Australia). Emphasizes major geographic themes and concepts, including population change, natural resource use, environmental concerns, economic development, geopolitical conflicts, and cultural perceptions. **Offered as needed.**

GEG202 World Regional Geography: The Developing World
3 class hrs/wk, 3 cr.
Introduces the physical and cultural geography of the developing world (Middle East, Sub-Saharan Africa, Latin America, and South, East and Southeast Asia). Emphasizes regional survey of the geography of developing countries, major geographic themes and concepts, including population change, natural resource use, environmental degradation, economic development, geopolitical conflicts, and cultural perceptions. **Offered as needed.**

GEG206 Geography of Oregon
3 class hrs/wk, 3 cr.
Examines the geography of Oregon, including its settlement by Europeans, various geographic regions, diverse physical environments, important natural resources, and varied population and economy. **Offered as needed.**

GEG207 Geography of U.S. and Canada
3 class hrs/wk, 3 cr.
Examines the natural and cultural environments of the U.S. and Canada, including climate, vegetation, landform regions, natural resource issues, and population and settlement patterns. **Offered as needed.**

GEG220 Middle East Geopolitics
3 class hrs/wk, 3 cr.
Focuses on recent geopolitical disputes in the Middle East with an emphasis on examining these disputes geographically. Gives special attention to the Arab-Israeli conflict, including the formation of a Palestinian state. Studies the Iran-Iraq War, the 1991 Gulf War, the 2003 War in Iraq, and rivalries over water and other resources. **Offered as needed.**

GEG282 Geography for Educators
3 class hrs/wk, 3 cr.
Emphasizes how to teach geography at any grade level (preschool through college) and any setting (private, public, or home school). Covers developing lesson plans, activities, and assessments which are grade level appropriate and incorporates the State and National Geography Standards. **Prerequisite:** successful completion of, or concurrent enrollment in, any geography course. **Offered as needed.**

GEO
Geology

GEO142 The Geology of Pacific Northwest Volcanoes, Mountains, and Glaciers
3 class and 2 lab hrs/wk, 4 cr.
Studies plate tectonic and exotic terrains; geomorphic provinces of Oregon; use of topographic maps; mountain building processes, volcanism and platonism; and the geomorphic work of glaciers. Covers mountainous regions of Oregon and Washington, including Blue Mountains, Klamath Mountains, Cascade Range, Coast Range-Willamette Valley and Olympics-Puget Lowland; earthquakes, faults, and tsunamis in the Pacific Northwest. **Offered as needed.**

GEO143 Pacific Northwest Rocks and Minerals
3 class and 2 lab hrs/wk, 4 cr.
Focuses on the description and identification of the principal rock-forming minerals and the most important igneous, sedimentary, and metamorphic rocks. Covers exotic terrains, plate tectonics, and the relationship of rock types to plate tectonic setting; description of types of mineral ore deposits and their plate tectonic settings; laboratory identification of principal ore minerals; and the geologic time scale. Includes a basic understanding of how to read the stratigraphic record. **Offered as needed.**

GEO144 The Geology of Pacific Northwest Rivers, Streams, and Deserts
3 class and 2 lab hrs/wk, 4 cr.
Studies plate tectonic and exotic terrains; geomorphic provinces of Oregon; use of Oregon; use of topographic maps; stream processes and characteristics, including Oregon examples; types of lakes and lake basins, including Oregon examples; geology and geologic history of the desert/steppe provinces of Oregon and Washington: Columbia-Deschutes Plateau, High Lava Plains, Basin and Range; fossils as evidence of past life; fossils and fossil sites in Oregon. **Offered as needed.**

GEO201 Geology
3 class and 3 lab hrs/wk, 4 cr.
Studies the nature and origin of common rocks and minerals. Identification techniques applied in laboratory and on field trips. **F**

GEO202 Geology
3 class and 3 lab hrs/wk, 4 cr.
Offers a broad non-quantitative, descriptive survey of geologic landforms. Map interpretation activities applied in laboratory and on field trips. **W**

GEO203 Geology
3 class and 3 lab hrs/wk, 4 cr.
Emphasizes geophysical study of earth history, interpreted through geophysics and plate tectonics, coupled with laboratory field study of paleontology. **Sp**

GS
General Science

GS104 Physical Science
3 class and 3 lab hrs/wk, 4 cr.
Presents an integrated study of the force, motion, heat, and light phenomena in the physical world. **F, W, Sp, Su**

GS105 Physical Science
3 class and 3 lab hrs/wk, 4 cr.
Offers a broad, non-quantitative, and descriptive survey of chemical principles which are relevant to everyday life. **F, W, Sp, Su**

GS106 Physical Science
3 class and 3 lab hrs/wk, 4 cr.
Introduces various branches of earth sciences. Includes basic terminology, fundamental processes, and respective interrelations. **F, W, Sp, Su**

GS107 Introduction to Astronomy
3 class and 3 lab hr/wk, 4 cr.
Surveys the physical properties of planets, stars and galaxies. Emphasizes the size of the universe and the objects within. Examines the process astronomers use to gather data and form models. **F, W, Sp, Su**

GS120 Rudiments of Meteorology
3 class hrs/wk, 3 cr.
Describes the treatment of contents of the atmosphere, cloud and precipitation types, weather instruments, thunderstorms, cyclones, hurricanes, air masses, fronts, and weather forecasting. **Offered as needed.**

GS141 Earth, Our Planet
3 class and 3 lab hrs/wk, 4 cr.
Explores the human population and human technology and their impact on our world. Presents how natural corrective processes are not keeping up with the pace of change and considers how the Earth system works, the consequences of human actions, and how we can use our knowledge to protect our world. Evaluates appropriate responses to local and global environmental problems. **Offered as needed.**

GS142 Earth Revealed
3 class and 3 lab hrs/wk, 4 cr.
An introductory telecourse or modem geology course. Studies the Earth as a system. A textbook, study packet, and lab component are closely integrated with video components. **F, W, Sp, Su**

GS143 The Earth's Oceans
3 class and 3 lab hrs/wk, 4 cr.
Focuses on the marine environment as a unique feature of planet Earth. Telecourse includes video viewing, journal writing, class projects and site-based labs. **Sp**

HD

Human Development

HD221 Life Skills Seminar 2
3 class hrs/wk, 3 cr.
Helps re-entering adults develop goals, skills, and support systems that promote success in education and careers. Topics include building self-confidence, balancing work and family, assertiveness, communication skills, stress, time management, and development of an individual action plan. **Prerequisite:** concurrent enrollment in CG120 or consent of instructor. **Offered as needed.**

HD230 Living with Purpose: Life Planning in Your 50s and 60s
3 class hrs/wk, 3 cr.
Guides individuals in their 50s and 60s with the development of a meaningful plan for older adulthood. Explores life stages, transitions, personal values, physical aging process, emotional health, relationships, lifestyle choices, interests, career/retirement opportunities, community resources, and goal setting. **Offered as needed.**

HDF

Human Development and Family Studies

HDF050 Parent/Infant
1 class hr/wk, 1 cr.
Covers infant growth, learning, behavior, and guidance; health and nutrition; expectations of parenthood; and activities with infants. Parents and children attend class together. Course may be repeated for a maximum of six credits. **Offered as needed.**

HDF051 Parent/Toddler
1 class hr/wk, 1 cr.
Covers toddler growth, learning, behavior, and guidance; health and nutrition; expectations of parenthood; and activities with toddlers. Parents and children attend class together. Course may be repeated for a maximum of six credits. **Offered as needed.**

HDF052 Parent/Preschooler
1 class hr/wk, 1 cr.
Covers preschooler growth, learning, behavior, and guidance; health and nutrition; expectations of parenthood; and activities with preschoolers. Parents and children attend class together. Course may be repeated for a maximum of six credits. **Offered as needed.**

HDF222 Family Relationships
3 class hrs/wk, 3 cr.
Examines communication patterns and relationships between adults, adults and children, and within intimate personal relations (marriage, families, and couple relations). Emphasizes understanding the role of the family and its consequent role in the development of the individual. **F**

HDF225 Prenatal, Infant, and Toddler Development
3 class hrs/wk, 3 cr.
Studies the basic principles of development, prenatal through two years of age. Emphasizes physical, intellectual, emotional, and social growth and development of young children. **F**

HDF227 The Whole Child
3 class hrs/wk, 3 cr.
Gives students, parents, teachers, and professional child care providers the tools they need to foster the growth and well-being of children in their care. Features real child care givers working and playing together with children in ways that facilitate learning and development. Locations used during the filming include a suburban preschool, an urban infant center and preschool, an in-home family child care program, two university child care centers and Head Start classrooms. **Offered as needed.**

HDF229 Development in Middle Childhood
3 class hrs/wk, 3 cr.
Studies growth and development in 6- through 12-year-old children. Emphasizes physical, intellectual, emotional, and social growth of the school-aged child. **Sp**

HDF242 Balancing School, Work, and Family
1 class hr/wk, 1 cr.
Presents information on balancing the demands of school, work, and family. Covers the work-family lifestyle, handling stress, communication skills, and time and money management. **Offered as needed.**

HDF247 Preschool Child Development
3 class hrs/wk, 3 cr.
Examines the principles of development as they apply to the young child, primarily ages 2 1/2 through 5. Emphasizes physical, intellectual, emotional, and social growth in children. **W**

HDF248 Learning Experiences for Young Children
4 class hrs/wk, 4 cr.
Focuses on planning and implementing preschool curriculum based on development theory. Involves lectures and experiences covering presentation, development, analysis, and evaluation of materials and concepts which facilitate development of the whole child (physical, social, emotional, and cognitive). **Prerequisite:** HDF225 and HDF247 or consent of instructor. **Sp**

HDF249 Introduction to Working with Infants and Toddlers
3 class hrs/wk, 3 cr.
Assists child care practitioners who work with infants and toddlers in child development centers and home settings. Focuses on understanding, facilitating, and respecting infant and toddler development. Appropriate environmental planning, activities, and observation skills will be discussed, demonstrated, and practiced. **F**

HDF257 Home, School and Community
3 class hrs/wk, 3 cr.
Emphasizes helping future teachers and child care workers recognize and understand their unique position as resource coordinators, advocates, and facilitators for parents. Focuses on developing effective and appropriate communication skills. Analyzes issues involving children with disabilities, ethics and values, and parent/school/community opportunities. **Prerequisite:** second-year standing in the Early Childhood Education program or consent of instructor. **W**

HDF258 Teaching in an Anti-Bias Classroom
3 class hrs/wk, 3 cr.
Examines the development of practices for teaching young children in culturally relevant and inclusive ways. Covers identity development in relation to gender, race, and other biases that influence and affect children and families. Focuses on uncovering and naming biases. Examines the social context that contributes to biases that affect teaching attitudes and practices. **W**

HDF260 Child Abuse and Neglect
3 class hrs/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. May also be useful to other professionals who come into contact with children and need to be aware of issues regarding child abuse and neglect. Includes examining the causes of abuse, the abused child, the abusive parent and adult, the role of the teacher, areas of treatment, and education. **Offered as needed.**

HDF285 Professional Issues in Early Childhood Education
3 class hrs/wk, 3 cr.
Prepares early childhood educators to fill the many professional roles that require basic knowledge of ethics, conflict resolution, understanding of the special needs child, advocacy, governmental processes, and development of an anti-bias professional attitude. Also covers historical perspectives relating to early childhood education. **Prerequisite:** second-year standing in the Early Childhood Education program or consent of instructor. **F**

HE

Health Education
See also HM—Health Services Management, HPE—Health Services Management.

HE151 Alcohol and Other Drugs
3 class hrs/wk, 3 cr.
Presents basic information concerning alcohol and other drugs. Covers mental, physical, emotional, and environmental aspects of alcohol and other drugs. Focuses on a decision making approach to drug use and abuse. **Offered as needed.**

HE204 Nutrition, Weight Control and Physical Fitness
3 class hrs/wk, 3 cr.
Presents methods of maintaining or improving fitness through consideration of diets and dieting, obesity, types of exercise, cardiovascular fitness, and nutritional concepts. **F, W, Sp, Su**

HE209 Human Sexuality
3 class hrs/wk, 3 cr.
Covers mental, physical, and social aspects of human sexuality. Emphasizes development of a decision making model that enables a person to make personal choices. Class discussion will be a vital part of the course. **F, W, S**p

HE210 HIV, AIDS and other STDs (Human Immunodeficiency Virus, Acquired Immunodeficiency Syndrome and other Sexually-Transmitted Diseases/Infections)
1 class hr/wk, 1 cr.
Presents basic information about HIV, AIDS, and other sexually transmitted diseases/infections. Explores newest research available. Focuses on decision making and behaviors which help prevent contracting sexually transmitted diseases/infections. **Offered as needed.**

HE213 Women's Health Issues
3 class hrs/wk, 3 cr.
Examines selected health issues and their physical and emotional effects on women. Topics include body image, reproductive life, sexually transmitted disease, relationships and sexuality, violence, menopause, cancer, depression and anxiety, heart disease, osteoporosis, Alzheimer's, and the politics of women's health. **F, W, Sp**

HE250 Personal Health
3 class hrs/wk, 3 cr.
Presents basic information concerning the social, emotional, intellectual, physical, spiritual, and environmental aspects of personal health and wellness. Emphasizes health-enhancing skills and behaviors. Provides an opportunity to apply and practice decision making models regarding personal health issues. **F, W, Sp, Su**

HE251 Community Health
3 class hrs/wk, 3 cr.
Introduces the core functions of community health and discusses prevention of diseases and injuries, health needs of special populations, functions of voluntary and governmental health organizations and future directions for community health. Explores epidemiology, chronic and infectious disease, social and behavioral factors in health, use of tobacco, obesity, maternal and child health, environmental impact on health, population growth, and the health care system. **F, W, Sp**

HE262 Cardiopulmonary Resuscitation Instruction
2 class hrs/wk, 2 cr.
Reviews theory and application of basic life support, instructional materials, and methods of use in CPR courses. Successful completion provides instructor certification or recertification by the Oregon Heart Association. **Prerequisite:** certification in CPR by the Oregon Heart Association. **Offered as needed.**

HM

Health Services Management
See also AH—Allied Health and MED—Medical Office Assisting.

HM101 Medical Law and Ethics
3 class hrs/wk, 3 cr.
Explores the relationships between the law, ethics, and bioethics and the health care professional. Uses case studies, independent and group projects, and personal reflection to identify common legal and ethical problems. **F, W, Sp**

HM105 Professional Development A
1 class hr/wk, 1 cr.
Develops leadership qualities, enhances awareness of diversity in the health care workplace, develops interpersonal communication skills, and provides a setting for self-improvement. **F**

HM106 Professional Development B
1 class hr/wk, 1 cr.
Develops leadership qualities, provides opportunities for community participation, enhances awareness of diversity in the health care workplace, explains employment rights, and provides a setting for self-improvement. **W**

HM110 Health Information Systems Procedures 1
3 class and 3 lab hrs/wk, 4 cr.
Provides entry-level skills for the Health Information Technician/Medical Transcription/Health Services Management/Medical Office Assisting and students in other programs to become proficient in a number of skills required of a professional office worker dedicated to assisting in the care of health care consumers. Introduces students to medical clinics and health-related organizations. Covers procedures used to keep any kind of medical office running efficiently. **Prerequisite:** HM120 or concurrent enrollment in HM120. **F**

HM112 Health Information Systems Procedures 2
3 class and 3 lab hrs/wk, 4 cr.
Provides entry-level skills for Health Information Technician/Medical Transcription/Health Services Management/Medical Office Assisting and students in other programs. Offers basic knowledge of health information systems and the skills necessary for health clerical functions. Focuses on the health care delivery system, the health information field, the content of a health record, and the health record processing of a variety of medical reports. **Prerequisite:** HM120 or equivalent course; HM110; or consent of instructor. **W**

HM114 CPT-IV Coding/Reimbursement
3 class hrs/wk, 3 cr.
Introduces the use of Current Procedural Terminology (CPT) coding system, insurance terminology and abbreviations, and basic health insurance systems. **Prerequisite:** HM120, concurrent enrollment in HM121, or consent of instructor. **W**

HM115 ICD-9-CM Coding/Reimbursement
3 class hrs/wk, 3 cr.
Introduces the use of International Classification of Diseases (ICD-9-CM) coding system, basic abbreviation and description of format of coding manual; fundamental application of coding in basic forms, and relationship to the reimbursement process. **Prerequisite:** HM120; HM121; or consent of instructor. **Sp**

HM116 Introduction to Allied Health Data
3 class hrs/wk, 3 cr.
Introduces the basic data sets and statistics used every day in health care organizations. Emphasizes the case-based and experiential learning process to facilitate familiarity with occupancy and discharge rates, disease incidence and prevalence, and minimum and universal data sets used in all accredited organizations. **Prerequisite:** MTH060 or consent of instructor. **W**

HM120 Medical Terminology 1
3 class hrs/wk, 3 cr.
Emphasizes the terminology related to the health care professions and specialties, equipment, drugs, symbols, and abbreviations. Includes the anatomy, physiology, and pathophysiology of the musculoskeletal, integumentary, nervous systems, as well as the sensory organs. Provides practical application in the workplace using case studies, operative, autopsy, diagnostic, and laboratory reports. **F, W, Sp, or Su as needed.**

HM121 Medical Terminology 2
3 class hrs/wk, 3 cr.
Focuses on the digestive, cardiovascular, respiratory, blood, lymphatic, genitourinary, female reproductive, and endocrine systems. Explores the origin of terms and the use of anatomical, general, operative, and symptomatic terms using a variety of case-based and experiential learning techniques. **Prerequisite:** HM120. **F, W, Sp, or Su as needed.**

HM122 Medical Terminology 3/Human Diseases
3 class hrs/wk, 3 cr.
Presents an advanced course using the language of clinical medicine in a variety of settings including oncology, diagnostic radiology, the clinical laboratory, and pharmacology. Focuses on the reading, analyzing, and use of clinical research and literature to explore advanced topics in medical terminology and the diseases and conditions of medical science. Emphasizes written and verbal presentation of the findings of individual and group student research projects. **Prerequisite:** HM121. **F, W, Sp, or Su as needed.**

HM130 Health Information Systems Office Practice
16 lab hrs/wk, 5 cr.
Includes practices in clinical situations of health information methods and techniques. **Prerequisite:** third-term standing in the Health Information Technician program with a grade of "C" or better in all required courses in the first two terms of the program. **F, Sp**

HM131 Health Information Systems Seminar
1 class hr/wk, 1 cr.
Studies the relationship of practicum in a health care setting with theoretical course content, as well as its application to career and personal goals. **Prerequisite:** concurrent enrollment in HM130. **F or W (as needed); Sp**

HM141 Medical Transcription 1
3 class hrs/wk, 3 cr.
Introduces in-depth transcription in all fields of medicine. Emphasizes spelling, grammar, punctuation, and formatting. Includes production goals that will be assessed regularly with timed tests. **Prerequisite:** HM120 and HM121(may be taken concurrently) or consent of instructor and touch keyboarding ability of 40 words per minute. **F, W, Sp**

HM142 Medical Transcription 2
3 class hrs/wk, 3 cr.
Includes transcription of comprehensive dictation in medical specialty areas including radiology, pathology, and cardiology using American Association of Medication Transcriptionist course tapes. **Prerequisite:** HM141 and touch keyboarding ability of 55 words per minute. **F, W, Sp**

HM143 Medical Transcription 3
3 class hrs/wk, 3 cr.
Includes transcription of 20 actual advanced tapes in all fields. **Prerequisite:** HM142 and touch keyboarding ability of 65 words per minute. **F, W, Sp**

HM144 Medical Transcription Seminar
1 class hr/wk, 1 cr.
Assists the student in relating classroom theory to practical experience and to discuss self-evaluations of work environment experiences. **Prerequisite:** concurrent enrollment in HM280. **F as needed, Sp**

HM210 Introduction to Health Services
3 class hrs/wk, 3 cr.
Provides an overview of the nation's health system. Includes use of health services, history of the health care system, and hospitals and other health service providers, and their relationship to the system as a whole. Explores the financial, legal, political, and ethical aspects of the health care system in the United States. **Prerequisite:** WR227 or consent of instructor. **F**

HM214 Advanced CPT—IV Coding
3 class hrs/wk, 3 cr.
Builds on previous experience or instruction to further develop ability and skills in CPT-IV coding practices and principles. Expands resources for further coding problem solving. **Prerequisite:** HM114; HM120, HM121 or basic knowledge of medical terminology. **Offered as needed.**

HM215 Advanced ICD-9-CM Coding
3 class hrs/wk, 3 cr.
Focuses on advanced ICD-9-CM coding practices and principles as well as resources for future coding problem solving. **Prerequisite:** HM115 or basic coding experience on the job, HM120, and HM121 or basic knowledge of medical terminology. **Offered as needed.**

HM230 Health Services Externship
15 lab hrs/wk, 5 cr.
One hundred sixty-five hours of workplace experience in a health care or related setting. **Prerequisite:** grade of "C" or better in HM210, HM250, HM251 or consent of instructor; and current enrollment in HM231. **F as needed, Sp**

HM231 Health Services Seminar
1 class hr/wk, 1 cr.
Studies the relationship between clinical practicum in health care or related setting with theoretical course content and application to career and personal goals. **Prerequisite:** concurrent enrollment in HM230, or consent of instructor. **F or W (as needed); Sp**

HM250 Health Services Management 1
3 class hrs/wk, 3 cr.
Introduces the management functions, concepts, and principles used, as well as managerial roles in the context of the health services organization and the health services delivery system. **Prerequisite:** WR227 or consent of instructor. **F**

HM251 Health Services Management 2
3 class hrs/wk, 3 cr.
Emphasizes the area of human resource management in health services organizations. Explores the concepts of motivation, leadership, communication, dynamics of change, personnel administration, labor relations, and new trends within the context of the health service organization and delivery system in the United States. **Prerequisite:** HM250. **W**

HM252 Health Services Management 3
3 class hrs/wk, 3 cr.
Provides a working knowledge of basic statistical techniques and their application to various health care literature and clinical environments. Uses the concepts of experiential and case-based learning to facilitate the learning process. **Prerequisite:** MTH095 or BA211; and HM116; and HM250 and HM251; or consent of instructor. **Sp**

HM280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

HOR

Horticulture

HOR111 Introduction to Horticulture
3 class and 2 lab hrs/wk, 4 cr.
Provides a broad view of the horticulture industry, with emphasis on greenhouse and nursery production. Introduces the basic requirements for plant growth. Explores environmental and social aspects of horticulture. **F**

HOR112 Pesticides and Safety
2 class hrs/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. **Sp**

HOR113 Mathematical Applications in Horticulture
2 class hrs/wk, 2 cr.
Uses application-based mathematics to solve problems in production horticulture. Focuses on algebraic and geometric concepts used to determine field layout and area, spray calibration, irrigation planning, and crop scheduling. Covers financial analysis, and other common horticultural calculations. Includes use of fractions, ratios, percentages, decimals, exponents, roots, and unit conversions. **Prerequisite:** MTH060 or equivalent. **Sp**

HOR114 Success in the Nursery and Greenhouse Workplace
2 class hrs/wk, 2 cr.
Examines employment opportunities in the nursery and greenhouse industry. Covers organizational structure of typical nursery or greenhouse business. Emphasizes unique attributes of the nursery and greenhouse workplace. Analyzes attributes of successful employees. Stresses communications with potential employers. **Prerequisite:** HOR111 and PSY104. **Sp**

HOR115 Nursery and Greenhouse Equipment and Safety
3 class hrs/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. **F**

HOR211 Plant Propagation
2 class and 2 lab hrs/wk, 3 cr.
Presents theory and methodology for reproducing plants by seed and by a variety of cloning methods. Covers anatomy, physiology, and genetics related to plant reproduction. **W**

HOR212 Advanced Plant Propagation
1 class and 2 lab hrs/wk, 2 cr.
Presents advanced principles and practices of plant propagation with emphasis on seed propagation and tissue culture. Emphasizes plant propagation techniques employed early in the growing season. Identifies equipment, tools, and structures required for advanced propagation techniques. **Prerequisite:** HOR211 or consent of instructor. **Sp**

HOR221 Nursery Production and Management
3 class hrs/wk, 3 cr.
Focuses on production systems and management practices in container and field nurseries. Emphasizes irrigation, fertilization, pruning, and other cultural practices that result in high quality plant material and healthy root systems. Covers harvesting, storing, and shipping. Examines differences between container and field production. Explores current issues and trends in nursery production in Oregon. **Sp**

HOR222 Greenhouse Structures and Equipment
2 class hrs/wk, 2 cr.

Covers structural and mechanical aspects of the greenhouse environment. Considers different styles of greenhouses. Compares greenhouse systems with regard to frames, covers, benches, mechanical controls, and general level of technology. Examines temperature control, lighting, irrigation, and fertilization systems in the greenhouse. **F**

HOR223 Greenhouse Production and Management
3 class hrs/wk, 3 cr.

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. **Prerequisite:** HOR222 or consent of instructor. **W**

HOR224 Horticulture Practicum
6 lab hrs/wk, 3 cr.

Applies nursery and greenhouse production techniques in the greenhouse and nursery. Focuses on practical skills used in greenhouses and container and field production nurseries. Includes plant propagation, transplanting, water, fertilizer and pest management, and growth regulation. Provides skills and experience in retail nursery management. **Prerequisite:** HOR111 and HOR211 or consent of instructor. **Offered as needed.**

HOR226 Identification of Woody Plants 1
1 class and 4 lab hrs/wk, 3 cr.

Identifies species and varieties of woody landscape plants that exhibit seasonal highlights of fruit and fall color. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves, fruit, and bark. Considers cultural requirements for individual species and varieties. **F**

HOR227 Identification of Woody Plants 2
1 class and 4 lab hrs/wk, 3 cr.

Identifies species and varieties of woody landscape plants, focusing on conifers and broadleaf evergreens with ornamental value. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves, needles, cones, fruit, and bark. Considers cultural requirements for individual species and varieties. **W**

HOR228 Identification of Woody Plants 3
1 class and 4 lab hrs/wk, 3 cr.

Identifies species and varieties of woody landscape plants that exhibit seasonal highlights in spring. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of form, structure and visual details of leaves and flowers. Considers cultural requirements for individual species and varieties. **Sp**

HOR234 Integrated Pest Management: Insects
3 class hrs/wk, 3 cr.

Presents an integrated approach to 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. Considers management of slugs and snails. **F**

HOR235 Integrated Pest Management: Diseases
3 class hrs/wk, 3 cr.

Presents an integrated approach to disease management in the nursery and greenhouse. 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. **W**

HOR236 Integrated Pest Management: Weeds
2 class hrs/wk, 2 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 pre-emergent and post-emergent application of herbicides. **Sp**

HOR255 Identification of Herbaceous Plants 1
1 class and 4 lab hrs/wk, 3 cr.

Identifies species and varieties of annuals, perennials, groundcovers, ornamental grasses, and bulbs grown in Oregon, focusing on spring flowering and greenhouse-produced plants. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of visual details of form, texture, size, leaves, flowers, and fruit. Considers production and cultural requirements for individual species and varieties. **Sp**

HOR256 Identification of Herbaceous Plants 2
1 class and 2 lab hrs/wk, 2 cr.

Identifies species and varieties of annuals, tender and hardy perennials, groundcovers, ornamental grasses, bulbs, and herbs grown in Oregon, focusing on plants with seasonal interest in the summer. Stresses scientific naming of plants. Presents plant identification techniques that rely on recognition of visual details of form, texture, size, leaves, flowers, and fruit. Considers production and cultural requirements for individual species and varieties. **Su**

HOR257 Horticultural Marketing
3 class hrs/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. **W**

HOR258 Nursery and Greenhouse Business Management
3 class hrs/wk, 3 cr.

Emphasizes the importance of business management to the financial success of a nursery business. Focuses on developing skills in business planning, goal setting, financial record keeping, financial analysis, and budgeting. Covers regulatory issues including, but not limited to, environment, taxes, and employment. **Prerequisite:** consent of instructor. **Sp**

HOR260 Soils, Media, and Nutrition
3 class and 2 lab hrs/wk, 4 cr.

Introduces physical, chemical, and biological properties of soils and soilless media. Covers essential plant nutrients, fertilizers, and fertilization practices. Discusses soil/water relationships and soil conservation and improvement. Assesses Willamette Valley soils for nursery crop production. **W**

HOR270 Native Plant Propagation and Use
2 class hrs/wk, 2 cr.

Explores uses of native plants for landscaping, habitat restoration and development, and environmental services. Examines native plant use in both natural and constructed environments. Presents a variety of propagation techniques commonly used with native plants. Analyzes current and future markets for Oregon native plants. **Offered as needed.**

HOR271 Urban Applications in Ecological Horticulture
2 class hrs/wk, 2 cr.

Explores plant applications for specific functions in urban landscapes, including green roofs, bioswales, rain gardens, and ecoscaping. Focuses on the environmental services plants provide, such as stormwater management, water filtration, carbon sequestration, and habitat. Examines propagation, growth, and management requirements for short-term and long-term plant success under harsh urban conditions. Compares native and non-native plant adaptations and plant selection for urban environments. Reviews the role of plants and horticulture in urban sustainability. **Offered as needed.**

HOR272 Invasive Plant Species Management
2 class hrs/wk, 2 cr.

Presents information about the history, impacts and management of invasive plant species in western Oregon ecosystems. Focuses on management strategies relevant to the horticulture industry. Includes basic knowledge of introduction, identification and natural history of invasive plants. Covers legally and culturally-defined terminology. Identifies impacts and threats invasive plants pose to native or planned plant communities, including nursery market areas. **Offered as needed.**

HOR273 Urban and Community Forestry
2 class hrs/wk, 2 cr.

Introduces economic, ecological, social, and technical aspects of urban forest management. Focuses on current practices related to the planting, care, and management of trees and vegetation in urban areas. Covers the relationship between plants and people in the urban forest. **Offered as needed.**

HOR274 Wetlands Design and Management
2 class hrs/wk, 2 cr.

Describes wetland types and compares native and constructed wetlands. Explores wetland functions and benefits to the environment and economy. Introduces the wetland construction permitting process. Evaluates design criteria for newly constructed wetlands, including plant propagation and selection. Reviews landscape management challenges with wetlands and strategies for achieving multiple goals. Presents wetland case studies. **Offered as needed.**

HOR275 Innovative Strategies for Water Management in Nurseries
2 class hrs/wk, 2 cr.

Explores conventional and innovative water management systems that provide adequate quantity and quality of irrigation while protecting the environment and other local resources. Evaluates the benefits and challenges of using either recirculated water or reclaimed wastewater to grow plants. Examines phytotechnologies that can be applied on a nursery/greenhouse scale, such as vegetated filter strips, 'living machines,' hydroponic tanks, floating islands, or wetland ponds. **Offered as needed.**

HOR280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

HPE

Health and Physical Education
See also PE—Physical Education.

HPE184 Sports Medicine: Prevention and Care of Athletic Injuries
3 class hrs/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. **F, W, Sp**

HPE270 Sport Psychology
3 class hrs/wk, 3 cr.

Introduces mental, physical, and social aspects of sports. Presents basic psychological mechanics and discusses how they are part of athletic performance. Explores newest research available. Focuses on decision making and behaviors which help promote team cohesion. **F, W, Sp**

HPE285 Advanced Prevention and Care of Athletic Injuries
3 class hrs and 2 lab hours/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:** grade of "C" or better in HPE184. **Sp**

HPE295 Health and Fitness for Life
3 class hrs/wk, 3 cr.

Provides information on personal levels of health, lifelong fitness, and wellness. **F, W, Sp, Su**

HPE296 Health and Fitness 2
3 class hrs/wk, 3 cr.

Provides a practical study of wellness components with a focus on individual promotion of healthy behaviors, lifestyles, and disease prevention. **Offered as needed.**

HS

Human Services

HS101 Addiction Pharmacology and Physiology
4 class hrs/wk, 4 cr.

Explains how alcohol and other drugs are processed in the body and the brain (pharmacology). Includes information on the physiological effects of alcohol and other drugs (AOD) on the human body and the possible implications for the treatment and prevention of problems that arise from their use. **F, W, Sp, Su**

HS103 Ethics for Human Service Workers
2 class hrs/wk, 2 cr.

Introduces professional issues associated with the helping relationship. Examines how personal characteristics and values affect the helping relationship and considers the issues faced by helpers-in-training. Explores the issues of client rights, confidentiality, competence, and dual relationships. Emphasizes development of an intercultural helping perspective. **Prerequisite:** enrollment in the Human Services program. **F, Sp**

HS120 Alzheimer's Disease: Coping and Caring
3 class hrs/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 caregiving; addressing issues to which families, caregivers, and case managers must attend. Promotes the individual's adaptation and addresses issues of self-esteem and fear. **Offered as needed.**

HS122 Women and Chemical Dependency Treatment
2 class hrs/wk, 2 cr.

Explores the historical, sociological, and physiological implications of women and chemical dependency. Introduces a holistic model of gender-specific treatment for this population group. **Offered as needed.**

HS140 Handling the Violent Client
1 class hr/wk, 1 cr.

Introduces the recognition, prevention, and control of aggressive behavior in clients. Stresses prevention of violence through early intervention and includes information on pre-aggression warning signs, as well as practice with defusing behavior and physical defense responses. **S, W**

HS150 Personal Effectiveness for Human Service Workers
3 class hrs/wk, 3 cr.

Develops knowledge and skills to improve personal effectiveness. Uses individual and small group exercises to improve skills in self-awareness, communication, values clarification, problem solving, and conflict management. **Prerequisite:** Admission to Human Services program; recommended concurrent enrollment in HS154 and HS170. **F, W**

HS151 Compulsive Gambling
1 class hr/wk, 1 cr.

Covers basic information concerning problem gambling and its consequences. Focuses on the stages of progression from recreational to pathological gambling. Addresses screening, diagnosis, intervention, and treatment. **Prerequisite:** HS101 or consent of instructor. **Offered as needed.**

HS152 Stress Management
1 class hr/wk, 1 cr.

Provides information on managing stress in all settings. Teaches relaxation techniques and their impact on health and well-being. Covers a variety of the major relaxation techniques and emphasizes the analysis of life stressors and the development of a personalized stress management plan. **F, W, Sp, Su**

HS154 Community Resources
3 class hrs/wk, 3 cr.
Develops an understanding of the history and values of community resources designed to meet the needs of vulnerable populations. Familiarizes students with local social service agencies/organizations; provides information about making appropriate referrals for services. Introduces application of basic research techniques. Concurrent enrollment recommended in HS150 and HS170 for Human Services program students and for students designated Pre-Human Services. **F, W**

HS155 Interviewing Theory and Techniques
3 class hrs/wk, 3 cr.
Provides the theory and specific techniques required for entry-level interviewing in human service settings. **Prerequisite:** grade of "C" or better in HS150, HS154 and HS170. **W, Sp**

HS156 Counseling Theories
3 class hrs/wk, 3 cr.
Introduces the major counseling theories that have demonstrated effectiveness with substance disorders and a variety of mental health issues. Presents an overview of 12 specific theories, their founders, key concepts, techniques, and appropriate applications. **F**

HS165 Activity Director Training/Long-Term Care
3 class hrs/wk, 3 cr.
Meets the training requirements of activity directors in long-term care facilities. Focuses on therapeutic activities and appropriate use of people and material resources in meeting patient needs. Promotes the continual growth and development of long-term care residents. **Offered as needed.**

HS170 Introduction to Practicum
3 class hrs/wk, 3 cr.
Provides the background and specific skills needed to select and succeed in the practicum placement. Serves as a prerequisite for Human Services practicum courses (HS284-HS288A,S). **Prerequisite:** Admission to Human Services program and recommended concurrent enrollment in HS150 and HS154. **F, W**

HS201 Addiction and the Family System
3 class hrs/wk, 3 cr.
Presents basic information regarding addiction and its effects on the family. Focuses on the family system and dynamics related to coping with addiction and other chronic conditions that impact the family life cycle. Introduces the major schools of family therapy including strengths-based and solution-oriented approaches. **Prerequisite:** grade C or better in HS101 or consent of instructor.

HS205 Youth Addiction
3 class hrs/wk, 3 cr.
Focuses on working with chemically-dependent youth. Includes prevention, intervention, assessment, and continuing recovery techniques for individuals and groups. **Prerequisite:** HS101 or consent of instructor. **Offered as needed.**

HS206 The Addicted Criminal
3 class hrs/wk, 3 cr.
Assists human service workers to develop skills with chemically-dependent clients who are convicted criminals. Includes information on recognizing, confronting, and treating the addicted criminal. **Prerequisite:** HS101 or consent of instructor. **Offered as needed.**

HS207 Adult Children of Alcoholics/Addicts
1 class hr/wk, 1 cr.
Explores the relationship between growing up in a chemically-dependent or dysfunctional family and problems that surface in adulthood. Discusses family dynamics, denial, relationships, work, social skills, and feelings. **F, W, Sp, Su**

HS209 Co-occurring Disorders
2 class hrs/wk, 2 cr.
Covers basic information about simultaneous diagnosis of addiction and chronic mental illness in the same patient/client. Stresses the importance of assessing and treating these areas in a blended format. **Prerequisite:** HS101 or consent of instructor. **Sp, Su**

HS211 HIV, TB and Infectious Diseases: Risk Assessment, Harm Reduction and Counseling
1 class hr/wk, 1 cr.
Explores the relationship between alcohol and other drug abuse and infectious diseases, including HIV/AIDS, tuberculosis, sexually-transmitted diseases, and hepatitis. Provides counseling techniques for assisting clients to identify personal risk and practice harm reduction. Also addresses special issues affecting diverse populations. Examines personal issues/discomforts arising from frankly discussing sexual behaviors of clients. HS101 recommended. **F, W, Sp**

HS213 Multicultural Practice
3 class hrs/wk, 3 cr.
Explores the ways membership in a racial, ethnic, or cultural group affects the client and helping professional relationship. Builds multicultural competency by increasing awareness and knowledge of cultural differences and the skills to develop and apply appropriate intervention strategies in cross-cultural situations. Focuses on factors that affect racial, ethnic, and cultural groups in the United States including African Americans, Asians, Latinos, Native Americans, gays, lesbians, persons with disabilities, and the elderly. HS150 recommended. **F, Sp**

HS214 Advanced Interviewing and Counseling Skills
3 class hrs/wk, 3 cr.
Focuses on developing advanced interviewing and counseling skills and strategies with significant opportunity for hands-on practice. **Prerequisite:** HS155 or consent of instructor. Concurrent enrollment in HS284-288 recommended. **F**

HS215 Conflict Resolution
3 class hrs/wk, 3 cr.
Explores the sources and dynamics of conflict in interpersonal, family, and work settings. Stresses developing an awareness of personal style in conflict situations and use of effective strategies for resolving conflict. **Offered as needed.**

HS216 Clinical Screening, Assessment and Treatment Planning
3 class hrs/wk, 3 cr.
Introduces diagnostic criteria for substance use disorders, as well as a number of other major mental health disorders often seen in substance abusing clientele. Provides a systematic approach to screening, assessment, and treatment planning in order to determine the most appropriate initial course of action given the client's needs, characteristics, and available resources. Provides significant opportunity for hands-on practice. **Prerequisite:** HS214 or consent of instructor. Concurrent enrollment in HS284-288 is recommended. **W**

HS217 Group Counseling Skills
3 class hrs/wk, 3 cr.
Presents strategies from accepted and culturally appropriate models for group counseling with clients with a variety of disorders including substance abuse. Focuses on the ethical use of groups as an effective therapeutic intervention. Addresses leadership behaviors, group formation, and group stages. **Prerequisite:** HS155 and HS260 or consent of instructor. Concurrent enrollment in HS284-288 is recommended. **W**

HS218A Group Processes A
1 class hr/wk, 1 cr.
Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules, and norms, as well as self-disclosure, roles, and group skills. First course in a three-term sequence. **Prerequisite:** Admission into the Human Services program, HS155 and HS260 or consent of instructor. Concurrent enrollment in HS284-288 is recommended. **F**

HS218B Group Processes B
1 class hr/wk, 1 cr.
Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules, and norms, as well as self-disclosure, roles, and group skills. Second course in a three-term sequence. **Prerequisite:** Admission into the Human Services program and HS218A. Concurrent enrollment in HS284-288 is recommended. **W**

HS218C Group Processes C
1 class hr/wk, 1 cr.
Provides experiential group training designed for actual experience with the power of group process. Provides opportunities to learn about leadership, group stages, rules, and norms, as well as self-disclosure, roles, and group skills. Third course in a three-term sequence. **Prerequisite:** Admission into the Human Services program and HS218B. Concurrent enrollment in HS284-288 is recommended. **Sp**

HS219 Case Management and Client Records
3 class hrs/wk, 3 cr.
Covers the preparation of clinical documentation related to screening and intake processes, assessments, treatment plans, reports, progress notes, discharge summaries, and other client-related data. Applies State, ASAM and other professionally relevant standards. Concurrent enrollment in HS284-288 is recommended. **Sp**

HS220 Aging and Society
3 class hrs/wk, 3 cr.
Introduces the field of social gerontology and explores the relationship between the aging individual and society. Serves as an introduction to the field of gerontology. **W**

HS222 Aging and Behavior
3 class hrs/wk, 3 cr.
Presents information about behavioral responses in the normal aging process, including coping, cognition and memory, personality, and adjustment. Emphasizes healthy adaptation to aging and promotion of ego integrity in older adults. Also covers the description, diagnosis, assessment, and treatment of common organic and functional mental disorders. **W, 09**

HS260 Group Dynamics
3 class hrs/wk, 3 cr.
Provides 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 the opportunity to evaluate personal performance within a group. **Prerequisite:** grade of "C" or better in HS150. **W, Sp**

HS262 Misuse and Abuse of Alcohol and Drugs Among the Elderly
1 class hr/wk, 1 cr.
Addresses problems of drug and alcohol misuse and abuse among older adults. Focuses on prescription drugs, over-the-counter drugs, and alcohol used either alone or in combination. **Prerequisite:** HS101 or consent of instructor. **Offered as needed.**

HS265 Casework Interviewing
3 class hrs/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, and development of a case file. **Prerequisite:** grade of "C" or better in HS155; concurrent enrollment in HS284-288 recommended. **F**

HS266 Case Management
3 class hrs/wk, 3 cr.
Provides theory and application in casework and interviewing applied to diverse populations and cultures in human services. Includes interviewing for assessment, problem solving, planning, monitoring, and crisis intervention. **Prerequisite:** grade of "C" or better in HS265; concurrent enrollment in HS284-288 is recommended. **W**

HS267 Systems Strategies
3 class hrs/wk, 3 cr.
Provides intervention strategies needed for human service work. Includes theory and practice in the use of family, group, and community intervention strategies. **Prerequisite:** grade of "C" or better in HS266 or HS216. **Sp**

HS284-288A, S Practicum—Human Services
11-23 lab hrs/wk, 4-8 cr.
Provides experience working on-site in a human service agency to integrate field and classroom experience. Offers students two different practicum sites, each at least two terms in length, during the program. The second-year practicum is more comprehensive and provides an opportunity to develop more advanced skills. Students in the post-baccalaureate Addiction Counselor Certification option remain at one site for three terms. **Prerequisite:** grade of "C" or better in HS150, HS154, and HS170. Post-baccalaureate students must attend mandatory orientation prior to placement. **F, W, Sp**

HST

History

HST110, 111, 112 History of World Civilization
3 class hrs/wk, 3 cr. each
Surveys human cultural, social, economic, and political development of world civilizations. HST110 covers ancient times to 1500 C.E.; HST111 covers 1500 to 1870; HST112 covers 1870 to the present. **F, W, Sp, Su**

HST157 History of the Middle East and North Africa
3 class hrs/wk, 3 cr.
Surveys cultural, social, economic, and political development in the Middle East and North Africa. **Offered as needed.**

HST158 History of Latin America
3 class hrs/wk, 3 cr.
Surveys cultural, social, economic, and political development in Latin America. **Offered as needed.**

HST159 History of Asia
3 class hrs/wk, 3 cr.
Surveys cultural, social, economic, and political development in Asia. **Offered as needed.**

HST201, 202, 203 History of the United States
3 class hrs/wk, 3 cr. each
Explores the cultural, economic, social, and political development of the United States. HST201: to 1840; HST202: 1840 to 1900; HST203: 1900 to the present. **F, W, Sp, Su**

HST228 History of Modern Europe
3 class hrs/wk, 3 cr.
Introduces the history and culture of Europe during the Twentieth Century. Covers the impact of war and revolution, the end of colonialism and decline of European empires, and the search for European unification. **Offered as needed.**

HST257 Native American History
3 class hrs/wk, 3 cr.
Studies the history of native peoples in the United States, from prehistory to the present. Examines how Native American societies have adapted over time to a constantly changing world. Emphasizes the relationship between European Americans and Native Americans after 1492. **Offered as needed.**

HST258 African American History
3 class hrs/wk, 3 cr.
Recounts and explains experiences which lie at the heart of America's struggle to deal with its racial composition. Examines historical forces which denied African Americans the opportunity to secure meaningful first-class citizenship. Focuses on the political decisions and social institutions that determined public policy regarding Americans of African descent. **Offered as needed.**

HST259 Latino American History
3 class hrs/wk, 3 cr.
Focuses on the racial, cultural, educational, economic, and political development of Latino Americans in the United States. **Offered as needed.**

HST262 Women in U.S. History
3 class hrs/wk, 3 cr.
Studies the transformation of the role of women in American society. **Offered as needed.**

HST269 Pacific Northwest History
3 class hrs/wk, 3 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. **Offered as needed.**

HST277 History of Early Russia
3 class hrs/wk, 3 cr.
Surveys human cultural, social, economic, and political developments of early Russia. Covers ancient times to 1682. **Offered as needed.**

HST278 History of Imperial Russia
3 class hrs/wk, 3 cr.
Surveys human cultural, social, economic, and political developments of Imperial Russia. Covers 1682 to 1917. **Offered as needed.**

HST279 History of Soviet and Contemporary Russia
3 class hrs/wk, 3 cr.
Surveys human cultural, social, economic, and political developments of Soviet and contemporary Russia. Covers 1917 to the present. **Offered as needed.**

Hospitality and Tourism Management

HTM100 Introduction to the Hospitality Industry
3 class hrs/wk, 3 cr.

Introduces the hospitality industry as a single, interrelated industry composed of food and beverage; travel and tourism; lodging, meeting, and planning; leisure and recreation; recreational entertainment; and eco and heritage tourism. Includes industry components, their current issues, and future trends. Assesses the impact of North America's changing demographics and lifestyles. Discusses economic impact, career opportunities, and service ethics. **F, Sp**

HTM101 Customer Service Management
3 class hrs/wk, 3 cr.

Provides an in-depth study of the methods and techniques employed by the hospitality and tourism industry to accomplish effective and efficient operation. Includes combined discussions of management theory, systems, decision making, and leadership directly relevant to the hospitality profession. Also covers the business facets of human resource management, finance, ethics, and marketing within the hospitality environment. **W, Su**

HTM102 Hotel, Restaurant, and Travel Law
3 class hrs/wk, 3 cr.

Covers the legal aspects of the hospitality and tourism industry. Utilizes critical thinking skills needed to communicate with attorneys and recognize ramifications of policies and practices in everyday operations. Discusses current legal situations, case studies, and the reasoning behind the course of action taken. Also covers the Americans With Disabilities Act, sexual discrimination, civil rights issues, basic court procedures, contract law negligence, guest relationship obligations, alcohol liability, travel agent relationships, and licensing and regulations. **F, Sp**

HTM103 Marketing in the Hospitality Industry
3 class hrs/wk, 3 cr.

Studies how marketing activities direct the flow of goods and services from product to consumer in the hospitality and tourism industry. Covers satisfaction of customer's needs and wants; nature of marketing; sequential steps in marketing; key role of marketing research; interdependence of hospitality and travel organizations; and organization-wide and multi-department efforts. Analyzes various industry marketing strategies. **F, Sp**

HTM104 Travel and Tourism Industry
3 class hrs/wk, 3 cr.

Explores the major concepts in tourism, what makes tourism possible, and how tourism can become an important factor in the economics of any nation, 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. **F, Sp**

HTM105 Introduction to the Food and Beverage Industry
3 class hrs/wk, 3 cr.

Covers the food service industry, including its structure, organization, size, economic impact, regulatory industries, and peripheral industries; managerial problems and practices; and trade journals and resources. Reviews food service segments. Discusses current industry operational topics. **W, Su**

HTM107 Food Sanitation and Cost Control
3 class hrs/wk, 3 cr.

Covers principles and practices of food sanitation and cost control for managers. Explains cost control and sanitation processes from purchasing through receiving, storage, issuing, preparing and serving. Includes inventory control techniques and yield cost analysis. **F, Sp**

HTM109 Front Desk Operations
3 class hrs/wk, 3 cr.

Focuses on specific functions of the front desk 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 development and maintenance of databases of guest information, coordination of guest services, and ensuring guest satisfaction. **F, Sp**

HTM112 Bed and Breakfast Operations
3 class hrs/wk, 3 cr.

Explores the bed and breakfast and innkeeping industry. Discusses purchasing, owning, and operating a successful inn. Includes design, financing, operations, food service and sanitation, marketing, and governmental regulations. **Offered as needed.**

HTM114 Travel Destination Geography 1
3 class hrs/wk, 3 cr.

Focuses on the geographical areas of North, Central, and South America. Provides in-depth geographical, political, and cultural information on the countries emphasized. **F**

HTM115 Travel Destination Geography 2
3 class hrs/wk, 3 cr.

Focuses on the geography of Europe with emphasis on the United Kingdom and Ireland. Provides in-depth geographical, political, and cultural data on the countries emphasized. **W**

HTM116 Travel Destination Geography 3
3 class hrs/wk, 3 cr.

Focuses on the geography of Africa, the Middle East, India, and the South Pacific. Provides in-depth geographical, political, and cultural data on the countries emphasized. **Sp**

HTM119 Introduction to Casino Management
3 class hrs/wk, 3 cr.

Provides an overview of casino management and casino hotel operations. Includes the history and culture of gaming, gaming trends in the United States, casino hotel organizational structure, government regulation, casino games, and Indian casinos. Covers the practices and problems associated with casino management, including staffing, controls, credit, security, marketing, and entertainment. **Offered as needed.**

HTM123 Global Distribution Systems
3 class hrs/wk, 3 cr.

Surveys travel agency computer reservation systems: (CRS-Apollo, Sabre, Worldspan, PARS). Includes use of reservation system simulations to identify flights, auto rentals, lodging, and associated travel information. Emphasizes problem solving in the workplace. **W**

HTM124 Catering and Banquet Operations
3 class hrs/wk, 3 cr.

Studies on-premise catering facilities, including operations, sales, and relationships with outside vendors and related departments and industries. Emphasizes logistical operations and seeking and servicing various market segments. **F**

HTM125 Special Events Planning
3 class hrs/wk, 3 cr.

Covers the management and operational activities required for successful coordination of special events and weddings. Focuses on research, design, planning, coordination stages, and career opportunities within the special event and wedding industry. **Sp**

HTM126 Meeting and Convention Management
3 class hrs/wk, 3 cr.

Focuses on the management and operations of the conventions and meeting market in the hospitality and tourism industry. Covers convention market salesmanship, promotional activities, negotiations for meeting services, and convention servicing. Incorporates facilities, technology, and media. **W**

HTM127 Selling in Hospitality and Tourism
3 class hrs/wk, 3 cr.

Focuses on learning how to sell services for a hospitality or tourism based business and how consumer use of the Internet impacts purchase decisions. Analyzes the different selling strategies used by the industry. **F**

HTM130 Beverage Management
3 class hrs/wk, 3 cr.

Focuses on cost control, inventory management, and pricing systems required for restaurant and food and beverage operations. Discusses customer demographic shifts, beverage trends, and the importance of responsible alcohol beverage service. Covers wine and beer appreciation including regional differences, production methods, and upscale product features of distillates. Incorporates beverage mixology, marketing, and profit management. **F, Sp**

HTM132 Menu Planning
3 class hrs/wk, 3 cr.

Covers principles of planning a menu from concept development and design mechanics to menu pricing and marketing issues. Addresses current foodservice industry needs, including operations, sanitation, nutrition concerns, design mechanics, and increasing sales through the menu. **F, Sp**

HTM133 Strategic Issues in Destination Management
3 class hrs/wk, 3 cr.

Provides an overview of long-range strategic issues in community-based tourism. Focuses on strengths, weaknesses, opportunities, and threats in the international tourism industry. Discusses role of destination management organizations in areas of strategic planning, marketing product development, and community visioning. Explores concept of "destination team" and impact on participants and funding mechanisms. **Sp**

HTM134 Destination Marketing
3 class hrs/wk, 3 cr.

Focuses on destination's mandate requiring strategic and effective marketing. Covers current trends in travel purchases, research, and evaluation. Presents best practices in destination marketing covering strategic marketing in tourism, destination image and positioning, promotional programs, and public relations for leisure, convention, and incentive travel markets. **F**

HTM135 Destination Leadership
3 class hrs/wk, 3 cr.

Presents information, tools, and techniques to provide strategic human resource and fiscal leadership for destination management organizations (DMOs). Focuses on developing work teams and creation of information and financial management systems. Discusses leadership styles for diverse stakeholder groups such as volunteers, paid staff, elected officials, and community leaders. **W**

HTM136 Tour Operations and Marketing
3 class hrs/wk, 3 cr.

Covers tour management concepts and principles. Provides understanding of relationships of group travel to tourism industry, including economic, geographic, technological, political, and social forces. Examines the specific knowledge and skills required by tour operators, suppliers, and representatives of destination marketing organizations. Reviews current best practices in tour marketing. Analyzes industry distribution channels and package strategies. **Sp**

HTM137 Tourism Transportation: Cruise, Air, Rail
3 class hrs/wk, 3 cr.

Provides understanding of relationships between transportation and tourism industries. Defines tourist transportation systems incorporating traveler needs into management and planning. Examines key issues which transport providers, decision-makers, managers, and tourists face in the use, operation, and management of tourist transportation. **W**

HTM144 Practicum 1—Hospitality and Tourism Management
1 class and 9 lab hrs/wk, 4 cr.

Provides on-site experience in a hospitality or tourism industry setting integrating field and classroom experience related to meeting program outcomes and career goals. **Prerequisite:** third-term standing in Hospitality or Tourism and Travel certificate with a grade of "C" or better in each of the required HTM courses and consent of instructor or program advisor. **Sp, Su**

HTM145 Practicum 2—Hospitality and Tourism Management
1 class and 24 lab hrs/wk, 9 cr.

Provides on-site experience in a hospitality or tourism industry setting integrating field and classroom experience related to meeting program outcomes and career goals. **Prerequisite:** fifth-term standing in Hospitality or Tourism and Travel degree with a grade of "C" or better in each of the required HTM courses and consent of instructor or program advisor. **Su**

HTM280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

HTM290 Hospitality and Tourism Management Capstone
3 class hrs/wk, 3 cr.

Reviews and refines essential skills needed for success in the hospitality and tourism industry. Covers competency in creative problem solving, critical thinking, effective oral and written communication, ethical reasoning, quantitative analyses, and the use of technology. Uses an industry simulation program to plan and implement hotel operational strategy and tactics and coordinate hospitality and tourism components in a single, inter-related system to service visitors in destination. **Prerequisite:** second-year standing in Hospitality Management or Tourism and Travel Management programs. **W, Su**

HUM
Humanities

HUM106 British Life and Culture
3 class hrs/wk, 3 cr.

Offers a broad overview of British culture and civilization. Examines traditions and instituions to help understand the British way of life in the Twentieth 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. **Offered as needed.**

HUM220 Resisting Empire: Latin American Revolutions
3 class hrs/wk, 3 cr.

Focuses on the culture, ideas, and actions that typify revolutionary movements in Latin America since the dawning of the twentieth century. Examines a Latin American emphasis against the backdrop of empire as manifested in the actions of local elites, first-world countries—especially the United States—and worldwide capitalist structures. **Offered as needed.**

HUM230 City, Town, Country: An Investigation in Words and Images
3 class hrs/wk, 3 cr.

Emphasizes the development of the knowledge and skills necessary to explore, research, create, and publish a work on a topic related to the sense of place. Course may be repeated for a maximum of six credits. **Offered as needed.**

HUM251 Concept of Self: Classical Greece
3 class hrs/wk, 3 cr.

Focuses on classical Greek culture. Examines the arts, broadly conceived (tragedy, philosophy, sculpture, poetry, drama, and historiography), sketches the developing Greek conception of what it is to be human. **Offered as needed.**

HUM252 Concept of Self: Renaissance Europe
3 class hrs/wk, 3 cr.

Explores the culture of Renaissance Europe. Examines its art, tragedy, philosophy, and literature, sketches the developing Renaissance conception of what it is to be human. **Offered as needed.**

HUM259 Death and Dying
3 class hrs/wk, 3 cr.

Introduces the study of death and dying. Students will compare and contrast historical and modern attitudes toward death and dying found in literature, rituals, religion, philosophy, film, medico-legal issues, and in the process clarify their attitudes and values. **F, W, Sp**

JNL
Journalism

JNL215 Publications Lab
4 lab hrs/wk, 2 cr.

Applies reporting skills, photojournalism, and production principles through work on the student newspaper. **Prerequisite:** JNL224 or consent of instructor. Course may be repeated for a maximum of twelve credits. **F, W, Sp**

JNL216 Newswriting
3 class hrs/wk, 3 cr.

Focuses on gathering and processing the news. Includes specific treatments on lede formats, organizing and constructing news stories, developing a news writing style, and both straight and feature materials. Covers editorial and column writing with considerable time devoted to the craft of writing. **Prerequisite:** familiarity with keyboarding. **F**

JNL217 Feature Writing
3 class hrs/wk, 3 cr.

Emphasizes feature, in-depth, and investigative reporting beyond gathering and processing of news. Requires presenting material for possible publication in the student newspaper. **Prerequisite:** JNL216 or consent of instructor. **W**

JNL224 Introduction to Mass Communications
3 class hrs/wk, 3 cr.

Survey of communication media with emphasis on historical, social, technological, and economic considerations in mass media in the United States. Examines important current legal and ethical dilemmas facing journalists. Recommended for journalism majors; open to others. **F, Sp**

JNL225 Advertising/Public Relations
3 class hrs/wk, 3 cr.

Introduces the communications and production aspects of advertising and public relations. Combines criticism and analysis with assignments in copy writing, design, and marketing strategy. Provides hands-on experience through work on the weekly student newspaper. **W**

JNL226 Editing/Design
3 class hrs/wk, 3 cr.

Provides a working example of newspaper management in relation to editing, production, and design procedures. Includes various printing processes, typography, page design, style, photo editing, and headline writing. Provides opportunity to obtain hands-on experience through work on the weekly student newspaper. **Prerequisite:** JNL224 or consent of instructor. **Sp**

JNL227 Media Ethics
3 class hrs/wk, 3 cr.

Provides an introduction to journalism ethics, emphasizing the First Amendment, the philosophical framework, corporate social responsibility, the legal system, the changing face of the media, editors, and readers in the debate process, and issues of taste versus responsibility. Examines important dilemmas facing print and broadcast journalists, using real-life examples of legal challenges to the system by the courts and various state and federal law-making bodies, and the changing standards of the public at large. **W**

JNL228 Media and Motion Pictures
3 class hrs/wk, 3 cr.

Examines significant historical events, the media coverage generated at the time, and eventual film depiction. Emphasizes individuals or issues that have changed laws, conventions, mores, rules, life in general, and especially the way the media operates, ranging from McCarthyism to Watergate, the Cold War to presidential politics. Evaluates legal and ethical dilemmas. Recommended for journalism majors but open to all. **Prerequisite:** JNL224 or consent of instructor. **F, Sp**

JPN
Japanese

JPN101, 102, 103 First Year Japanese, Terms 1, 2, 3
4 class hrs/wk, 4 cr. each

Introduces the Japanese language (including listening, speaking, reading, and writing) and Japanese culture (including geography, customs, daily life, heritage, and literature), facilitated by the study of vocabulary, grammar, short readings, and guided conversation. Instructor and students use Japanese as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. JPN102: JPN101 or one year of high school Japanese or consent of instructor; JPN103: JPN102 or two years of high school Japanese or consent of instructor. JPN101, **F;** JPN102, **W;** JPN103, **Sp**

JPN201, 202, 203 Second Year Japanese, Terms 1, 2, 3
4 class hrs/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 Japanese grammar and vocabulary, as well as a broadening of the student's understanding of Japanese culture. Instructor and students use Japanese as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. JPN201: JPN103 or three years of high school Japanese or consent of instructor; JPN202: JPN201 or consent of instructor; JPN203: JPN202 or consent of instructor. JPN201, **F;** JPN202, **W;** JPN203, **S**

Job Search
See FE—Field Experience.

Literature
See ENG—English.

Management
See BA—Business Administration.

Mechanical Design
See DRF—Drafting Technology.

MED
Medical Office Assisting
See also AH—Allied Health and HM—Health Services Management.

MED124 Medical Assisting, Basic Procedures
3 class and 3 lab hrs/wk, 4 cr.

Surveys 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:** HM120 or concurrent enrollment. **F**

MED125 Medical Assisting, Advanced Procedures
4 class and 3 lab hrs/wk, 5 cr.

Surveys advanced clinical/laboratory knowledge and skills required of the medical office assistant. Emphasizes electrocardiography, hematology, urinalysis, microbiology, 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. Designed to provide individual and small group assistance to students for skill development. **Prerequisite:** second-term standing in the Medical Office Assisting program with a grade of "C" or better in all required courses. **W**

MED130 Medical Assisting Practice
16 lab hrs/wk, 5 cr.

Assigns students to health care agencies to apply learned medical assisting methods, procedures, and techniques in a health care setting. **Prerequisite:** successful completion of term one and term two of the Medical Assisting program with a grade of "C" or better in all required courses. Current Standard First Aid card and Health Care Provider CPR card on file with the instructor. **Sp**

MED131 Medical Assisting Seminar
1 class hr/wk, 1 cr.

Studies the relationship of practicum in a health care setting with theoretical course content, as well as its application to career and personal goals. **Prerequisite:** concurrent enrollment in MED130. **Sp**

MED280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

MT
Industrial

MT110 Microelectronics
3 class hrs/wk, 3 cr.

Surveys the field of microelectronics. Covers an overview of the technology and manufacturing processes used and the economic and social impacts. Applies to students considering a career in Oregon's high growth semiconductor industry. **Prerequisite:** MTH070, or High School Algebra 2, or consent of instructor.

MT201A Introduction to MEMS
1 class hr/wk, 1 cr.
Presents micro-electromechanical (MEM) devices and their applications. Explains common manufacture techniques and processes for such devices. **Prerequisite:** concurrent enrollment in MT110 or consent of instructor. **F, W**

MT201B MEMS Design 1
1 class hr/wk, 1 cr.
Covers basic design and layout considerations of micro-electromechanical devices. Introduces students to Sandia National Labs' SUMMiT V software including 2D and 3D visualization tools. Requires access to AutoCAD 2002 or later. **Prerequisite:** MT201A and DRF130 or consent of instructor. **W, Sp**

MT201C MEMS Design 2
1 class and 3 lab hrs/wk, 2 cr.
Covers advanced design and layout considerations of micro-electromechanical devices. Uses Sandia National Labs' SUMMiT V software including 2D and 3D visualization tools to design and layout complex devices on a reticule. Requires access to AutoCAD 2002 or later. **Prerequisite:** MT201B. **Sp**

MT221 Fluid and Vacuum Systems
3 class and 3 lab hrs/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. **Prerequisite:** MTH070, High School Algebra 2, or consent of instructor. **Sp**

MT223 High Vacuum Technology
3 class hrs/wk, 3 cr.
Addresses high vacuum concepts, theory, and the various types of vacuum systems. Includes vacuum pumps, seals, gauges, valves, power supplies, leak-detecting equipment, and related hardware. Examines the setup, operation, troubleshooting, and monitoring of vacuum systems. **Prerequisite:** MTH070, or High School Algebra 2, or consent of instructor. **Sp**

MT227A Pneumatics and Hydraulics Fundamentals
2 class hrs and 3 lab hrs/wk, 3 cr.
Covers theory, operation, and application of hydraulic and pneumatic systems. Includes diagnosis, service, maintenance repair of pneumatic components and systems. **Prerequisite:** MTH070, High School Algebra 2, or consent of instructor. **Sp**

MT250 CMOS 1
2 class and 6 lab hrs/wk, 4 cr.
Covers entry-level integrated circuit design in CMOS (Complimentary Metal Oxide Silicone) technology. Emphasizes creating the layout for IC circuits based on logic and schematic diagrams. **Prerequisite:** DRF101 or DRF130 or consent of instructor; and MT110. **F, W**

MT251 CMOS 2
1 class and 6 lab hrs/wk, 3 cr.
Covers advanced concepts of Integrated Circuit Mask design using specialized CAD tools to produce integrated circuit layout projects. **Prerequisite:** MT250 or consent of instructor. **W, Sp**

MT252 CMOS 3
1 class and 6 lab hrs/wk, 3 cr.
Focuses on the design and layout of masks for IC Circuits. Covers how to interpret schematics, create a floor plan, and divide responsibility among team members to produce the layout for IC subsystems. **Prerequisite:** MT251 or consent of instructor. **Sp**

MTH
Mathematics

MTH020 Basic Mathematics
4 class hrs/wk, 4 cr.
Includes fundamentals of addition, subtraction, multiplication, and division in problems involving whole numbers, fractions, decimals, ratios, percentages, and geometric measurements and formulas. Emphasizes analysis and solution of application problems. **F, W, Sp, Su**

MTH052 Introduction to Algebra and Geometry
3 class hrs/wk, 3 cr.
Introduces basic algebraic, geometric, and two-dimensional graphing techniques and applications. The course is designed primarily for students in specific vocational or technical programs. **Prerequisite:** grade C or better in MTH020 or consent of instructor. **F, W, Sp, Su**

MTH053 Introduction to Trigonometry with Geometry
3 class hrs/wk, 3 cr.
Introduces basic trigonometric and geometric techniques beyond those covered in MTH052, as well as applications of these techniques. Includes Pythagorean theorem, similar triangles, volumes of common geometric figures, and right and oblique triangle trigonometry. **Prerequisite:** grade of "C" or better in MTH052 or equivalent. **F, W, Sp, Su**

MTH060 Introductory Algebra
4 class hrs/wk, 4 cr.
Gives students with no algebra background a strong, fundamental background in beginning algebra. Covers signed numbers, elementary algebraic expression manipulation, and equation solving. Describes concepts using verbal, numerical, graphic, and symbolic forms. Scientific calculator required. **Prerequisite:** grade of "C" or better in MTH020 or equivalent. **F, W, Sp, Su**

MTH062 Business Applications Using Mathematics
4 class hrs/wk, 4 cr.
Covers application of mathematics to the world of business. Includes applications involving securities, profit distribution, overhead allocation, business statistics, simple interest, notes and bank discounts, compound interest, multiple payment plans, annuities, depreciation, single discount equivalents, markup, markdown, inventory valuation, and financial statement analysis with ratios. Uses manual, hand-held calculator, and spreadsheet computational tools. **Prerequisite:** grade of "C" or better in MTH060 or higher or equivalent; and CIS101 or CA118B1 or CIS125E or equivalent; or consent of instructor. **F, W, Sp, Su**

MTH070 Elementary Algebra
4 class hrs/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 graphing calculator as well as traditional approaches. **Prerequisite:** grade of "C" or better in MTH060 or equivalent. **F, W, Sp, Su**

MTH075 Applied Geometry
1 class hr/wk, 1 cr.
Covers the basic concepts of points, lines, planes, angles, triangles, congruence, similarity, and polygons, all from an intuitive point of view. Uses applied problems involving these concepts. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** grade of "C" or better in MTH060 or equivalent. **F, W, Sp, Su**

MTH076 Applied Geometry
1 class hr/wk, 1 cr.
Presents basic concepts of perimeter, circumference, arc length, central and inscribed angles, areas of polygons, areas of circles and sectors, surface area of solids, and volumes of various solids. Includes applied problems involving these figures. Offers an individualized course that may be started and completed any time during the term. **Prerequisite:** grade of "C" or better in MTH075 or equivalent. **F, W, Sp, Su**

MTH078 Applied Trigonometry
1 class hr/wk, 1 cr.
Covers definitions of the trigonometric ratios of sine, cosine, and tangent, and how they apply to right triangles. Includes applications involving right triangles. Reviews the concepts of angles, triangle similarity, and the Pythagorean theorem. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** grade of "C" or better in MTH070, MTH075, and MTH076 or equivalent. **F, W, Sp, Su**

MTH079 Applied Trigonometry
1 class hr/wk, 1 cr.
Covers trigonometric ratios of obtuse angles, law of sines, law of cosines, vectors, and radian measure. Includes applied problems involving these concepts. Offers an individualized course that may be started and completed at any time during the term. **Prerequisite:** grade of "C" or better in MTH078 or equivalent. **F, W, Sp, Su**

MTH081 Technical Mathematics 1
4 class hrs/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, and solutions of linear, quadratic and rational equations. Emphasizes using mathematics and technology to solve applied problems. **Prerequisite:** grade of "C" or better in MTH070 or equivalent. **F, W**

MTH082 Technical Mathematics 2
4 class hrs/wk, 4 cr.
Offers the second course of a two-term technical mathematics sequence designed to meet the needs of technology students from various disciplines and provide the mathematical skills for solving applied problems in the technical fields of engineering, drafting, mechanical design, forestry, and electronics. Covers trigonometric functions, oblique triangles, vectors, solutions of trigonometric equations and graphing of trigonometric functions, exponents and radicals, complex numbers, logarithmic and exponential functions, and their applications. **Prerequisite:** grade of "C" or better in MTH081. **W**

MTH095 Intermediate Algebra
4 class hrs/wk, 4 cr.
Introduces the study of functions with emphasis on power, linear, quadratic, exponential, and rational functions. Uses a variety of methods including logarithms to solve equations. **Prerequisite:** grade of "C" or better in MTH070 or equivalent. **F, W, Sp, Su**

MTH105 Introduction to Contemporary Mathematics
4 class hrs/wk, 4 cr.
Surveys the application of mathematics as a problem-solving tool in the real world. Includes business, consumer, ecology, and city planning applications using probability, statistics, geometry, graph theory, linear programming, and game theory. **Prerequisite:** grade of "C" or better in MTH095 or equivalent. **F, W, Sp, Su**

MTH111 College Algebra
5 class hrs/wk, 5 cr.
Studies functions and related inequalities using a graphing calculator. Focuses on polynomial, rational, exponential, logarithmic, and related piecewise defined functions. Includes a study of the complex number system, the algebra of functions, and the applications of functions in sequences and series. High-order linear systems will be solved using a calculator. **Prerequisite:** grade of "C" or better in High School Algebra 2 or MTH095. **F, W, Sp, Su**

MTH112 Trigonometry
5 class hrs/wk, 5 cr.
Offers a pre-calculus course covering trigonometric functions. Includes conic sections, vectors, parametric equations, and polar coordinates. Emphasizes applications and the use of a graphing calculator. **Prerequisite:** grade of "C" or better in MTH111 or MTH075 (or High School Geometry). **F, W, Sp, Su**

MTH211 Foundations of Elementary Mathematics
4 class hrs/wk, 4 cr.
Introduces the first course of a three-course 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 conceptual understanding **Prerequisite:** grade of "C" or better in MTH095 or equivalent. **F**

MTH212 Foundations of Elementary Mathematics
4 class hrs/wk, 4 cr.
Offers the second course of a mathematics sequence designed for prospective elementary teachers. Covers basic concepts about rational numbers, real numbers, statistics, and probability. Uses manipulatives to deepen conceptual understanding **Prerequisite:** grade of "C" or better in MTH211 or equivalent. **W**

MTH213 Foundations of Elementary Mathematics
4 class hrs/wk, 4 cr.
Presents the third course in a mathematics sequence designed for prospective elementary teachers. Covers topics in geometry. Utilizes computer programs and manipulatives to deepen conceptual understanding. **Prerequisite:** grade of "C" or better in MTH212 or equivalent. **Sp**

MTH231 Discrete Mathematics
4 class hrs/wk, 4 cr.
Introduces logic, sets, functions, algorithms, matrices, graph theory, and trees, with applications. Offers the first course for computer science and mathematics majors. **Prerequisite:** grade of "C" or better in MTH111 or equivalent. **W**

MTH232 Discrete Mathematics
4 class hrs/wk, 4 cr.
Applies fundamentals from MTH231 to tree theory, advanced counting techniques, relations, and Boolean algebra. Offers a second course for computer science and mathematics majors. **Prerequisite:** grade of "C" or better in MTH231 or equivalent. **Sp**

MTH241 Elementary Calculus
4 class hrs/wk, 4 cr.
Emphasizes techniques of calculus in applied problem solving. A one-term terminal course with an intuitive approach to differential and integral calculus. Intended for non-math majors. **Prerequisite:** grade of "C" or better in MTH111 or equivalent. **F, W, Sp**

MTH243 Probability and Statistics 1
4 class hrs/wk, 4 cr.
Introduces descriptive statistics. Covers data analysis, regression and correlation, counting and probability, common probability distributions, sampling, confidence intervals, and one-sample hypothesis testing. **Prerequisite:** grade of "C" or better in MTH111 or equivalent. **F, W, Sp, Su**

MTH244 Probability and Statistics 2
4 class hrs/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, and one-way and two-way analysis of variance. **Prerequisite:** grade of "C" or better in MTH243 or equivalent. **Sp**

MTH251 Differential Calculus
5 class hrs/wk, 5 cr.
Prepares students for further study in mathematics, sciences, engineering, and other technical areas. Covers rates of change and derivatives with applications; the definite integral in modeling sums of products such as distance, area, and average function value; and an intuitive development of the fundamental theorem of calculus. Graphing calculator required. **Prerequisite:** grade of "C" or better in MTH112 or equivalent. **F, W, Sp, Su**

MTH252 Integral Calculus
5 class hrs/wk, 5 cr.
Covers applications of definite integrals, constructing functions from their rates of change and techniques of integration. Introduces differential equations. Graphing calculator required. **Prerequisite:** grade of "C" or better in MTH251 or equivalent. **F, W, Sp**

MTH253 Series Calculus and Linear Algebra
4 class hrs/wk, 4 cr.
Combines topics from linear algebra and infinite series. Includes Taylor and Fourier Series with applications and systems applications using determinants and matrices. Graphing calculator required. **Prerequisite:** grade of "C" or better in MTH252 or equivalent. **W, Sp**

MTH254 Vector Calculus 1
4 class hrs/wk, 4 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:** grade of "C" or better in MTH252 or equivalent. **F, Sp**

MTH255 Vector Calculus 2
4 class hrs/wk, 4 cr.
Explores vector fields, motion in space, Green's theorem, Stokes' theorem, the divergence theorem, surface areas, and line and surface integrals, along with their related topics, including divergence, curl, and flux. Offers the second course in multivariable calculus. **Prerequisite:** grade of "C" or better in MTH254 or equivalent. **W**

MTH256 Applied Differential Equations
4 class hrs/wk, 4 cr.
Covers solutions of linear and first-order, non-linear differential equations. Includes Laplace transforms and convolutions. Graphing calculator required. **Prerequisite:** grade of "C" or better in MTH254 or equivalent. **Sp**

MUP and MUS

Music

MUP100 Individual Lessons
1 class hr/wk, 1 cr.
Covers pedagogy of the instrument being studied, including fundamentals of music, reading and theory, beneficial practice habits, repertoire for the instrument, interpretation, and performance techniques. Course may be repeated for a maximum of nine credits per instrument. **F, W, Sp**

MUP105 Jazz Ensemble
3 lab hrs/wk, 1 cr.
Offers applied study and performance on musical instruments played in ensemble or solo formats. **Prerequisite:** Two years instruction on an instrument or an audition. **Offered as needed.**

MUP174 Voice
1 class hr/wk, 1 cr.
Gives individual instruction in fundamentals of theory, melodic contouring and phrasing, vocal production, and body mechanics incorporated into basic singing skills and music reading. Open to students of all levels and interests. May be repeated for a maximum of nine credits. **F, W, Sp**

MUS105 Music Appreciation: Introduction to Rock Music
3 class hrs/wk, 3 cr.
Examines the relationship between rock music and society, and emphasizes the musical and lyrical significance of rock music as contemporary social commentary. **Offered as needed.**

MUS161 Music Appreciation
3 class hrs/wk, 3 cr.
Highlights 17th to 20th century instrumental and vocal music and the growth of the orchestra. Covers acknowledged masters such as Mozart, Haydn, and Beethoven. **Offered as needed.**

MUS197 Chorus
4 lab hrs/wk, 2 cr.
Offers singing in a choral ensemble, in a mixed voice (soprano, alto, tenor, bass) chorus. Includes proper singing habits, basic musical terms and expressions, rehearsal techniques procedures, and exposure to a wide variety of music literature, culminating in a final performance. Course may be repeated for a maximum of eight credits. **Prerequisite:** Previous experience singing with a school, civic, or church choir is helpful but not mandatory. **F, W, Sp**

MUS201 Introduction to Music and Its Literature
3 class hrs/wk, 3 cr.
Focuses on the music of the 17th and 18th centuries, including early vocal music, the origins of opera and sacred music, and the early instrumental forms of music that led to the classical symphony of Haydn, Mozart, and Beethoven. **F**

MUS202 Introduction to Music and Its Literature
3 class hrs/wk, 3 cr.
Focuses on the l8th and l9th centuries, including Beethoven and his Ninth Symphony; the growth of the orchestra and the music written for it; the emergence of the piano as an important musical and sociological factor; the new dimensions of song and opera. **W**

MUS203 Introduction to Music and Its Literature
3 class hrs/wk, 3 cr.
Focuses on the music of the 20th century, including Impressionism, Expressionism, Atonality, Neoclassicism, electronic music, random and chance music, and minimalism. **Sp**

MUS205 Introduction to Jazz History
3 class hrs/wk, 3 cr.
Covers popular music traditions of the 20th century, including musical theater, jazz, and rock and roll. Explores jazz music with an emphasis on the historical and social perspectives of jazz as a U.S. American cultural phenomenon. **Offered as needed.**

NET

Network Technology
See also MT—Industrial.

NET120 Network Media Fundamentals
3 class and 2 lab hrs/wk, 4 cr.
Focuses on types of transmission media used in computer network environments. Covers transmission line theory and discusses the characteristics of coaxial cables, twisted-pair cables, and single- and multi-mode fiber. Compares the specification for cables and connectors used in networking. **Prerequisite:** ELT100 or consent of instructor. **W**

NET123 Network Computer Operating Systems
3 class and 2 lab hrs/wk, 4 cr.
Introduces network computer operating systems using the command line. Includes hands-on work with network computer operating systems in a structured lab environment. **Prerequisite:** CIS101 or equivalent experience. **F**

NET125 IT-E: Computer Hardware and Software
3 class and 3 lab hrs/wk, 4 cr.
Presents the first course of a Cisco Academy two-part sequence in IT Essentials for networking technology instructors and students preparing for industry certification. Provides in-depth coverage of computer hardware and software systems, with associated peripherals. Covers interface methods of different hardware and software systems. Includes file systems, user permissions and file security. Introduces simple computer networking methods and discusses related security issues. Discusses technical support methods, systems design, maintenance, and troubleshooting techniques, with industry recommended best practice. **Prerequisite:** CIS140B or NET123, or consent of instructor. **W, Su**

NET125F IT-E: Computer Hardware and Software Fast Track
2 class and 2 lab hrs/wk, 3 cr.
Offers a course designed to meet the fast-track instructor certification requirements for Cisco Academy instructors. Provides an overview of computer hardware and software systems, with associated peripherals. Reviews interface requirements of different hardware and software systems. Includes discussion of technical support methods, systems design, maintenance, troubleshooting techniques, and recommended best practice. **Prerequisite:** NET123 or consent of instructor. **Offered as needed.**

NET151 Networking Essentials
3 class and 4 lab hrs/wk, 5 cr.
Provides the first course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Provides classroom and laboratory experience in current networking technology and includes network terminology, protocols, network standards, LANs, WANs, OSI model, cabling, cabling tools, safety, network topology, and IP addressing. **Prerequisite:** CIS101 or consent of instructor. **F**

NET152 Network Router Configurations
3 class and 4 lab hrs/wk, 5 cr.
Provides the second course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology and includes network terminology and protocols, LANs, network topology and IP addressing, routers, router programming, and application of routing and protocols. **Prerequisite:** NET151. **F**

NET153 LANs and Internetwork Design
3 class and 4 lab hrs/wk, 5 cr.
Provides the third course of a four-part sequence in a Cisco curriculum directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology that includes LAN segmentation using bridges, routers, and switches to control network traffic. **Prerequisite:** NET152. **W**

NET154 WAN Design
3 class and 4 lab hrs/wk, 5 cr.
Provides the fourth course of a four-part sequence directed toward the Cisco Certified Network Associate Certificate (CCNA). Introduces WAN services. Covers ISDN, ATM, frame relay, and dial-up services. **Prerequisite:** NET153. **Sp**

NET171 Fundamentals of Wireless LANs
3 class and 4 lab hrs/wk, 5 cr.
Introduces the fundamentals of wireless LANs. Focuses on 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: NET152, equivalent experience, or consent of instructor. **Sp**

NET251 Advanced Routing Configuration
3 class and 4 lab hrs/wk, 5 cr.
Provides the first course of a four-part sequence in the Cisco Certified Network Professional (CCNP) curriculum. Provides classroom and advanced laboratory experience in current networking technology. Focuses on design issues related to complex routed LANs and WANs. **Prerequisite:** NET154 or consent of instructor. **F**

NET252 Remote—Access Networks
3 class and 4 lab hrs/wk, 5 cr.
Presents the second course of a four-part sequence in the Cisco Certified Network Professional (CCNP) certification. Provides advanced experience in networking design. Focuses on installation, configuration, and troubleshooting of complex routed LANs, routed WANs, switched networks, and dial access services. **Prerequisite:** NET251 or consent of instructor. **F**

NET253 Multi-Layer Switching
3 class and 4 lab hrs/wk, 5 cr.
Offers the third of a four-part sequence in the Cisco Certified Network Professional (CCNP) certification. Provides advanced experience in switched multi-layer network design. Focuses on designing, installing, configuring, and troubleshooting of complex switched networks. **Prerequisite:** NET252 or consent of instructor. **W**

NET254 Network Troubleshooting
3 class and 4 lab hrs/wk, 5 cr.
Continues the fourth course of a four-part sequence in the Cisco Certified Network Professional (CCNP) certification. Provides advanced experience troubleshooting networks. Focuses on problem isolation and use of troubleshooting tools. **Prerequisite:** NET253 or consent of instructor. **Sp**

NET261 Fundamentals of Network Security
3 class and 4 lab hrs/wk, 5 cr.
Explains network security processes and equipment with a hands-on emphasis. Covers security policy design and management; security technologies, solutionss and products; security appliance firewalls and secure router design; AAA and VPN implementation. Intended for people currently employed in the computer industry or computer technology instructors. **Prerequisite:** NET154 or current CCNA certification or consent of instructor. **W**

NET271 IP Telephony
3 class and 3 lab hrs/wk, 4 cr.
Introduces Cisco IP Telephony, a converged voice and data network. Includes the challenges faced by these different technologies. Covers Voice over IP (VoIP) and Quality of Service (QoS) concepts as they apply to the Cisco CallManager Express (CME) environment. **Offered as needed.**

NET281 Networks for Educators 1
3 class and 4 lab hrs/wk, 5 cr.
Provides the first course in a four-part sequence directed toward Cisco Certified Network Associate Certification (CCNA). Covers the history and fundamentals of computer networking, both software and hardware. Studies local, wide-area, and global networks; small to medium size networks will be designed, built, and maintained. Discusses issues related to teaching networking concepts. Covers networking fundamentals, ISU/OSI model, and TCP/IP protocols. **Prerequisite:** one year experience in technical instruction. **Offered as needed.**

NET282 Networks for Educators 2
3 class and 4 lab hrs/wk, 5 cr.
Provides the second course in a four-part sequence directed toward Cisco Certified Network Associate Certification (CCNA). Covers the history and fundamentals of computer networking, both software and hardware. Studies local, wide-area, and global networks; small to medium size networks will be designed, built, and maintained. Discusses issues related to teaching networking concepts. Includes router fundamentals and network topology.
Prerequisite: NET281. **Offered as needed.**

NET283 Networks for Educators 3
3 class and 4 lab hrs/wk, 5 cr.
Provides the third course in a four-part sequence directed toward the Cisco Certified Network Associate Certification (CCNA). Emphasizes experience in current networking technology that includes LAN segmentation using bridges, routers, and switches to control network traffic. Designed for educators/trainers to discuss issues related to teaching networking concepts. **Prerequisite:** NET282. **Offered as needed.**

NET284 Networks for Educators 4
3 class and 4 lab hrs/wk, 5 cr.
Provides the fourth course in a four-part sequence directed toward the Cisco Certified Network Associate Certification (CCNA). Introduces WAN services. Covers ISDN, ATM, frame relay, and dial-up services. Designed for educators/trainers to discuss issues related to teaching networking concepts. **Prerequisite:** NET283. **Offered as needed.**

NET289 Advanced Network Systems and Support
3 class and 3 lab hrs/wk, 4 cr.
Serves as a capstone project class for the Network Technology program. Focuses on network systems designs, systems management, systems upgrade, troubleshooting, support, and technical issues encountered in small, medium, or large corporate IT environments. Includes: LAN switching and routing environments and LAN security, WAN connectivity and security, intranet web access for applications and documents, Internet access and company Internet web presence, integration of various network operating systems, hardware and software configurations and requirements, and support and security issues. **Prerequisite:** CIS288, NET252, concurrent enrollment in CIS286 and NET254, or consent of instructor. **Offered as needed.**

NFM

Nutrition and Food Management

NFM215 Nutrition for Foodservice and Culinary Professionals
3 class hrs/wk, 3 cr.
Focuses on nutrition as it relates to foodservice or culinary professionals. Explores the potential issues and hot topics behind dietary concerns of restaurant patrons. Emphasizes food and recipe composition. Applies nutrition concepts to creative menu planning designed to meet dietary needs. **Sp**

NFM225 Nutrition
4 class hrs/wk, 4 cr.
Covers nutrients, their sources, and body utilization to promote optimum health. Includes development of eating patterns, current dietary trends, nutrition information in mass media, and current national and international problems. **F, W, Sp, Su**

NFM240 Nutrition in the Lifecycle
3 class hrs/wk, 3 cr.
Covers the sources and utilization of nutrients to promote optimum health during each stage of life, from infancy to older age. Emphasizes nutritional concerns, health issues and metabolic disorders. Summarizes appropriate food selections.
 Prerequisite: NFM225. **W**

NUR

Nursing

NUR060 Nursing Success Strategies
3 class hrs/wk, 3 cr.
Introduces basic skills that are built upon in the nursing curriculum. Includes an overview of the Nursing program; development of study skills, math, and writing for nursing; learning styles; coping strategies; and workplace skills as they relate to the nursing curriculum. Note: Students may repeat this course once without instructor approval. **Prerequisite:** consent of instructor. **Offered as needed.**

NUR106 Fundamentals of Nursing
5 class and 12 lab hrs/wk, 9 cr.
Presents concepts and skills that lay a foundation for socialization into the nursing profession. Provides opportunities to attain the knowledge and skills necessary to promote health, prevent disease, and deliver basic nursing care to individual patients across the lifespan. **Prerequisite:** admission to the Nursing program. Clinical: Registration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is also required. **Corequisite:** BI232 and PSY201. Corequisites may be completed prior to enrollment in NUR106. **F**

NUR106A Skills Applications for NUR106
3 lab hrs/wk, 1 cr.
Provides practical application and hands-on learning for basic nursing skills, including hygiene skills, transmission-based and standard precautions, moving and positioning, transferring, administering intramuscular injections (IMs), data collection, tubes and specimens, and medication administration. **Prerequisite:** concurrent enrollment in NUR106. **F**

NUR108 Care of Acutely Ill Patients and Developing Families 1
6 class and 12 lab hrs/wk, 10 cr.
Provides opportunities to attain the knowledge and skills necessary to implement the roles of a practical nurse in providing care to acutely ill patients across the lifespan. Focuses on the care of individual patients with health problems related to the respiratory, cardiovascular, endocrine, and musculoskeletal systems. Includes pathophysiological effects, such as fluid and electrolyte imbalances and pain, and treatment modalities, such as pharmacology and surgery, associated with these health problems. Also provides opportunities to learn concepts related to the care of developing families. **Prerequisite:** NUR106. Clinical: Registration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is also required. **Corequisite:** BI233 and PSY237. Corequisites may be completed prior to enrollment in NUR108. **W**

NUR108A Skills Applications for NUR108
3 lab hrs/wk, 1 cr.
Provides practical application and hands-on learning for nursing skills, including enteral nutrition; subcutaneous injections; scrubbing, gowning and gloving; changing intravenous (IV) bags and tubing; sterile dressing changes; urinary catheterization; and medication administration. **Prerequisite:** concurrent enrollment in NUR108. **W**

NUR109 Care of Acutely Ill Patients and Developing Families 2
5 class and 15 lab hrs/wk, 10 cr.
Provides opportunities to obtain the knowledge and skills necessary to implement the roles of a practical nurse in providing care to patients across the lifespan who are acutely ill. Focuses on the care of patients with health problems related to the neurological, hematological, gastrointestinal, and genitourinary systems, as well as conditions related to cancer, mental health, infectious diseases, and complications of obstetrics. Also provides opportunities to implement the roles of a practical nurse in providing care to developing families. **Prerequisite:** NUR108. Clinical: Registration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is also required. **Corequisite:** BI234 and WR121. Corequisites may be completed prior to enrollment in NUR109. **F, Sp**

NUR109A Skills Applications for NUR109
3 lab hrs/wk, 1 cr.
Provides practical application and hands-on learning for nursing skills, including previously learned skills, converting an intravenous (IV) infusion to an intermittent device, saline flushes via an intermittent venous access device, intradermal injections, wound care, nasogastric tube insertion and removal, suctioning, and tracheostomy care. **Prerequisite:** concurrent enrollment in NUR109. **F, Sp**

NUR206 Care of Patients with Complex Health Problems
6 class and 15 lab hrs/wk, 11 cr.
Provides the foundation for practice as an associate degree registered nurse. Builds on the curriculum of the first year of the Nursing program and socializes students into the nursing roles at the registered nurse level of responsibility. Provides opportunities to learn and apply the knowledge and skills necessary to implement these roles in giving care to patients with complex physical and mental health problems. **Prerequisite:** NUR109 and Clinical. Registration must be completed and TB test results and proof of current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is also required. **Corequisite:** CIS101. Corequisite may be completed prior to enrollment in NUR206. **F, Sp**

NUR206A Skills Applications for NUR206
3 lab hrs/1k, 1 cr.
Provides practical application and hands-on learning for nursing skills, including caring for central venous access devices, focused patient assessments, chest tubes, intravenous piggyback medication administration (IVPB), patient controlled analgesia (PCA), and assisting physicians during procedures. **Prerequisite:** concurrent enrollment in NUR206. **F, Sp**

NUR208 Care of Patients in Situations of Crisis and in Community-Based Settings
5 class and 15 lab hrs/wk, 10 cr.
Provides opportunities to learn and apply the knowledge and skills necessary to implement the role of an associate degree registered nurse in providing care to patients experiencing a health-related crisis such as a critical illness, an acute exacerbation of a chronic illness, or an end-stage disease. Also provides the opportunity to gain knowledge and explore nursing practice in community-based settings. **Prerequisite:** NUR206. Clinical: Registration must be completed and TB test results and current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. **Corequisite:** Social Science elective and sociology elective. Corequisites may be completed prior to enrollment in NUR208. **W**

NUR208A Skills Applications for NUR208
3 lab hrs/wk, 1 cr.
Provides practical application and hands-on learning for nursing skills, including review of all previously learned skills, blood transfusions, intravenous (IV) push medications, and team medications. **Prerequisite:** concurrent enrollment in NUR208. **W**

NUR209 Preparation for Entry into Practice
3 class and 15 lab hrs/wk, 8 cr.
Provides opportunities to demonstrate mastery of the concepts and skills inherent in the beginning practice roles of an associate degree registered nurse. Focuses on the first-level management skills necessary for providing nursing care to groups of patients in acute or sub-acute care settings. As the culmination of the Nursing program clinical sequence, NUR209 incorporates a four-week preceptorship during which students demonstrate achievement of program outcomes. **Prerequisite:** NUR208. Clinical: Registration must be completed and TB test results and current immunizations submitted before a student is permitted in the clinical area. Current CPR certification is required. **Corequisite:** Humanities/Fine Arts/Communication elective and General Education elective. Corequisites may be completed prior to enrollment in NUR209. **Sp**

NUR220 NCLEX-RN Preparation
2 class hrs/wk, 2 cr.
Provides a comprehensive review and preparation for the National Council Licensure Examination for Registered Nurses (NCLEX-RN). Presents an opportunity for application of test taking strategies and critical analysis of NCLEX type questions through guided learning. Explores universal principles of nursing care management; maternal, child and pediatric nursing; psychiatric and mental health nursing; adult and geriatric health; and pharmacology. **Prerequisite:** successful completion of NUR208 or consent of instructor. **Offered as needed.**

NUR268 Drug Therapy and Nursing Implications
3 class hrs/wk, 3 cr.
Trains students in the knowledge and principles required for safe administration of medications in caring for patients. Provides comprehensive base for clinical application, with specific considerations for pediatrics, maternity, and geriatric patients. **Prerequisite:** RN, currently enrolled nursing student, LPN. **Offered as needed.**

NUR272 Pathophysiology for Nurses
3 class hrs/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. **Offered as needed.**

NUR280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

OC

Oceanography

OC133 Introduction to Oceanography
3 class hrs/wk, 3 cr.
Discusses four main areas of oceanography: chemical, physical, geological, and biological. Covers plate tectonics, ocean circulation, physical properties of seawater, chemical cycles, marine ecosystems, sedimentation, land and sea cycles, and climate effects. **Offered as needed.**

Photography
See ART—Art and VC—Visual Communications.

PE

Physical Education

PE131 Introduction to Physical Education
3 class hrs/wk, 3 cr.
Covers human movement as a scientific and humanistic field of study, including historical development, professional opportunities and qualifications, and leaders and major organizations in physical education and athletics. **Offered as needed.**

PE185AA,AB,AC Sports Conditioning
3 lab hrs/wk, 1 cr. each
Offers a conditioning program for specific athletic activities. Improves fitness, speed, and coordination with various protocols including plyometrics, agility, games, strength, and conditioning exercises. **F, W, Sp**

PE185BG Baseball—Advanced
3 lab hrs/wk, 1 cr.
Introduces the fundamentals of baseball. **F, W**

PE185BJ,BK,BL Basketball—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Emphasizes fundamental skills, team play, and a knowledge of the sport. **F, W, Sp**

PE185BV,BW,BX Bowling—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Presents the fundamentals, rules, and etiquette of bowling. Develops specific skills necessary for successful recreation or lifetime sports activity. **F, W, Sp, Su**

PE185CA,CB,CC Conditioning—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Offers a conditioning program designed to complement individual interests, needs, and goals. May improve some or all of the areas of physical fitness: cardiovascular, muscular, body composition, and flexibility. **F, W, Sp, Su**

PE185CD,CE,CF Correctives—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Provides the setting, assistance, and instruction for improving the fitness level of students with a physical injury or disability. **Prerequisite:** completion of health information form by physician, registered therapist, or self. **F, W, Sp**

PE185CM,CN,CP Cross Country Skiing—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Provides the opportunity to learn cross country skiing on tracked and untracked terrain. **W**

PE185DA,DB,DC Aerobics, Low-Impact—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Studies how to obtain cardiovascular and health benefits. Class activities may include any one of the following: power aerobics, step aerobics, jazz aerobics, line dancing, yoga aerobics, body sculpt, and hi/lo aerobics. **F, W, Sp, Su**

PE185DJ,DK,DL Dance/Modern—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Studies a variety of styles within the modern dance realm. Introduces the concepts of space, time, and force; explores how each of these elements plays a part in movement and dance technique. Focuses on correct alignment, efficient and proper use of the body; includes axial and locomotor movement. Incorporates increased flexibility, coordination, balance, and muscular strength in warm-up and cool-down periods. **F, W, Sp**

PE185DM,DN,DO Aerobics—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers how to increase cardiovascular and muscular endurance through dance routines or step movements and to develop muscular strength and flexibility through stretching, isometric, and isotonic routines. Includes information on proper nutrition. **F, W, Sp, Su**

PE185DR,DS,DT Ballroom Dance—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Prepares students to perform basic dance steps and common variations of the swing, foxtrot, waltz, and cha cha. Beginning class covers basics. Intermediate and advanced classes cover progressively more difficult variations. **F, W, Sp**

PE185FD,FE,FF Soccer—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers the fundamentals of soccer and basic conditioning. **F, W, Sp**

PE185GJ,GK,GL Golf—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Offers training for the beginning to advanced golfer. Emphasizes the development of basic swing fundamentals. Students who have mastered the fundamentals will be allowed optional playing days. Also emphasizes proper golf etiquette, rules, and playing procedures. **F, W, Sp, Su**

PE185JA,JB,JC Dance, Jazz—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers basic warm-ups at the barre, stretching, isolations, and floor movement with emphasis on technique, alignment, and contemporary jazz style. **F, W, Sp**

PE185JJ,JK,JL Jogging—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers jogging to gain and maintain cardiovascular fitness. **F, W, Sp**

PE185KA,KB,KC Karate—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Develops the basic language and movements of martial arts. **F, W, Sp, Su**

PE185PA,PB,PC Personal Defense—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Introduces preventive measures and basic moves related to personal defense. **Offered as needed.**

PE185RA,RB,RC Racquetball—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Familiarizes students with racquetball fundamentals, including grip, swing mechanics, rules, strategy and etiquette. **F, W, Sp**

PE185SA,SB,SC Scuba Diving—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Promotes and encourages the safe enjoyment of underwater activities, as well as increasing awareness of environmental sensitivity, while developing social, emotional, physical, and nutritional wellness skills. **Prerequisite:** PE185SB: PE185SA; PE185SC: PE185SB. **F, W, Sp, Su**

PE185SD,SE,SF Swim for Fitness—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Develops cardiovascular endurance through swimming. Covers stroke technique, interval training, and lap swimming. **Prerequisite:** Beginning swimming. **F, W, Sp**

PE185SH,SJ,SK Skiing—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Presents fundamental downhill skiing techniques through instruction and skill application. **W**

PE185SR Softball—Advanced
3 lab hrs/wk, 1 cr.
Covers fundamentals, rules, and strategy of softball. Presents specific skills necessary for successful recreational and/or competitive experience in softball. Incorporates wellness in the areas of physical, social, emotional, and nutritional health; stress management; and student support systems. **F**

PE185SS,ST,SU Swimming—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Develops and improves swimming skills and fitness levels through a pool workout. Covers stroke improvement and swim conditioning. **F, W, Sp, Su**

PE185TF,TG,TH Tennis—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Covers tennis fundamentals, including stroke production, rules, scoring, strategy, and court etiquette. **F, Sp, Su**

PE185VJ,VK,VL Volleyball—Beginning, Intermediate, Advanced
3 lab hrs/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. **F, W, Sp**

PE185WA,WB,WC Weight Management—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Educates, supports, and motivates individuals interested in managing their weight. Includes nutrition information, weigh-in, class discussion, and daily exercise management. **F, W, Sp, Su**

PE185WD,WE,WF Weight Training—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Develops and executes a strength-improvement program to meet individual goals. **F, W, Sp, Su**

PE185WG Osteoporosis Risk Reduction
3 lab hrs/wk, 1 cr.
Promotes an active lifestyle that helps prevent osteoporotic fractures by maintaining or increasing muscle strength, improving balance and coordination, decreasing rate of bone loss, and decreasing the incidence and severity of falls. **Offered as needed.**

PE185WK,WL,WM Walking Fitness—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Helps develop a lifelong plan for walking fitness. Includes goal setting, group and individualized recommendations for walking intensity, and pre-and post-cardiovascular assessment. **F, W, Sp**

PE185WN,WO,WP Water Exercise—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Includes warm-up, stretching, strength, aerobic, and cool-down periods to improve flexibility, muscular strength, endurance, and cardiovascular fitness. Intended for non-swimmers and swimmers. Emphasizes safe exercise. **F, W, Sp, Su**

PE185YA,YB,YC Yoga—Beginning, Intermediate, Advanced
3 lab hrs/wk, 1 cr. each
Introduces Hatha physical yoga. Includes the background, safety precautions, and value of yoga. Emphasizes stretching postures, proper breathing techniques, and stress reduction. **F, W, Sp, Su**

PE194TF Tennis—Professional
1 class and 2 lab hrs/wk, 2 cr.
Demonstrates how to teach tennis. Intended for physical education majors. **Sp**

PE266 Basketball Coaching Theory
2 class hrs/wk, 2 cr.
Introduces the coaching profession. Provides information, techniques, and strategies necessary to make a better coach. Addresses the fundamentals of organizing a basketball program using available resources, leadership strategies, and interpersonal communications. **F**

PE294BP Professional Activities—Basketball
1 class and 2 lab hrs/wk, 2 cr.
Includes skill progression, knowledge, strategy, teaching and coaching techniques, practice, rule interpretation, and conditioning for safety. **Offered as needed.**

PE294VP Professional Activities—Volleyball
1 class and 2 lab hrs/wk, 2 cr.
Covers skill progressions, knowledge, strategy, practice, and conditioning; rules interpretation; teaching and coaching techniques, as well as physical, social, emotional, and nutritional health; student support systems; and stress management. **Offered as needed.**

PE294WP Professional Activities—Weight Training
1 class and 2 lab hrs/wk, 2 cr.
Prepares students to do personal training, teach or coach weight training. Emphasizes various training techniques. **Prerequisite:** PE185WD or consent of instructor. **Offered as needed.**

Physics

PH060 Applied Physical Science
2 class and 3 lab hrs/wk, 3 cr.
Provides the necessary physical science concepts and skills required to enter Industrial and Engineering programs. **Prerequisite:** program instructor consent based on math placement score. **F**

PH111 Physical Science for Fire Science and Emergency Services
4 class and 2 lab hrs/wk, 5 cr.
Introduces the necessary concepts and skills in physical science required to enter the fire science and paramedic programs. **Prerequisite:** MTH070 or equivalent or consent of instructor. **Offered as needed.**

PH121 Applied Physics
3 class and 2 lab hrs/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:** completion of or concurrent enrollment in MTH082 or MTH053 or consent of instructor. **F, W**

PH122 Applied Physics
3 class and 2 lab hrs/wk, 4 cr.
Covers applied physics, including mechanics of measurement, structure of matter, heat energy, heat engines, sound, light, and nuclear physics. Includes demonstrations and experiments to clarify physics principles and procedures. **Prerequisite:** PH121 or consent of instructor. **Offered as needed.**

PH201 General Physics
3 class and 3 lab hrs/wk, 4 cr.
Offers the first term of a three-term sequence of introductory algebra-based college physics. Includes kinematics, Newton's laws, energy, momentum, and rotation. **Prerequisite:** MTH111 and MTH112. **F**

PH202 General Physics
3 class and 3 lab hrs/wk, 4 cr.
Covers the second term of a three-term sequence of introductory algebra-based college physics. Includes fluids, oscillations, waves, thermodynamics, and electricity. **Prerequisite:** PH201. **W**

PH203 General Physics
3 class and 3 lab hrs/wk, 4 cr.
Offers the third term of a three-term sequence of introductory algebra-based college physics. Includes circuits, magnetism, electromagnetic waves, and optics. **Prerequisite:** PH202. **Sp**

PH207 Astronomy
3 class and 2 lab hrs/wk, 4 cr.
Presents Earth's coordinate system, observational astronomy, the moon and the planets, evolution of the solar system, and the sun. Illustrates principles of the solar system. **Prerequisite:** grade of "C" or better in MTH070. **F**

PH208 Astronomy
3 class and 2 lab hrs/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:** grade of "C" or better in MTH070. **W**

PH209 Astronomy
3 class and 2 lab hrs/wk, 4 cr.
Examines astronomical, optical, and radio telescopes; the Milky Way galaxies; the universe of galaxies; the origin of the universe and life in the universe. Illustrates physical principles of the galactic system. **Prerequisite:** grade of "C" or better in MTH070. **Sp**

PH211 Physics for Engineers and Scientists
4 class and 3 lab hrs/wk, 5 cr.
Presents the first term of a three-term sequence of introductory calculus-based physics. Includes kinematics, Newton's laws, energy, momentum, rotation, and gravitation. **Prerequisite:** MTH251. **F**

PH212 Physics for Engineers and Scientists
4 class and 3 lab hrs/wk, 5 cr.
Presents the second term of a three-term sequence of introductory calculus-based physics. Covers fluids, oscillations, waves, thermodynamics, and electricity. **Prerequisite:** MTH252 and PH211. **W**

PH213 Physics for Engineers and Scientists
4 class and 3 lab hrs/wk, 5 cr.
Offers the third term of a three-term sequence of introductory calculus-based physics. Includes circuits, magnetism, and light. **Prerequisite:** PH212. **Sp**

PHL

Philosophy

PHL201 Introduction to Philosophy
3 class hrs/wk, 3 cr.
Introduces methods and ideas of western philosophy by focusing on the nature of reality, free will, determinism, the existence of God, knowledge, and the good life. Features such important figures as Socrates, Plato, Aristotle, Descartes, Kant, and Sartre. Prepares students for other classes in Philosophy, such as Theories of Knowledge, Ethics, Logic, Philosophy of Religion, and Biomedical Ethics.. **F, W, Sp**

PHL202 Theories of Knowledge
3 class hrs/wk, 3 cr.
Focuses on theories of knowledge (Epistemology). Emphasizes understanding terms and theories, and analyzes arguments in epistemology. Covers the three areas implied by the traditional account of knowledge as justified true belief. Devotes attention to the natures of truth, belief, and justification. Explores problems in other fields of philosophy generated by epistemic considerations. **W, Sp**

PHL203 Ethics
3 class hrs/wk, 3 cr.
Introduces ancient and modern theories of ethics. Includes explanations and paradigmatic illustrations of the central theories of ethics and close scrutiny of standard arguments supporting and attaching these theories. Applies theories to contemporary moral problems and personal dilemmas. **W, Sp**

PHL204 Critical Thinking and Logic
3 class hrs/wk, 3 cr.
Introduces ancient and modern theories of ethics. Includes explanations and illustrations of the central theories of ethics, and close scrutiny of standard arguments supporting and criticizing these theories. Applies theories to contemporary moral problems and personal dilemmas. **Offered as needed.**

PHL205 Biomedical Ethics
3 class hrs/wk, 3 cr.
Covers ethical decision making in Western, Eastern, and non-traditional settings. Explores real-world health problems in light of historical and contemporary ethical theories. 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. **Offered as needed.**

PHL206 Faith and Reason: Philosophy of Religion
3 class hrs/wk, 3 cr.
Explores the complex relationship between faith and reason. Analyzes classical and contemporary texts that address the uneasy relationship between the two phenomena. Focuses on both rational attacks against, and rational defenses of, reason, and thereby, on the nature and the scope-the limits-of rational thought. Also examines the character of religious belief and the ways in which reason has been used both to attack and to defend religious faith. **Offered as needed.**

PHM

Pharmacy Technician/ Pharmacology

PHM101 Introduction to Pharmacy Technology
1 class hr/wk, 1 cr.
Introduces the job responsibilities and knowledge and skills required of a pharmacy technician. Overviews assisting the pharmacist in collecting, organizing, and evaluating information for direct patient care. **Prerequisite:** current enrollment in the Pharmacy Technician/Pharmacology program or consent of instructor. **F**

PHM110 Pharmacy Calculations
3 class hrs/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:** grade of "C" or better in MTH070 or equivalent; PHM101; and enrollment in the Pharmacy Technician/Pharmacology program. **W**

PHM115 Pharmacy Operations/ Management
4 class hrs/wk, 4 cr.
Introduces pharmacy operations as they relate to management. Includes pharmacy record maintenance, communication and customer service, inventory systems, insurance procedures, and accounts receivable methods. **Prerequisite:** admission to the Pharmacy Technician program. **F**

PHM120 Pharmacy Operations/ Laboratory
2 class and 2 lab hrs/wk, 3 cr.
Covers the various controls of pharmaceutical inventory, accessing of non-compounded products, and compounding preparation of pharmaceuticals for distribution. **Prerequisite:** enrollment in the Pharmacy Technician/Pharmacology program. **W**

PHM130 Pharmacy Information/Law and Ethics
3 class hrs/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:** PHM120 and enrollment in the Pharmacy Technician/Pharmacology program. **Sp**

PHM150 Pharmacy Technician Practicum
4 class hrs/wk, 4 cr.
Prepares students for the national pharmacy certification examination given upon completion of pharmacy technician education. National certification, as a certified pharmacy technician, is a requirement of the Oregon Board of Pharmacy. Also covers identification potential career opportunities. **Prerequisite:** third-term standing in the Pharmacy Technician/Pharmacology program. **Sp**

PHM151 Pharmacy Seminar
1 class hr/wk, 1 cr.
Prepares students for the national pharmacy certification examination given upon completion of pharmacy technician education. National certification, as a certified pharmacy technician, is a requirement of the Oregon Board of Pharmacy. Also covers identification of potential career opportunities. **Prerequisite:** third-term standing in the Pharmacy Technician/Pharmacology program. **Sp**

PHM205 Pharmacy Specialized Care
3 class hrs/wk, 3 cr.

Introduces specialty pharmacies. Covers acute care (long-term care), home-care practice, ambulatory, community or outpatient pharmacy practice, pediatrics, elderly, oncology, and nuclear medicine. **Prerequisite:** PHM110; PHM130; PHM210; PHM233; and enrollment in the Pharmacy Technician/Pharmacology program. **Sp**

PHM210 Over-the-Counter (OTC) Products
2 class hrs/wk, 2 cr.

Covers medications, both prescription (legend) and non-prescription over-the-counter (OTC) drugs available to pharmacy customers. **W**

PHM215 Sterile Compounding/Cytotoxic Medications
2 class and 3 lab hrs/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:** PHM110; PHM130; PHM210; PHM233; and enrollment in the Pharmacy Technician/Pharmacology program. **W**

PHM220 Multicultural Patient Healthcare
2 class hrs/wk, 2 cr.

Introduces approaches to healthcare for multicultural patients. Covers aspects of western medicine as practiced in the United States. **Sp**

PHM230 Pharmaceutical Drug Classifications
3 class hrs/wk, 3 cr.

Covers the sources and classifications/prototypes of drugs. Examines pharmaceutical names; routes of administration; pharmacokinetics and pharmacodynamics of xenobiotics; variables that affect drug actions including contraindications and drug interactions; prescription abbreviations and interpretations; drug marketing; and drug approval processes. **F**

PHM231 Pharmacology 1
3 class hrs/wk, 3 cr.

Focuses on the general concepts of medication therapeutics, as well as the pathophysiology regarding diseases being treated involving cellular physiology and drug transport through the cell membranes. Covers the integumentary, skeletal, nervous, somatic systems and special senses. **Prerequisite:** PHM230 (or concurrent enrollment) or consent instructor and BI231 (or concurrent enrollment). **F**

PHM232 Pharmacology 2
3 class hrs/wk, 3 cr.

Continues pharmacological principles involving therapeutic medications and diseases/pathophysiology involving the cardiovascular, muscular, immune, hematology, and respiratory systems. **Prerequisite:** PHM231and BI232 or concurrent enrollment. **W**

PHM233 Pharmacology 3
3 class hrs/wk, 3 cr.

Continues pharmacological principles involving therapeutic medications and diseases/pathophysiology affecting the endocrine, gastrointestinal, renal, and reproductive systems. **Prerequisite:** PHM232 and BI233 (or concurrent enrollment). **Sp**

PHM250 Pharmacy Externship
15 lab hrs/wk, 5 cr.

Focuses on developing workplace experience in a healthcare or related setting (one hundred sixty-five hours). **Prerequisite:** sixth term standing in the Pharmacy Technician/Pharmacology program. **Sp**

PHM280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

PS
Political Science

PS201 American Government
3 class hrs/wk, 3 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 imbedded in the United States Constitution. Studies the relationship between the American political system and its capitalist economic system. Provides an analysis of democratic theory and process, and the role of education and the mass media in shaping American politics. **F, W, Sp, Su**

PS202 American Government
3 class hrs/wk, 3 cr.

Continues PS201. Examines the three branches of government. Includes the study of the relationship of corporate America and government, and the making and execution of domestic and foreign policy. PS201 recommended but not required. **F, W, Sp, Su**

PS203 State and Local Government
3 class hrs/wk, 3 cr.

Introduces U.S. state and local governments with emphasis on comparative political behavior in states and communities. Covers the political and institutional processes by which state and local governments make policy, as well as the policy outputs themselves. **Offered as needed.**

PS205 International Relations
3 class hrs/wk, 3 cr.

Introduces world politics. Deals with the nature of global conflict, nationalism, U.S. foreign policy, the role of multinational corporations in international decision making, North-South relations, and the mechanisms of conflict resolutions. Examines current global issues facing nation-states. **Offered as needed.**

PSY
Psychology

PSY100 Introduction to Psychology
3 class hrs/wk, 3 cr.

Introduces perspectives in psychology; scientific methods of inquiry; biological foundations; sensation and perception; consciousness, learning, emotion, and motivation; personality theory; abnormal behavior; and therapeutic interventions. **F, W, Sp, Su**

PSY101 Psychology of Human Relations
3 class hrs/wk, 3 cr.

Explores basic principles of psychology necessary for enhancing self-understanding, effective communication, and development of positive interpersonal relationships. Covers developing emotional well-being, determining values and setting goals, and dealing with problems and changes in interpersonal relations resulting from an individual's growth and development. **F, W, Sp, Su**

PSY104 Psychology in the Workplace
3 class hrs/wk, 3 cr.

Focuses on a number of important factors for effective performance in the workplace. Includes communication styles, developing conflict resolution skills, employee selection process, goal setting, time management, diversity and cultural sensitivity, stress management, and work conditions. Covers the history of work in the United States. **F, W, Sp, Su**

PSY201 General Psychology—Biological Emphasis
3 class hrs/wk, 3 cr.

Focuses on psychology as a science stressing history, methodology, the biological foundations of behavior, human development, sensation, and perception. **F, W, Sp, Su**

PSY202 General Psychology—Cognitive Emphasis
3 class hrs/wk, 3 cr.

Presents an overview to the operation of cognitive processes. Includes principles of learning, memory, cognition, motivation, and emotion. Recommended that students take PSY201 prior to this course. **F, W, Sp, Su**

PSY203 General Psychology—Clinical/Social Emphasis
3 class hrs/wk, 3 cr.

Covers principles and theories of personality, psychological disorders, psychotherapy, social influence, and stress. Recommended that students take PSY201 prior to this course. **F, W, Sp, Su**

PSY206 Introduction to Social Psychology
3 class hrs/wk, 3 cr.

Introduces the problems, theories, and methods of social psychology. Emphasizes diverse ways in which social influences alter an individual's thoughts, feelings, and actions. Examines prejudice, conformity, leadership, and aggression and how they affect such events as wars, sexuality, discrimination, violence, and interpersonal attraction. Recommended that students take PSY201 prior to this course. **Offered as needed.**

PSY237 Life Span Development
3 class hrs/wk, 3 cr.
Introduces human growth and development from genetics and conception through prenatal development, birth, infancy, childhood, adolescence, adulthood, and death and bereavement. **Prerequisite:** PSY201. **F, W, Sp, Su**

PSY239 Introduction to Abnormal Behavior
3 class hrs/wk, 3 cr.
Explores the psychology of abnormal behavior. Provides a foundation for understanding the nature of psychopathology, diagnosis, and classification. Covers a number of specific disorders, including anxiety disorders, mood disorders, schizophrenia and other psychotic disorders, personality disorders, sexual and gender identity disorders, substance-related disorders, and psycho-physiological disorders. **Prerequisite:** PSY201. **F, W, Sp, Su**

PSY282 Psychology of Adolescence
4 class hrs/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 behavior. **Prerequisite:** PSY201. **F, W, Sp**

QS

Quality Science

QS062A Foundations for Quality, Overview (Partnerships for Quality)
10 class hrs, 1 cr.
Provides an orientation to a system of approaches for integrating continuous improvement into a business or organization. **Offered as needed.**

QS062B Foundations of Quality (Partnerships for Quality)
20 class hrs, 2 cr.
Introduces a system of approaches for integrating continuous improvement into a business or organization. **Offered as needed.**

QS062C Managing Customer Expectations (Partnerships for Quality)
10 class hrs, 1 cr.
Guides participants through an examination of who their customers are, how to serve them, what value is, and how it evolves. **Offered as needed.**

QS062D Continuous Process Improvement (Partnerships for Quality)
20 class hrs, 2 cr.
Provides information and practice in process management and improvement. Uses a comprehensive simulation for practicing the quality tools of Continuous Process Improvement (CPI). **Offered as needed.**

QS062E Simulation for Continuous Process Improvement (Partnerships for Quality)
10 class hrs, 1 cr.
Simulates work environment designed to provide practice applying the key tools of process improvement. Participants assume jobs in a fictional company and experience the problems of a traditional workplace first-hand while collaboratively redesigning the system to increase productivity, employee morale, and quality. **Offered as needed.**

QS062F ISO 9000 Overview (Partnerships for Quality)
10 class hrs, 1 cr.
Provides an overview to the ISO 9000 Series, a set of international standards developed to provide direction in the design, assessment, and maintenance of quality systems. Includes history, standards, and the resources required of an organization desiring to implement them. **Offered as needed.**

QS062G Understanding ISO 9000 (Partnerships for Quality)
10 class hrs, 1 cr.
Prepares participants in companies that will undergo ISO 9000 registration. **Offered as needed.**

QS062H Quality Auditing (Partnerships for Quality)
10 class hrs, 1 cr.
Provides an understanding of the quality auditing process, with particular focus and application on internal quality auditing and associated role of corrective action. **Offered as needed.**

QS062I Effective Team Skills (Partnerships for Quality)
24 class hrs, 2 cr.
Provides an opportunity to learn and practice effective team skills using a variety of learning modules, including team activities, simulation, role-play, meeting practice, presentations, self-assessments, surveys and discussion. **Offered as needed.**

QS062J Facilitating Effective Teams (Partnerships for Quality)
20 class hrs, 2 cr.
Presents team facilitator and team facilitation skills through a variety of learning modules, including team activities, videotaping, simulation, role-play, meeting practice, presentations, self-assessments, surveys, process analysis, and discussion. **Offered as needed.**

QS062K Putting Teams to Work (Partnerships for Quality)
10 class hrs, 1 cr.
Examines the merit of teams and how teams might support their organization's business strategy through team activities, simulation, role-play, meeting practice, presentations, self-assessments, surveys, individual exercises, and discussion. **Offered as needed.**

QS062L Statistical Process Control (SPC) (Partnerships for Quality)
32 class hrs, 3 cr.
Prepares participants for developing and implementing Statistic Process Control (SPC) in their organizations. **Offered as needed.**

QS062M Gauge Capability (Partnerships for Quality)
12 class hrs, 1 cr.
Shows how the continuous improvement of product and service quality has become the primary driver for increasing productivity, customer satisfaction, and employee involvement. Covers the use and interpretation of gauge capability studies and statistical control of a gauge setup. **Offered as needed.**

QS062N Just-In-Time (Partnerships for Quality)
12 class hrs, 1 cr.
Introduces Just-In-Time (JIT) core techniques for manufacturing organizations using simulation exercises. **Offered as needed.**

QS062O Cycle Time Reduction (Partnerships for Quality)
10 class hrs, 1 cr.
Provides practical ideas and tools for reducing cycle time in a manufacturing or service setting. **Offered as needed.**

QS062P Strategic Planning for Change (Partnerships for Quality)
20 class hrs, 2 cr.
Presents a process for organizational change and growth by facilitating the organizational strategy decision making process for managers and other leaders. Participants will complete an action plan to take back to their workplace to initiate a change process or strengthen the strategic plan for their organization. **Offered as needed.**

QS062Q Leadership for Change (Partnerships for Quality)
20 class hrs, 2 cr.
Assists in understanding the changing role of leadership. Participants will examine the skills, roles, and styles that leaders must understand and encourage in others to improve organization effectiveness. **Offered as needed.**

RD

Reading
See also SSP—Study Skills.

RD080 Effective Reading
3 class hrs/wk, 3 cr.
Focuses on active reading by identifying main ideas and major details in a variety of materials. Improves comprehension by understanding vocabulary clues and patterns of organization. Introduces outlining, mapping, and summarizing to improve learning. **Prerequisite:** COMPASS reading placement test score of 51-68 or consent of instructor. **F, W, Sp, Su**

RD090 College Textbook Reading
3 class hrs/wk, 3 cr.
Prepares students to comprehend and apply information from college-level textbooks. Encourages active reading by teaching students how to ask and look for answers to questions about author's purposes and strategies. Includes application of active reading skills to specific academic disciplines and career fields. **Prerequisite:** grade of "C" or better in RD080; COMPASS reading placement test score of 69-79 or consent of instructor. **F, W, Sp, Su**

RD115 Academic Thinking and Reading
3 class hrs/wk, 3 cr.
Prepares students to become active participants in the process of reading college-level materials. Encourages students to build and apply a repertoire of reading and thinking strategies to meet the demands of an academic setting. **Prerequisite:** grade of "C" or better in RD090; COMPASS reading placement test score of 80-90 or consent of instructor. **F, W, Sp, Su**

RD120 Critical Thinking and Reading
3 class hrs/wk, 3 cr.
Develops vital critical and creative thinking and reading skills. Students will apply these skills as they consider issues of Difference, Power, and Responsibility (DPR) within American society. **Prerequisite:** COMPASS reading placement test score of 91-100 or consent of instructor. **F, W, Sp**

REL

Religion

REL201 Asian Religions
3 class hrs/wk, 3 cr.
Introduces 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. **F, W, Sp**

REL202 Middle Eastern Religions
3 class hrs/wk, 3 cr.
Explores 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. **F, W, S**

REL203 American Religions
3 class hrs/wk, 3 cr.
Focuses on the dominant religions of America, both contemporary and historical. Examines the dynamic relation between American history and American faith traditions. **F, W, Sp**

RUS

Russian

RUS101, 102, 103 First Year Russian, Terms 1, 2, 3
4 class hrs/wk, 4 cr. each
Introduces the Russian language (including listening, speaking, reading, and writing) and Russian culture (including geography, customs, daily life, heritage, and literature), facilitated by the study of vocabulary, grammar, short readings, and guided conversation. Uses Russian as the primary language of class. **Prerequisite:** These classes are to be taken sequentially. RUS101: None; RUS102: RUS101, one year of high school Russian, or consent of instructor; RUS103: RUS102, two years of high school Russian, or consent of instructor. RUS101, **F;** RUS102, **W;** RUS103, **Sp**

RUS201, 202, 203 Second Year Russian, Terms 1, 2, 3
4 class hrs/wk, 4 cr. each
Provides 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 understanding of Russian culture. Uses Russian as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. RUS201: RUS103, three years of high school Russian, or consent of instructor; RUS202: RUS201 or consent of instructor; RUS203: RUS202 or consent of instructor. **Offered as needed.**

Secretarial
See BT—Business Technology.

SLP

Speech Language Pathology Assistant
See also ED—Education.

SLP180 Survey of Speech and Language Disorders
3 class hrs/wk, 3 cr.
Provides an overview of the profession of speech language pathology. Describes the nature of various speech, language, voice, and hearing; covers communication development in children and descriptions of language differences. Includes the training, scope, and practice of a speech language pathologist and a speech language pathology assistant. **F, W, Sp, Su**

SLP181 Phonetics for Language
3 class hrs/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. **F, W, Offered as needed.**

SLP182 Intervention Strategies for SLP Assistants
3 class hrs/wk, 3 cr.
Focuses on approaches to intervention that speech language pathology assistants can use with children, adolescents, and adults within the limits of a specified scope of practice. Covers data and record-keeping methodologies, along with types of materials and approaches that are motivating for students/clients in different age groups. **Prerequisite:** SLP180. **F, W, Sp, Offered as needed.**

SLP183 Introduction to Language Development
3 class hrs/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 as the major focus for the identification and the milestones of language development. **W, Offered as needed.**

SLP184 Language Therapy
3 class hrs/wk, 3 cr.
Offers an advanced clinical course for students pursuing training as speech language pathology assistants. Focuses primarily on the age groups of early childhood, childhood, and adolescence. Includes intervention approaches that can be used successfully with adults. Provides directed application of language, cognitive, and behavioral therapy techniques in individual and group intervention modalities. Stresses integration of interpersonal and paraprofessional knowledge and skills into clinical activities. **Prerequisite:** SLP180, SLP182, SLP183. **F, W, Sp, Offered as needed.**

SLP185 Anatomy and Physiology of Speech and Language
3 class hrs/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. **Su, Offered as needed.**

SLP186 Speech Intervention with Children, Adolescents, and Adults
3 class hrs/wk, 3 cr.
Presents an advanced clinical intervention course for speech language pathology assistants. Covers the various uses of group and individual therapy. Discusses treatment content and pacing. Includes the application of reinforcement schedules, along with effective use of various speech sound teaching and correction strategies. **Prerequisite:** SLP180, SLP181. **F, W, Sp, Offered as needed.**

SLP187 Clinical Documentation and Materials Management for the SLPA
3 class hrs/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. **Su, Offered as needed.**

SLP188 Communication Disorders in Low Incidence Populations
3 class hrs/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 methods and tracking of progress with various data methods as a major key to success for these clients in both group and individual treatment models. Includes an overview of the various genetic disorders. **Prerequisite:** SLP180. **Offered as needed.**

SLP189 SLPA Practicum 1
1 class and 6 lab hrs/wk, 3 cr.

Focuses on guided practice in speech language pathology assisting. Includes working with a speech language pathologist supervisor at one or more sites of service. Emphasizes skill shaping and improvement using input from the supervising clinician and the college instructor. **Prerequisite:** successful completion of all SLPA courses or consent of instructor. **F, W, Sp**

SLP190 SLPA Practicum 2
1 class and 6 lab hrs/wk, 3 cr.

Focuses on guided practice in speech language pathology assisting. Includes working with a speech language pathologist supervisor at one or more sites of service. Emphasizes skill shaping and improvement using input from the supervising clinician and the college instructor. **Prerequisite:** SLP189 or consent of instructor. **F, W, Sp**

SOC

Sociology

SOC204 General Sociology—Introduction
3 class hrs/wk, 3 cr.

Covers basic issues and findings regarding the biological, symbolic, and social nature of humankind. Discusses foundations for social interaction, including patterns of social structure, culture, socialization, primary relationships, social differentiation, organization, deviance, and collective behavior. Includes principles of scientific methods and major sociological theorists. **F, W, Sp, Su**

SOC205 General Sociology—Institutions
3 class hrs/wk, 3 cr.

Analyzes social institutions with special emphasis on family, religion, education, economy, and politics. Identifies factors contributing to institutional stability and change. It is recommended that students take SOC204 prior to this course. **F, W, Sp, Su**

SOC206 General Sociology—Social Problems
3 class hrs/wk, 3 cr.

Uses a sociological approach to major social problems in contemporary U.S. American society. Emphasizes concepts of aging, health care, law, leisure, minorities, pollution, poverty, technology, urbanization, work, and youth. It is recommended that students take SOC204 prior to this course. **F, W, Sp, Su**

SOC210 Sociology of the Family
3 class hrs/wk, 3 cr.

Offers a sociological perspective to family and marriage. Covers historical changes and societal variation in family patterns, changes over the life course, and diverse family forms. **F, W, Sp, Su**

SOC213 Social Diversity and Inequality
3 class hrs/wk, 3 cr.

Promotes awareness and knowledge of the differences and similarities among diverse groups and individuals in society. Focuses on discussion and analysis of national demographic and historical trends; social constructionism; sociological concepts of race, ethnicity, gender, disability, sexual identity, social class; and the dynamics of social interaction and power. **F, Sp**

SOC221 Juvenile Delinquency
3 class hrs/wk, 3 cr.

Examines the nature, extent, causes, control, reaction, treatment, and rehabilitation of juvenile delinquency in contemporary American society from a sociological perspective. **F, W, Sp, Su**

SOC235 Society and Forestry
3 class hrs/wk, 3 cr.

Analyzes some of the classical sociological theories and their relevance in understanding the management of natural resources by a society. **W**

SP

Speech

SP100 Introduction to Communication
3 class hrs/wk, 3 cr.

Surveys the areas of communication with emphasis on intrapersonal, interpersonal, group, and mass communication modes. **F, W, Sp**

SP111 Fundamentals of Public Speaking
3 class hrs/wk, 3 cr.

Covers preparation and delivery of public speeches with an emphasis on informative speaking. **F, W, Sp, Su**

SP112 Fundamentals of Persuasion
3 class hrs/wk, 3 cr.

Introduces public speaking on a persuasive level. Includes discussion of the verbal and non-verbal levels of persuasion. Concentrates on effective delivery, theories of persuasion, and use of support in effective persuasive speeches. Activities allow use of theories in public speaking situations. **F, W, Sp, Su**

SP115 Introduction to Intercultural Communication
3 class hrs/wk, 3 cr.

Explores impact of culture on communication. Investigates the areas of language, non-verbal communication, values, cultural systems, sex roles, belief systems, and culture shock. **F, W, Sp**

SP130 Business and Professional Speaking
3 class hrs/wk, 3 cr.

Designed to improve speech efficiency, self-confidence, and skill in planning, organizing, and delivering the kinds of presentations encountered in business organizations. **Offered as needed.**

SP218 Interpersonal Communication
3 class hrs/wk, 3 cr.

Introduces interpersonal, dyadic communication. Emphasizes increasing skills to communicate within personal and work settings. **F, W, Sp, Su**

SP219 Fundamentals of Small Group Communication
3 class hrs/wk, 3 cr.

Emphasizes communication skills to participate in team settings. Covers the characteristics of small groups, leadership, and conflict management skills. **F, W, Sp**

SP229 Reader's Theater
3 class hrs/wk, 3 cr.

Provides opportunities for students to explore literature through interpretive reading with emphasis on characterization, emotional response, and analysis of literacy structure and function. **Offered as needed.**

SP237 Gender and Communication
3 class hrs/wk, 3 cr.

Examines the role of gender in communication and identifies many of the personal and public factors involved in communication between men and women. Includes sex-differentiated language and conversational styles, the impact of the mass media on sex roles, how intimacy is expressed in same and opposite-sex friendships, and the question of what constitutes ethical communication when it comes to "gender talk." **Offered as needed.**

SPN

Spanish

SPN101, 102, 103 First Year Spanish, Terms 1, 2, 3
4 class hrs/wk, 4 cr. each
Introduces the Spanish language (including listening, speaking, reading, and writing) and Hispanic culture (including geography, customs, daily life, heritage, and literature), facilitated by the study of vocabulary, grammar, short readings, and guided conversation. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. SPN101: None; SPN102: SPN101, one year of high school Spanish, or consent of instructor; SPN103: SPN102, two years of high school Spanish, or consent of instructor. SPN101, **F**; SPN102, **W**; SPN103, **Sp**

SPN111, 112, 113 Beginning Spanish Conversation Terms 1, 2, 3
3 class hrs/wk, 3 cr. each
Provides Spanish conversation for beginners whose primary goal is basic communication in the language and an understanding of Hispanic culture. Listening, speaking, reading, and writing skills are developed with an emphasis on conversation, facilitated by the study of vocabulary and structure. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. SPN111: None; SPN112: SPN111 or consent of instructor; SPN113: SPN112 or consent of instructor. SPN111: **F**, SPN112: **W**, SPN113: **Sp**

SPN121, 122, 123 Espanol para Nativos (Spanish for Native Speakers), Terms 1, 2, 3
4 class hrs/wk, 4 cr. each
Focuses on helping native speakers of Spanish to develop reading, writing, and grammar skills in their native language, and to appreciate the depth and diversity of Hispanic culture in the United States and abroad. Emphasizes spelling, accents, vocabulary, punctuation, verb morphology and sentence grammar of standard Spanish, facilitated by readings, dictation and composition. Presents all classroom interaction (both by intructor and students) in Spanish. SPN121: Native Spanish speaker. No previous college coursework in Spanish is required. However, students are expected to have had some contact with the written language; SPN122: SPN121 or consent of instructor; SPN123: SPN122 or consent of instructor. **Offered as needed.**

SPN150, 151 First Year Spanish, Accelerated Terms 1, 2
6 class hrs/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. These two courses are equivalent to SPN101, 102, and 103. Spanish is the primary language of the class. **Prerequisite:** SPN150: None. It is recommended that the student have had some experience studying a foreign language; SPN151: SPN150, one year of high school Spanish, or consent of instructor. **Offered as needed.**

SPN201, 202, 203 Second Year Spanish, Terms 1, 2, 3
4 class hrs/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 Spanish grammar and vocabulary, as well as a broadening of the student understanding of Hispanic culture. Presents all classroom interaction (both by instructor and students) in Spanish. **Prerequisite:** These classes are to be taken sequentially. SPN201: SPN103 or three years of high school Spanish, or consent of instructor; SPN202: SPN201 or consent of instructor; SPN203: SPN202 or consent of instructor. SPN201, **F, Su**; SPN202, **W, Su**; SPN203, **Sp, Su.**

SPN211, 212, 213 Intermediate Spanish Conversation, Terms 1, 2, 3
3 class hrs/wk, 3 cr. each
Covers Spanish for intermediate learners whose primary goal is increased basic communication in the language and an expanded understanding of Hispanic culture. Listening, speaking, reading, and writing skills continue to be developed with an emphasis on conversation, facilitated by the study of vocabulary and structure. Instructor and students use Spanish as the primary language of the class. **Prerequisite:** These classes are to be taken sequentially. SPN211: SPN113, SPN102 or consent of instructor; SPN212: SPN211 or consent of instructor. SPN213: SPN212 or consent of instructor. SPN211: **F**, SPN212: **W**, SPN213: **Sp**

SSC

Social Science
See also CLA—Chicano/Latino Studies.

SSC100 Foundation of American Indian Languages
3 class hrs/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 speakers, combined with rudiments of linguistics, phonetics, writing systems, and efforts to revitalize indigenous languages. **Offered as needed.**

SSC150 Ethnic Cultures of the Northwest United States
3 class hrs/wk, 3 cr.
Introduces the major ethnic groups currently residing in the northwest United States, focusing on Native Americans, Hispanics/Latinos, African-Americans, and Asian-Americans. **Offered as needed.**

SSP

Study Skills
See also RD—Reading.

SSP013A,B,C Spelling Basics
1 class hr/wk, 1 cr. each
Provides instruction in the basic patterns of English spelling as well as strategies to use to master frequently misspelled words in each one-credit course. Focuses on students learning words that are specific to their individual needs. **Prerequisite:** Determined by in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP014A,B,C Spelling Rules
1 class hr/wk, 1 cr. each
Provides individualized instruction, including rules of spelling and exceptions to the rules, as well as practice in pronunciation, writing of sentences, and development of a personal spelling list. Spelling rules include use of final e, apostrophes, and ie/ei. **Prerequisite:** Determined by in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP015A,B,C Vocabulary Building
1 class hr/wk, 1 cr. each
Focuses on improving vocabulary by learning strategies for remembering new words. Determine the meanings of new words by using context clues, word parts (prefix, suffix, root), and word history. Relates these strategies to the terminology in college textbooks. **Prerequisite:** Determined by in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP030A,B,C Advanced Vocabulary Building
1 class hr/wk, 1 cr. each
Provides instruction in vocabulary analysis in order to increase general and/or technical vocabulary. Applies word-part strategies in medical terminology. **Prerequisite:** Determined by in-class placement test or consent of instructor. **F, W, Sp, Su**

SSP051 Studying for College
3 class hrs/wk, 3 cr.
Focuses on implementing positive changes in behavior for pre-program technical students who feel challenged in getting organized and studying effectively. Provides strategies for learning effectively in a college setting. **F, W, Sp**

SSP060 Study Strategies for Learning Math
1 class hr/wk, 1 cr.
Develops study skills critical for success in math courses. **Prerequisite:** concurrent enrollment in a math course. **F, W, Sp, Su**

SSP101 Creating College Success
3 class hrs/wk, 3 cr.
Presents strategies that contribute to success in college. Students create a personal and academic plan and learn how to maintain motivation, form a support system, and manage time. **F, W, Sp, Su**

SSP112 Effective Learning
3 class hrs/wk, 3 cr.
Prepares students to become active and efficient participants in the learning process. Encourages students to build and employ a collection of effective learning strategies necessary to meet the learning challenges of academic and career settings. Develops note taking, listening, textbook study and reading, time management, test taking, and concentration and memory strategies. Focuses on reducing test anxiety and procrastination; identifies campus resources and learning preferences. **F, W, Sp, Su**

SSP115 Advanced Time Management
1 class hr/wk, 1 cr.
Develops practical and efficient time management strategies. Course has an online component that requires students to use Internet resources. **Prerequisite:** COMPASS reading test score of 80 or higher or consent of instructor. **F, W, Sp, Su**

SSP116 Advanced Textbook Reading
1 class hr/wk, 1 cr.
Develops practical and efficient textbook study-reading strategies. Course has an online component that requires students to use Internet resources. **Prerequisite:** COMPASS reading test score of 80 or higher or consent of instructor. **F, W, Sp, Su**

SSP117 Advanced Note Taking
1 class hr/wk, 1 cr.
Develops practical and efficient textbook and lecture note taking as well as listening strategies. Course has an online component that requires students to use Internet resources. **Prerequisite:** COMPASS reading test score of 80 or higher or consent of instructor. **F, W, Sp, Su**

SSP118 Advanced Test Taking
1 class hr/wk, 1 cr.
Develops practical and efficient test taking strategies. Course has an online component that requires students to use Internet resources. **Prerequisite:** COMPASS reading test score of 80 or higher or consent of instructor. **F, W, Sp, Su**

ST
Occupational Skills Training
ST050A-P Occupational Skills Training
1-15 credit
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. **Offered as needed.**

TA
Theater Arts
TA101 Introduction to Acting
3 class hrs/wk, 3cr
Provides an overview of acting for students with no prior experience. Presents strategies for overcoming fear and other inhibitors to public presentation. Includes improvisation techniques, theater exercises, performance process, and basic scene work. Emphasizes confidence building and clear vocal and physical communication when creating a basic character. **Offered as needed.**

TA110 Introduction to Theater
3 class hrs/wk, 3 cr.
Covers performance interpretation using a range of mediums for presenting plays. Focuses on the student identification of dramatic conflict and interpretation using the current and historic symbolic language of the stage. **Offered as needed.**

TA121 Acting 1
3 class hrs/wk, 3 cr.
Introduces the basic skills of acting. Defines the common terminology used in acting and demonstrates the similarities between different systems of acting. Offers an overview of the ancient history of western acting, including the roots of acting and a respect for its traditions. **F, W, Sp**

TA122 Acting 2
3 class hrs/wk, 3 cr.
Reinforces the ideas and systems covered in TA121. Focuses on enforcing the habit of instant recall of key concepts and physical patterns. Includes extensive work on movement systems such as the Alexander system. Provides experience in actors being exposed to cold readings. Also guides student actors in more complex and demanding scenes and monologues. **Prerequisite:** TA121. **F, W, Sp**

TA123 Special Issues in Theater: Improvisation and Audition Techniques
3 class hrs/wk, 3 cr.
Emphasizes the human voice as a key part of training. Exposes actors to improv comedy, to audition techniques, and discusses where to go for further experience. Includes video taping of final projects to prepare actors for TV or film work. Covers strategies for becoming an extra in local films and recommends additional training. **Prerequisite:** TA122. **F, W, Sp**

TA130A,B,C Theater Rehearsal and Performance: First Year
3-9 lab hrs/wk, 1-3 cr.
Introduces the study of rehearsal and performance techniques to include blocking, memorization, character development, and public performance. Course may be repeated for a maximum of nine credits. **Prerequisite:** consent of the instructor, dependent upon audition and selection for a role (chorus, support, or lead) or responsible duties, e.g. stage manager, house manager. **Offered as needed.**

TA140A,B,C Technical Production Workshop: First Year
3-9 lab hrs/wk, 1-3 cr.
Introduces the skills required in technical theater production. Covers scenery construction and painting, lighting, sound, properties, and stage management. Content and practical experiences change each term based on the public performance productions being produced. Course may be repeated for a maximum of nine credits. This course is the stage technician's equivalent of TA130A, TA130B, and TA130C. **Offered as needed.**

TA190A,B,C Projects in Theater
3-9 lab hrs/wk, 1-3 cr.
Presents a designed, independent project associated with an area in theater arts. Includes developing a contract with a theater arts instructor related to the course content. Course may be repeated for a maximum of six credits. **Prerequisite:** at least one course in TA130, TA140, TA121, or TA110, and consent of instructor. **Offered as needed.**

TA230A,B,C Theater Rehearsal and Performance: Second Year
3-9 lab hrs/wk, 1-3 cr.
Covers the study of rehearsal and performance techniques, including blocking, memorization, character development, and public performance. Course may be repeated for a maximum of 9 credits. **Offered as needed.**

TA240A,B,C Technical Production Workshop: Second Year
3-9 lab hrs/wk, 1-3 cr.
Continues TA140A, TA140B, and TA140C with an increase in skill level and responsibility, such as crew leader, assistant technical director, or design project. Course may be repeated for a maximum of nine credits. **Prerequisite:** completion of TA140A, TA140B, TA140C for at least three terms. **Offered as needed.**

TA286 Technical Theater
1 class and 6 lab hrs/wk, 3 cr.
Introduces the fundamental skills in stagecraft to mount small productions and events. Covers scenery construction, safe operation of theatrical rigging, and the care, handling, and operation of lighting and sound equipment. Incorporates the skills needed for crew and house management work. Course may be repeated for a maximum of six credits. **Offered as needed.**

TA287 Technical Theater Production
3 lab hrs/wk, 1 cr.
Prepares the student to function as a member of the technical production and event crews for the auditorium. Course may be repeated for a maximum of six credits. **Prerequisite:** TA286 or consent of instructor. **Offered as needed.**

TA290A,B,C Projects in Theater
3-9 lab hrs/wk, 1-3 cr.
Presents an advanced, designed, independent project associated with an area in theater arts. Includes developing a contract with a theater arts instructor related to the course content. Course may be repeated for a maximum of six credits. **Prerequisite:** minimum of one course in TA190 and consent of instructor. **Offered as needed.**

Visual Communications

See also ART—Art.

VC101-103 Special Topics in Visual Communications

1-3 class hrs/wk, 1-3 cr.

Offers a variable format class to gain an enhanced knowledge of software, current graphic arts issues, and industry standards. Presents different topics each term. Examples include graphics software, papers and inks, and interactive media. Course may be repeated for a maximum of six credits. **Prerequisite:** enrollment in the Visual Communications program may be required for some topics and will be identified in the schedule of classes each term. **Offered as needed.**

VC111 Introduction to Visual Communications

4 class hrs/wk, 4 cr.

Presents an overview of the graphic arts and the Visual Communications program. Includes the history and practice of communications and graphic arts, the evolution of digital graphics and current career possibilities. **Prerequisite:** enrollment in the Visual Communications program or consent of instructor. **F**

VC114 Introduction to Digital Graphics

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

Includes the Mac 0S page layout, illustration and photo manipulation software. **Prerequisite:** CIS101 or equivalent and enrollment in the Visual Communications program. **F**

VC121 Layout 1: Page Design

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

Introduces the basics of page layout using InDesign software. **Prerequisite:** successful completion of VC111, VC114, and ART224, or consent of instructor. **Sp**

VC122 Layout 2: Intermediate Page Design

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

Develops the basic skills required in the design and layout process of the graphic arts. Includes assignments in advanced electronic page layout with type, and graphic elements. **Prerequisite:** successful completion of VC121. **F**

VC126 Information Graphics

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

Introduces the clear, honest, and aesthetically appealing presentation of numerical, technical, and conceptual information in graphic form. Includes the use of illustration software to create graphics. **Prerequisite:** computer experience; successful completion of MTH060 or equivalent. **Offered as needed.**

VC130 Photoshop 1

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

Introduces the concepts and techniques of digital image manipulation and correction. **Prerequisite:** previous computer experience. **F, W, Sp, Offered as needed.**

VC131 Photoshop 2

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

Refines and expands the concepts and techniques of digital imaging tools with application to digital illustration. **Prerequisite:** VC130. **Sp**

VC133A InDesign 1

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

Introduces basic page layout using InDesign. **Prerequisite:** Previous computer experience. **Offered as needed.**

VC133B Quark XPress 1

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

Introduces basic page layout using Quark XPress. **Prerequisite:** Previous computer experience. **Offered as needed.**

VC134 Dreamweaver

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

Introduces the use of Macromedia Dreamweaver software for the creation of Web pages and maintaining a Web presence. **Prerequisite:** Previous computer experience. **Offered as needed.**

VC135 Flash 1

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

Introduces the concepts and techniques of creating animation, sound and interactivity for Web sites. **Prerequisite:** Previous computer experience. **Offered as needed.**

VC136 Flash 2

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

Covers techniques including bringing sound, advanced interactivity, and video into Flash Projects, as well as optimizing movies. **Offered as needed.**

VC137 Web Graphics 1

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

Develops the techniques and skills needed to create, edit, save, and post basic images on the Web. Investigates the basic reasons for using graphics on a Web page and explores the various types of usage. **Prerequisite:** VC130 or equivalent experience. **Offered as needed.**

VC138 Web Graphics 2

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

Further develops the techniques and skills needed to create, edit, save and post complex images on the World Wide Web. **Prerequisite:** VC137 or consent of instructor. **Offered as needed.**

VC139 Illustrator 1

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

Introduces the use of vector graphic software, Illustrator. **Prerequisite:** previous computer experience. **Offered as needed.**

VC140 Illustrator 2

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

Continues the use of vector graphic software Illustrator. **Prerequisite:** VC139 or consent of instructor. **W**

VC151 Electronic Imaging 1: Digital to Print

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

Introduces the printing process and the preparation of digital files, including photos; scans; and digital illustrations, for print. **Prerequisite:** enrollment in the Visual Communications program and successful completion of VC111 and VC114. **W**

VC171-173 Special Projects

1 class and 2-4 lab hrs/wk, 1-3 cr.

Provides the opportunity to work on special projects agreed upon by contract between student and instructor. Topics may include individualized tutorial study of software, independent work on projects, or in-depth study of graphic arts processes and procedures. Course(s) may be repeated for a total of six credits. **Offered as needed.**

VC201-203 Advanced Topics in Visual Communications

1-3 class hrs/wk, 1-3 cr.

Presents variable formats, discussions, and demonstrations. Topics vary each term. Examples include freelance work, pre-flighting, graphics software, papers and inks, or the exploration of new software or techniques. Course(s) may be repeated for a maximum of six credits. **Offered as needed.**

VC221 Layout 3: Publication Design

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

Applies the concepts and skills of the design and layout process to the principles of publication design. **Prerequisite:** second-year standing in the Visual Communications program and successful completion of VC122 Layout and Design 2 **Corequisite:** VC246 and VC238. **W**

VC230 Digital Painting

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

Introduces digital painting methods and techniques. Covers developing projects from the sketch stage to digitally executed images and prints. Includes use of digital painting programs and graphic tablets. Emphasizes generating original ideas through the use of hand drawn imagery and rendering those ideas using digital paint. **Prerequisite:** ART234 recommended, and demonstrated ability to work with computers. **Offered as needed.**

VC237 Web Design 1

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

Introduces the techniques and skills needed to plan and create basic graphics and pages for the Web using industry standard coding practices, Web editors, and graphics applications. **Prerequisite:** computing and Internet browsing basics. **F, Offered as needed.**

VC238 Web Design 2

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

Develops the techniques and skills needed to plan Web sites and create complex graphics and pages for the Web using industry standard Web editors and graphics applications. **Prerequisite:** VC237. **W, Offered as needed.**

VC241 Interactive Media
2 class and 2 lab hrs/wk, 3 cr.

Introduces the planning and production of multimedia projects using various software programs. Topics include the art of storytelling, digital sound and video, animation, interactivity, incorporating text and still images, and interactive presentations. **Prerequisite:** second-year standing in the Visual Communications program or consent of instructor. **Sp**

VC242 3D Graphics
2 class and 2 lab hrs/wk, 3 cr.

Presents an overview of 3D computer illustration with emphasis on the artistic and practical fundamentals of modeling, lighting, and rendering virtual 3D scenes. **Prerequisite:** computer experience. **Offered as needed.**

VC243 Animation 1
2 class and 2 lab hrs/wk, 3 cr.

Covers concepts, methods, and techniques of creating traditional animations. **Offered as needed.**

VC244 Animation 2
2 class and 2 lab hrs/wk, 3 cr.

Applies the basic principles of 2D animation in a computer environment. Includes developing a short animation project by first scripting and storyboarding the project and then using traditional and computer skills to animate it. **Offered as needed.**

VC246 File Prep
2 class and 2 lab hrs/wk, 3 cr.

Builds knowledge of preparing digital files for film output and printing. Presents common file problems and their solutions. **Prerequisite:** second-year standing in the Visual Communications program or equivalent work experience; working knowledge of the Mac Operating System and graphic arts software. **Corequisite:** VC221. **W**

VC251 Electronic Imaging 2: Color Correction
2 class and 2 lab hrs/wk, 3 cr.

Offers advanced color correction for images. **Prerequisite:** VC111, VC114, and VC151. **F**

VC265 Digital Video 1
2 class and 2 lab hrs/wk. 3 cr.

Introduces the creation of digital video projects. Covers work with hardware (cameras, tripods, lighting) and software (non-linear editing). Includes digital production and editing techniques. **Prerequisite:** demonstrated ability to work with computers. **W, Offered as needed.**

VC266 Digital Video 2
2 class and 2 lab hrs/wk, 3 cr.

Introduces the creation of complex digital video projects. Students focus on pre-production planning and post-production skills and techniques. **Prerequisite:** VC265. **Sp**

VC271-273 Studio Practices
1 class and 3-6 lab hrs/wk, 1-3 cr.

Provides the opportunity to work with an instructor on the production of live jobs. Any combination of the courses may be repeated for a maximum of six credits. **Prerequisite:** second-year standing in the Visual Communications program. **Offered as needed.**

VC280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

VC283 Business of Graphic Arts
4 class hrs/wk, 4 cr.

Introduces running a creative business. Emphasizes graphic arts trade practices, production schedules, estimating, working with clients, markups, hourly rates, recordkeeping, and billing procedures. **Prerequisite:** second-year standing in the Visual Communications program and concurrent enrollment in VC284. **Sp**

VC284 Portfolio Preparation
2 class and 4 lab hrs/wk, 4 cr.

Serves as a capstone course for all students in the Visual Communications program. Includes portfolio building, job markets, résumés and business stationery, and mock interviews. Participation in a class portfolio show is a graduation requirement. **Prerequisite:** second-year standing in the Visual Communications program and concurrent enrollment in VC241 and VC283. **Sp**

VMW

Vineyard Management/ Winemaking

VMW101 General Viticulture
3 class hrs/wk, 3 cr.

Introduces grape growing. Covers botany, fruiting, and rootstock cultivars; anatomy and physiology; history and distribution of grapes; vine classification; world growing areas, including latitude, climate, and soils; and common diseases and pests. **F, W, Sp**

VMW102 Wine Industry Exploration
3 class hrs/wk, 3 cr.

Examines various segments of the wine industry and how they function as a whole. Reviews the legal entities for doing business. Explores different business models in the Oregon wine industry. **Offered as needed.**

VMW105 Spanish in the Vineyard
3 class hrs/wk, 3 cr.

Covers practical Spanish terms and phrases specific to viticulture work. Surveys cultural information about Spanish speaking people. Includes pronunciation, technical vocabulary, greetings, and basic grammar. No prior knowledge of Spanish is necessary. **W**

VMW110 Fall Vineyard Practices
3 class and 2 lab hrs/wk, 4 cr.

Surveys fall vineyard management practices. Focuses on harvest practices, harvest contracts, and ripening parameters. Compares different ripening characteristics for a variety of clones and rootstocks. Covers fall canopy management, disease problems, and weather effects on ripening. **Prerequisite:** VMW101 or consent of instructor. **F**

VMW111 Winter Vineyard Practices
3 class and 2 lab hrs/wk, 4 cr.

Surveys winter vineyard management practices. Covers training, pruning, propagation, bench grafting, and simple trellis designs. **Prerequisite:** VMW101 or consent of instructor. **W**

VMW112 Spring Vineyard Practices
3 class and 2 lab hrs/wk, 4 cr.

Surveys spring vineyard management practices. Focuses on preparing a vineyard site for planting, spring canopy management, and other site issues. Covers pest and disease control. **Prerequisite:** VMW101 or consent of instructor. **Sp**

VMW113 Summer Vineyard Practices
3 class and 2 lab hrs/wk, 4 cr.

Surveys summer vineyard management practices. Covers planting, training of young vines, disease and weed control, canopy and vineyard floor management, and nutritional applications. **Prerequisite:** VMW101 or consent of instructor. **Su**

VMW122 Introduction to Winemaking
3 class hrs/wk, 3 cr.

Surveys the history of wine, wine grape varieties, and world wine regions. Covers the annual cycle of vine growth and berry ripening; wine grape processing practices; and fermentation of wines. Examines the winemaking practices used for white, red, sparkling, and dessert wines. Introduces the application of sensory science to wine quality evaluation. Reviews wine and health issues. **W**

VMW131 Wine Appreciation
3 class hrs/wk, 3 cr.

Introduces wine appreciation. Includes grape varieties; wine types; sensory distinctions; food and wine combinations; and the sensory evaluation of wines. **Prerequisite:** Student must be 21 years of age. **F, Sp**

VMW132 Wines of the World
3 class hrs/wk, 3 cr.

Introduces wines and the wine producing regions of the world. Focuses on viticultural practices and winemaking styles. Covers the influence of wine on literature, history, the economy, and religion. **Prerequisite:** VMW131 or consent of instructor. Student must be 21 years of age. **W**

VMW134 Wines of the Pacific Northwest
3 class hrs/wk, 3 cr.

Focuses on the viticultural regions of the Pacific Northwest and the sensory evaluation of representative wines. Emphasizes knowledge of the winemaking history of the area. Promotes a basic understanding of the wines of the regions. **Prerequisite:** VMW131 or consent of instructor. Student must be 21 years of age. **F**

VMW170 Introduction to Wine Marketing
3 class hrs/wk, 3 cr.

Explores wine marketing in Oregon and worldwide. Introduces concepts and topics useful to winery and vineyard owners, marketing personnel, retail and wholesale wine marketers, and wine buyers. **Sp**

VMW222 Science of Winemaking
3 class hrs/wk, 3 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:** CH122, CH172, VMW122, or consent of instructor. Student must be 21 years of age. **Sp**

VMW232 Sensory Evaluation of Wine Varietals
3 class hrs/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 or consent of instructor. Student must be 21 years of age. **W**

VMW233 Sensory Evaluation of Wine Components
3 class hrs/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 that have been constructed to show the effects of steadily increasing the amount of the component in a wine. **Prerequisite:** Student must be 21 years of age. **Sp**

VMW244 Wine Production
3 class and 6 lab hrs/wk, 6 cr.

Focuses on wine processing practices and quality control management. Presents harvest and pre-fermentation processing decisions. Covers equipment operation, maintenance, sanitation, and safety. Examines juice analysis, additions, selection of wine microorganisms, and managing fermentations. Presents post-fermentation management practices, managing malolactic fermentation, and new wine analysis. **Prerequisite:** CH123, CH172, VMW222, or consent of instructor. Student must be 21 years of age. **F**

VMW245 Wine Clarification and Stabilization
2 class and 4 lab hrs/wk, 4 cr.

Focuses on wine processing practices and quality control management. Covers physical, chemical, and microbial stabilization of new wines. Includes tartrates, proteins, oxidation, reduction, color and phenols, microbial stability, use of fining agents, and causes and corrections of wine defects. **Prerequisite:** CH123, CH172, VMW244, or consent of instructor. Student must be 21 years of age. **W**

VMW246 Wine Aging, Filtration, and Bottling
2 class and 4 lab hrs/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. Presents aging and barrel storage, bottling practices and equipment, and required wine analysis. **Prerequisite:** CH123, CH172, VMW245, or consent of instructor. Student must be 21 years of age. **Sp**

VMW250 Agricultural Supervisor Training
4 class hrs/wk, 4 cr.

Emphasizes skills needed for supervision in agricultural settings. Covers confidence and esteem building; decision making; communication; leadership and management; and legal and safety issues. **Offered as needed.**

VMW254 Wine Process Planning and Design
3 class hrs/wk, 3 cr.

Focuses on winemaking systems, winery operations, utilities, and equipment. Covers process technologies and systems used in wineries, winery design and layout. Stresses regulatory issues in planning and operating a winery and workplace safety. **W**

VMW255 Wine Industry Business Management
3 class hrs/wk, 3 cr.

Introduces vineyard and winery business management practices. Covers annual plans, budgets, and winery and vineyard development. Examines labor management, contracts, legal compliance, record-keeping, and problem solving. **Sp**

VMW260 Soil and Plant Nutrition
4 class hrs/wk, 4 cr.

Introduces basic principles of soil science. Emphasizes grapevine mineral nutrition and the relationship of water and soils. Covers soil conservation and improvement. **Sp**

VMW261 Vine Physiology
4 class hrs/wk, 4 cr.

Introduces the anatomy, physiology, and growth habits of grapevines. Covers plant processes responsible for patterns of growth, yield, and fruit quality in wine grapes in the context of common viticulture practices. **W**

VMW271 Wine Marketing 1—Brand Development
4 class hrs/wk, 4 cr.

Focuses on establishing and managing a brand in the wine industry with emphasis on the Oregon wine industry. Examines multiple models and aspects of product differentiation, brand planning, public relations, and media relations. **Prerequisite:** BA223 and VMW170, or consent of instructor. **Offered as needed.**

VMW272 Wine Marketing 2— Understanding the Wine Market Place
4 class hrs/wk, 4 cr.

Stresses the channels of wine distribution, focusing on the three-tier system. Covers technological tools to target the market. Emphasizes effective sales presentations and techniques. Reviews the political and legal aspects of the wine market place. **Prerequisite:** BA223 and VMW170, or consent of instructor. **Offered as needed.**

VMW273 Wine Marketing 3—Assessing and Targeting the Market
4 class hrs/wk, 4 cr.

Emphasizes how to move the wine marketing business past the romance stage to the next level. Combines the practical and theoretical. Covers tools for assessing the wine marketplace. Examines how external events impact a wine marketing plan. Integrates all aspects of wine marketing. Focuses on preparing and presenting a wine marketing plan. **Prerequisite:** VMW271 and VMW272, or consent of the instructor. **Offered as needed.**

VMW280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

WFB

Welding Fabrication

WFB087 Fabrication Practices 3
1 class and 6 lab hrs/wk, 3 cr.

Emphasizes structural fabrication using steel and aluminum. **Prerequisite:** enrollment in Welding Fabrication program or consent of program chair. **Offered as needed.**

WFB088 Fabrication Practices 4
1 class and 6 lab hrs/wk, 3 cr.

Includes instruction and experience in production-type welding with use of jigs, fixtures, and positioners. **Prerequisite:** WFB087 or consent of program chair. **Offered as needed.**

WFB096 Shop Projects
1 class and 3 lab hrs/wk, 2 cr.

Emphasizes practical experience in maintenance and repair of weld shop machines, accessories, and fixtures. Uses selected fabrication and repair projects to develop resourcefulness and confidence in the application of skills and knowledge developed in concurrent courses. **Prerequisite:** enrollment as a full-time student in the Welding Fabrication program or consent of the program chair. **Sp**

WFB097 Weld Shop Problems 2
1 class and 15 lab hrs/wk, 6 cr.

Provides continuation of welding shop problem experience with an emphasis toward on-the-job work experience. Encourages students to begin the CWE (Cooperative Work Experience) program in order to transition from school to the work place. **Prerequisite:** Sixth-term standing in the Welding Fabrication AAS degree program or consent of instructor. **Sp**

WFB280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

WLD
Welding

WLD051 Basic Arc Welding
2 class and 9 lab hrs/wk, 5 cr.
Studies the basic principles involved in making fillet welds on mild steel using standard industrial procedures, equipment, and welding electrodes with the shielded metal arc welding (SMAW) process. Includes information concerning other welding processes and compares them to the shielded metal arc welding process. **F**

WLD052 Intermediate Arc Welding
2 class and 9 lab hrs/wk, 5 cr.
Continues WLD051 covering ferrous and non-ferrous alloys and welding procedures. Presents demonstration and supervised practice of techniques on various metals applied in fabrication and repair. **Prerequisite:** WLD051 or consent of program chair. **W**

WLD053 Advanced Arc Welding
1 class and 6 lab hrs/wk, 3 cr.
Prepares for welding, under code-type procedures, 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:** Satisfactory completion of WLD051 and WLD052, or equivalent industrial experience with consent of program chair. **Sp**

WLD056 Blueprint Reading and Sketching
6 lab hrs/wk, 2 cr.
Covers basic sketching techniques and reading of three-view drawings for welders. Includes dimensioning practices, scaling, line alphabet notes, and symbols. Emphasizes developing skills in reading detail and welding drawings. **F**

WLD057 Layout Practices
3 lab hrs/wk, 1 cr.
Studies the layout tools and their use in fabricating structural members, bins, hoppers, pipe fittings, chutes, etc. Includes principles and practices of pattern development for typical forms and fitting. **W**

WLD058 Weld Shop Problems
2 class and 15 lab hrs/wk, 7 cr.
Offers a review and application of welding, layout, and fabrication processes. Includes study and practice of production welding methods, electrode consumption, and method selection. Selected fabrication and assembly projects present typical layout, fabrication, and production problems. **Prerequisite:** successful completion of the first two terms of the one-year Welding program, or equivalent industrial experience with consent of program chair. **Sp**

WLD059 Ornamental Iron Work
1 class and 3 lab hrs/wk, 2 cr.
Introduces the design and creation of metal sculpture and decorative structures through welded fabrication. **F, Offered as needed.**

WLD061 Basic Gas Metal Arc Welding (MIG)
1 class and 6 lab hrs/wk, 3 cr.
Introduces basic skills in semiautomatic metal inert gas (MIG) welding processes. Covers principles involved in equipment, material and procedures, combined with demonstrations and supervised practical experience, using standard industrial equipment. Uses solid and flux-core wire in typical industrial applications. **F**

WLD062 Intermediate Gas Metal Arc Welding (MIG)
1 class and 6 lab hrs/wk, 3 cr.
Builds on WLD061 and includes a study of and practice in welding of carbon steel. Emphasizes production in welding situations, using large diameter electrodes (solid and flux-cord) with mixed shielding gases in flat or horizontal positions. **Prerequisite:** WLD061 or consent of program chair. **W**

WLD063 Advanced Gas Metal Arc Welding (MIG)
1 class and 6 lab hrs/wk, 3 cr.
Continues WLD062. Includes welding mild steel, aluminum, and stainless steel. Students may take a certification test in accordance with the American Welding Society (AWS) unlimited plate test in accordance with AWS D1.1 structural code. **Prerequisite:** WLD061 or equivalent industrial experience with consent of program chair. **Sp**

WLD070 Oxyacetylene Processes
1 class and 6 lab hrs/wk, 3 cr.
Familiarizes the student with the safe use, care, and operation of oxyacetylene welding, brazing, and cutting equipment. **F**

WLD071 Basic Oxyacetylene Welding
1 class and 3 lab hrs/wk, 2 cr.
Teaches the fundamentals of oxyacetylene welding including brazing. **Offered as needed.**

WLD072 Oxyacetylene Cutting
5 lab hrs/wk, 2 cr.
Covers the use and care of oxyacetylene cutting equipment. **Offered as needed.**

WLD073 Basic Gas Tungsten Arc Welding (TIG)
1 class and 9 lab hrs/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:** enrollment in second term of the Welding Technology program or consent of program chair. **W**

WLD077 Welding Processes
2 class and 6 lab hrs/wk, 4 cr.
Introduces the fundamentals of shielded metal arc welding, oxyacetylene welding and cutting, and metallic inert gas welding (MIG). **W**

WLD080 Metallurgy for Welders
2 class hrs/wk, 2 cr.
Studies basic metallurgy as it pertains to welding. Covers identification of ferrous and non-ferrous metals. Includes mechanical properties, grain structure, and effects of heat. **Sp**

WLD097 Welding
1 class and 3 lab hrs/wk, 2 cr.
Covers the fundamentals and application of arc welding, oxyacetylene welding, brazing, and cutting pertaining to the automotive industry. **Prerequisite:** second-year standing in the Automotive Technology program or consent of instructor. **Sp**

WLD280B-L Cooperative Work Experience
See CWE—Cooperative Work Experience.

WR
Writing
See also SSP—Study Skills.

WR049 Basic Writing
4 class hrs/wk, 4 cr.
Focuses on practicing essential writing skills that give flexibility in academic writing. Introduces the language used by writing instructors and authors of college-level readers and handbooks. Emphasizes fluency in the writing process through use of invention strategies, drafting, revision, proofreading, and editing. Covers critical analysis of the organization, central idea, and other authors' perspectives to develop and extend thinking and understanding. **F, W, Sp, Su**

WR090 Fundamentals of Writing
4 class hrs/wk, 4 cr.
Focuses on writing essentials that build confidence in writing for a variety of academic purposes. Emphasizes skills necessary to produce thesis-driven essays. Reinforces grammar and sentence-level editing skills in the context of paragraphs and short essays. Covers critical reading of college-level texts. **F, W, Sp, Su**

WR091 Writing Essentials
1 class hr/wk, 1 cr.
Covers the mechanical and linguistic aspects of writing and other skills needed in college writing courses. Course may be repeated for a maximum of two credits. **Offered as needed.**

WR115 Introduction to Composition
3 class hrs/wk, 3 cr.
Focuses on developing college-level writing skills by emphasizing critical thinking, reading, and the writing of well-constructed, unified, coherent paragraphs to form essays that support a thesis and develop a main idea through a structure appropriate to the thesis and reader. Bridges developmental writing courses and WR121 by introducing students to writing situations and skills that will prepare them for WR121. Reinforces competency in sentence writing. **Prerequisite:** Asset score of 41-43; or COMPASS score of 64-81; or grade of "C" or better in WR090 or consent of WR115 instructor. **F, W, Sp, Su**

WR121 English Composition—Exposition
3 class hrs/wk, 3 cr.

Emphasizes clear, detailed, informative writing, critical thinking, and active reading. **Prerequisite:** Ability to organize thoughts and competency in standard written English as demonstrated by (a) qualifying score on a standard placement test or (b) grade of "C" or better in WR115 or (c) grade of "C" or better in COM051. **F, W, Sp, Su**

WR122 English Composition—Logic and Style
3 class hrs/wk, 3 cr.

Focuses on the writing of logical, effective, argumentative prose; use of stylistic elements; awareness of and consideration for different audiences; elementary research and citation skills; and critical reading. **Prerequisite:** grade of "C" or better in WR121. **F, W, Sp, Su**

WR123 English Composition—Research Writing
3 class hrs/wk, 3 cr.

Emphasizes the acquisition and evaluation of evidence; integration of source material and personal opinion; and a process research method, as well as appropriate process forms for developing and writing an analytical/argumentative research paper. **Prerequisite:** grade of "C" or better in WR121 and WR122. **F, W, Sp, Su**

WR227 Technical Writing
3 class hrs/wk, 3 cr.

Covers writing a variety of reports. Addresses issues of organization, supplements, bibliography, illustration, and document design. Emphasizes detailed, factual content, objective presentation, and a defined purpose for specific readers. For some programs, WR227 is the only writing course required at Chemeketa other than WR121. Therefore, there is a research component to the course that incorporates formal documentation. **Prerequisite:** grade of "C" or better in WR121 or BA214. **F, W, Sp, Su**

WR240 Creative Nonfiction
4 class hrs/wk, 4 cr.

Introduces the basic elements of creative nonfiction, including memoir and researched essays; the process of creating nonfiction works; and the workshop system used to share and discuss the work of peers. Students will create and revise at least one new work of creative nonfiction, which may be either a short work or part of a longer project. **Prerequisite:** WR121 or consent of instructor. Course may be repeated for a maximum of eight credits. **Offered as needed.**

WR241 Fiction
4 class hrs/wk, 4 cr.

Introduces the basic elements of the short story, the process of creating short stories, and the workshop system used to share and discuss the work of peers. Includes the creation and revision of at least one new short story. (Note: Focuses on short stories rather than novels or portions of novels.) **Prerequisite:** WR121 or consent of instruction. Course may be repeated for a maximum of eight credits. **F, W, Sp, Su**

WR242 Poetry
4 class hrs/wk, 4 cr.

Introduces the basic elements of poetry, the process of creating original poems, and the workshop system used to share and discuss the work of peers. Students will create and revise several new poems of their own. **Prerequisite:** WR121 or consent of instructor. Course may be repeated for a maximum of eight credits. **F, W, Sp, Su**

WR243 Playwriting
4 class hrs/wk, 4 cr.

Introduces the basic elements of play scripts, the process of creating original short plays, and the play lab system used to share and discuss the work of peers. Students will create and review at least one new short play of their own. **Prerequisite:** WR121 or consent of instructor. Course may be repeated for a maximum of eight credits. **Offered as needed.**

WR244 Advanced Fiction
4 class hrs/wk, 4 cr.

Further develops the techniques of creating and revising short fiction introduced in WR241, and examines in greater complexity the foundational theories of imaginative writing. Also examines current methods of finding print and electronic audiences for works of fiction. Employs a workshop format of presenting and critiquing student work. **Prerequisite:** WR241 or consent of instructor. Course may be repeated for a maximum of eight credits. **Offered as needed.**

WR245 Advanced Poetry
4 class hrs/wk, 4 cr.

Develops the techniques of creating and revising short poetry introduced in WR242 and examines in greater complexity the foundational theories of imaginative writing. Examines current methods of finding print and electronic audiences for works of poetry. Employs a workshop format of presenting and critiquing student work. **Prerequisite:** WR242 or consent of instructor. Course may be repeated for a maximum of eight credits. **Offered as needed.**

WR262 Screenwriting
4 class hrs/wk, 4 cr.

Introduces the basic elements of the screenplay, the process of creating screenplays, and the workshop system used to share and discuss the work of peers. Students will create and revise at least one short screenplay. **Prerequisite:** WR121 or consent of instructor. Course may be repeated for a maximum of eight credits. **Offered as needed.**

WS

Women's Studies

WS101 Introduction to Women's Studies: Women in American Society
3 class hrs/wk, 3 cr.

Introduces the sociology of women in American society throughout the life cycle. Focuses on the search for identity and positive, meaningful relationships, as well as theories of gender role socialization, and covers the new scholarship concerning women in western civilization, their history, and alterative futures. **F**

WS102 Introduction to Women's Studies: Women, Work and Family
3 class hrs/wk, 3 cr.

Examines the economic position of women in American society today. Includes an overview of working women in American history from colonial times to the present. Focuses on the problems women face today as a result of economic pressures, changing family and work roles, societal expectations, and the double day. **W**

WS103 Introduction to Women's Studies: Women Around the World
3 class hrs/wk, 3 cr.

Surveys of women around the world in the 20th Century using cross-cultural comparisons. Examines the status of women in subsistence economies and developing countries, and under socialism and capitalism. Explores women's productivity, access to resources and political power, and gender relations in different societies. Debates the politics of ecofeminism, environmental consciousness, and ecological awareness. **Sp**

ZOO

Zoology

ZOO201 General Zoology
3 class and 3 lab hrs/wk, 4 cr.

Introduces the major unifying principles and concepts of biology as applied to the study of animals. Includes the chemical basis of life, cell biology, theories about the origin of life, evolution, and genetics. **F**

ZOO202 General Zoology
3 class and 3 lab hrs/wk, 4 cr.

Introduces the major invertebrate phyla emphasizing the diversity of living organisms and adaptations to their environment. Applies principles and concepts studied in ZOO201 to the study of the invertebrates. **Prerequisite:** ZOO201. **W**

ZOO203 General Zoology
3 class and 3 lab hrs/wk, 4 cr.

Introduces vertebrate animals emphasizing the diversity of living organisms and adaptations to their environment. Includes comparative anatomy and physiology of selected body systems. **Prerequisite:** ZOO202. **Sp**
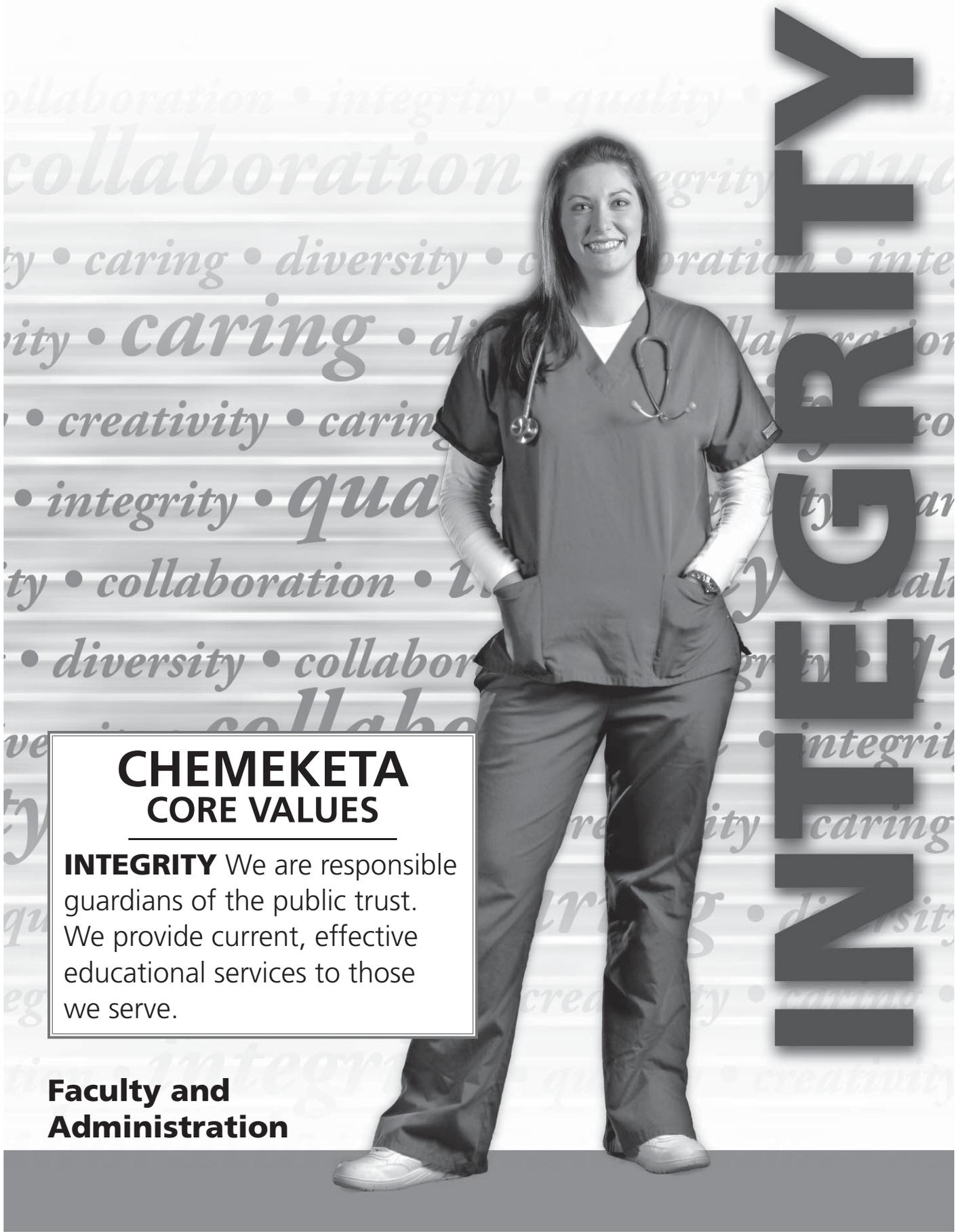
CHEMEKETA
CORE VALUES

INTEGRITY We are responsible guardians of the public trust. We provide current, effective educational services to those we serve.

Faculty and Administration

INTEGRITY

Board of Education

Members of the Chemeketa Board of Education are elected to represent seven geographical zones in the college district.

Zone One—Ed Dodson

Zone Two—Ron Pittman

Zone Three—JoAnne Beilke

Zone Four—Dan Ostlund

Zone Five—Ray Beaty

Zone Six—Gerald Watson

Zone Seven—Richard Riggs

Faculty & Administration as of July 2008

This is a partial listing of Chemeketa Community College's administration and faculty. It includes most of the people who are employed full time in instructional, coordinating, and administrative roles.

Aebi, Eric—Instructor, Hospitality & Tourism Management
BA, Arts & Letters   Portland State University

Agee, CS (Steve)—Instructor, Automotive Technology
Cert., Auto Technician   Mt. Hood Community College

Alfaqeeh, Nuri—Instructor, Mathematics
BS, Engineering—Nuclear   Oregon State University

Alvarez, Maria (Cleo)—Counselor
MS, Counseling   Western Oregon University

Anderson, D. Craig—Director, Natural Resources
PhD, Animal Nutrition   Oregon State University
MS, Animal Nutrition   Oregon State University
BS, Agriculture/Animal Science   University of Idaho

Anderson, Kenneth—Instructor, Mathematics
MS, Systems Analysis   Air Force Institute of Technology
BS, Mathematics   Western Oregon University
BS, Secondary Education   Western Oregon University

Andrews, Peggy—Instructor, Emergency Medical Technology
Cert., Emergency Medical Technician—Paramedic   Houston Community College
Cert., Paramedic Training   Houston Community College

Antoine, Patricia—Instructor, Sociology/Diversity
MS, Sociology   Portland State University
BS, Sociology   Portland State University
AA, Lower Division Collegiate   Chemeketa Community College

Balyo, JM (Mike)—Instructor, History
MA, History   Western Michigan University
BA, History   The King's College

Barber, Wayne—Instructor, Mathematics
MS, Teaching: Mathematics   University of Oregon
BS, Mathematics   University of Oregon

Bassett-Smith, Ron—Dean, Strategic Partnerships & Information Resources, & Assistant Chief Financial Officer
BS, Sociology   Oregon State University

Bates, Michael—Instructor, Computer Science
MS, Mathematics   Idaho State University
BS, Mathematics   University of Utah

Beach, Natalie—Director, Library and Tutoring Services
MLS, Library Science   Rutgers
MA, Humanities: History of Ideas   Rutgers
BA, English   University of Texas at Dallas

Beck, Sally—Coordinator, Adult Basic Education/GED/English as a Second Language
MS, Language Arts; Secondary Education   Western Oregon University
BA, English   Willamette University

Behmard, Sheeny—Instructor, Mathematics
MS, Math Science: Statistics   Eastern Kentucky University
MS, Statistics   Oregon State University
BA, Mathematics   Berea College
BA, Physics   Berea College

Belmodis, Cassie—Director, Coordinator of Health & Human Performance, and Athletics
BA, Physical Education   Willamette University
BA, Psychology   Willamette University

Bennett-Connolly, Gerri—Coordinator, Occupational Skills Training
BS, Speech Communication   Oregon State University

Bernhisel, Donna—Instructor, English/Writing
MA, English   Utah State University
BS, Social Work   Brigham Young University

Berntson, Tom—Instructor, Physical Science
MS, Biochemistry   Iowa State University
BS, Chemistry   Western Illinois University

Berry, Cecelia—Director of Evening & Weekend Programs
MS, Education   Lewis and Clark College
BA, Education   Portland State University

Bibler, Margaret (Carol)—Instructor, Art
BA, Art   University of Washington

Blodget, James—Media Production Specialist
BA, Communications   University of California—Berkeley

Bolante, Rebecca—Coordinator, Disability Services
MS, Rehabilitation   Western Oregon University
BS, Psychology; Criminal Justice   Western Oregon University

Bone, Andrew—Executive Dean
MA, Humanities   California State University at Dominguez Hills
MS, Business   California State University at Fresno
BS, Business Administration   Saint Mary's College of California

Booth, Karleen—Coordinator, Occupational Skills Training
M.Ed, Business Education   Oregon State University
BA, Business Education: Secretarial   University of Northern Colorado

Borden, Tiffany—Counselor
MS, Counseling   Western Oregon University
BA, Liberal Arts   Stephens College

Borjesson, Peggy—Director of Human Resources
BS, Social & Behavior Sciences   Linfield College
AA, General Studies   Linn-Benton Community College

Bowman, Roberta (Bobbi)—Instructor, Reading, Study Skills
MS, Interdisciplinary Studies   Western Oregon University
BS, Elementary Education   University of Kansas Main Campus

Brase, Amy—Instructor, Nursing
BSN, Nursing   University of Washington

Brase, Don—Associate Dean, Humanities & Communications
MA, English University of Montana
BA, English University of Washington

Brewer-Wallin, Gabrielle—Instructor, Theater Arts
MFA, Theater Directing California Institute of the Arts
MAT, Secondary English Lewis & Clark College
BA, English Lewis & Clark College

Brummond, Candy—Counselor
MS, Counseling Western Oregon University
BS, Psychology Western Oregon University

Buckholz, Cheryl—Instructor Pharmacy Technician
PhD, Pharmacy Oregon State University
BS, Botany Oregon State University

Bunch, Kathleen—Manager, Accounting & Procurement
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—Reference Librarian
MLS, Library Science Emporia State University
BA, Portland State University

Burns, Barbara—Instructor, Nursing-Clinical
BSN, Nursing Oregon Health Science University

Bush, Lori—Director, Workforce Integration
BS, Individual & Family Studies Pennsylvania State University

Cammack, Janice—Instructor, Physical Science
PhD, Chemistry Oregon State University
BS, Chemistry George Fox University

Campbell, Kathleen—Associate Dean, Enrollment
Management Services
BA, Human Resources Management George Fox University
AA, Transfer Coursework Lane Community College

Canoy, David—Instructor, Life Science
MS, Zoology Oregon State University
BS, Biology Western Oregon University
BS, Secondary Education Western Oregon University

Carnegie, Kay—Associate Dean, Health Sciences
MS, Nursing University of Portland
BSN, Nursing Illinois Wesleyan University

Casey White, Eileen—Instructional Coordinator/Analyst I
Ed.D, Leadership/Curriculum Portland State University
M.Ed, Reading Education Arizona State University
BS, English Arizona State University
BS, Secondary Education Arizona State University
AA, History Mesa Community College

Cegon, Lori—Instructor, Center for Business and Industry
BS, Public Administration Western Oregon University

Clark, Lori—Instructor, Physical Education
MA, Physical Education University of Oregon
BA, Norwegian Pacific Lutheran University
BA, Physical Education: Corrective Therapy
Pacific Lutheran University

Collins, Aileen—Instructor, Psychology
MS, Psychology University of Georgia
BA, Psychology University of Georgia

Colton, Lois—Instructor, Adult Basic Education
MA, Adult Education Oregon State University

BA, Elementary Education Portland State University

Concepcion, Paul—Instructor, Psychology
MS, Psychology Oklahoma State University
BA, Psychology University of California—Los Angeles

Cortez, Julio—Counselor
MS, Counseling Western Oregon University
BA, Psychology Western Oregon University

Craven, Linda—Instructor, Early Childhood Education
M.Ed, Education University of Portland
BA, Human Development Pacific Oaks College
AS, Early Childhood Education Chemeketa Community College

Crossler-Laird, Jannie—Instructor, English as a Second
Language
M.Ed, Adult Education Oregon State University
BA, German Pacific Lutheran University
BA, Social Sciences Pacific Lutheran University

Cudmore, Wynn—Instructor, Life Science
PhD, Life Sciences: Ecology Indiana State University
BS, Biology Northeastern University

Darby, Sydney—Instructor, English
MA, English Boston College
BA, English Portland State University

Davis, Cheryl—Instructor, Health Services Management
MBA George Fox University
BS, Health Education University of Oregon

Dishong McCormack, Michele—Instructor, Speech
MA, Communications Washington State University
BA, English and Speech Communication Chadron State College

Dobay, Deborah—Instructor, Psychology
MA, Human Development Pacific Oaks College
BS, Education: Child & Family Development
Bowling Green State University

Duncan, Nancy—Director, Hospitality & Tourism
Management
MSC, Counseling Oregon State University
BS, Home Economics University of Wisconsin—Madison

Dye, Kevin—Instructor, Composition/Literature
PhD, English University of New Mexico
MA, English Western Washington University
BA, English New York University
AA, Liberal Arts Nassau Community College

Edwards, Karen—Instructor, Business Management
MM, Business & Public Administration Willamette University
BA, History Willamette University

Elias, Marilyn—Instructor, Nursing
MS, Nursing Oregon Health Sciences University
BS, Nursing Walla Walla College

Emme, Larry—Instructor, Physical Science
MS, Chemistry Portland State University
BS, Chemistry Portland State University

Eppler, Carol—Instructor, Business Technology
M.Ed, Business Education Oregon State University
BS, Business Education Oregon State University

Eustrom, James—Dean, Student Services
M.Ed, College Student Services Administration
Oregon State University
BA, Sociology Willamette University

Evans, Michael—Project Coordinator, Student Support Services
MS, Counseling — Western Oregon University
BS, Psychology — Corban College
AA, Refrigeration/Heating/Air Conditioning
— Linn-Benton Community College

Falk, Cheryl—Dean, Regional Education Services
PhD, Education — Oregon State University
M.Ed, Elementary Education — University of Guam
BA, Spanish — University of Washington

Fallow, Gary—Instructor, English as a Second Language
MA, International Management
— American Graduate School of Management
BA, German — University of Oregon
BA, Political Science — University of Oregon

Farjami, Javad—Instructor, Mathematics
MS, Electrical & Computer Engineering Oregon State University
BS, Electrical & Computer Engineering Oregon State University

Ferguson, Mark—Instructor, Mathematics
MA, Mathematics — Oregon State University
BA, Business — Western Oregon University
BA, Mathematics — Western Oregon University

Ferry, Marjorie—Instructor, Composition/Literature
PhD, Literature: Russian — Yale University
MA, English — University of Oregon
BA, Russian — Bryn Mawr College

Fifer, Pamela—Instructor, Nursing
MS, Nursing — University of Portland
BS, Nursing — University of Portland

Finholt, James—Instructor, Computer Science & Networking
MBA, International Business Our Lady of The Lake University
BA, Economics — Luther College

Florence, William—Instructor, Student Newspaper Advisor
General Studies — St. Clair Community College
General Studies — University/College, Dublin, Ireland

Forslund, Larry—Instructor, Life Science
PhD, Biology — Tulane University of Louisiana
MS, Biology — Creighton University
BS, Physical Science — Wayne State University

Frank, Andrew—Instructor, Physical Science/Geology
PhD, Geology — University of Texas at Austin
MS, Geology — Northern Arizona University
BA, Geology — University of The Pacific

Franzone, Jeffrey—Instructor, Electronics
MTE, Engineering Technology — Arizona State University
BS, Engineering Technology
— California State University—Long Beach
AA, Radio/Television Broadcast Engineering Fullerton College
AA, Liberal Arts — Fullerton College

Frey, Melissa—Student Services Coordinator/Analyst I
M.Ed, College Student Services/Administration
— Oregon State University
BA, Business Administration — Oregon State University

Frey, Phil—Manager, Auxiliary Services
BS, Humanities — Oregon State University
BS, Social Sciences — Oregon State University

Fry, Mitchel—Instructor, Computer Science
MS, Computer Sciences — Oregon State University
BS, Psychology — Western Oregon University
BS, Computer Sciences — Western Oregon University

Furey, Kevin—Instructor, Economics
PhD, Economics — University of Washington
BA, Chemistry — California State University

Furr, William (Laney)—Instructor, Business Management Program
MBA, Business Administration: Finance
— Texas A&M University
BM, Music Literature — Sam Houston State University

Gastoni, William—Instructor, Corr Ed/Automotive
Cert., 1000 hrs Specialist: Masters Pro
— Ford Motor Credit Technical School
Cert., 200 hrs Corrections — Oregon Police Academy

Gelder, Minna—Registrar
BS, Computer Sciences — Western Oregon University

Gentile, Benedict—Instructor, Hospitality & Tourism Management
BA, Geography — University of Illinois At Chicago

George, Lynn—Instructor, Dental Assisting
MS, Policy Foundation & Administration
— Portland State University
BS, Business Admin. — Warner Pacific College
Cert., Dental Assisting — Chemeketa Community College

Gilley, Robin—Instructor, Developmental Education
M.Ed, Education — Purdue University
BA, Education — Purdue University

Goulard, Elizabeth—Vice President/Chief Academic Officer
EdD, Education — Oregon State University
MS, Nursing — University of Portland
BS, Nursing — University of Wisconsin—Madison

Graham, Jerry—Instructor, Center for Individualized Learning
MA, Education — Alliant International University
BS, Elementary Education — Northern Arizona University
AA, General Studies — Palomar College

Gredler, Gail—Instructor, Horticulture
MAg, Horticulture — Oregon State University
BS, General Science — University of Oregon

Green, Nancy—Director, Corrections Education
BS, Management & Communication — Corban College
AA, Lower Division Transfer Chemeketa Community College

Guerra, Manuel—Director, Student Retention & College Life
AA, Social Sciences — Mendocino College

Hale, Elizabeth—Learning Technologies Facilitator
MA, Education — University of Washington
Cert., English as a Second Language Initial Teaching Certificate
— Seattle University
BS, Political Science — University of Washington

Hallett, David—Associate Dean of Social Science, Human Services & Education Programs
JD, Law — University of Akron
BA, English — State University of New York
AAS, Communications — Cayuga Community College

Hammer, Peggy—Instructor, Business Technology
M.Ed, Education — University of Portland
BS, Liberal Studies — Oregon State University

Hardesty, David—Instructor, Adult Basic Education/GED
MS, Education: Policy Foundation & Administration
— Portland State University
BA, Psychology — Southern Methodist University

Harris, Rodney—Instructor, Electronics
  BEd, Mathematics   Eastern Washington University
  AAS, Electronics Technology: Electrical Engineering
                      Chemeketa Community College

Harvey, Jean—Instructor, Alternative High School
  MA, Teaching Program   Willamette University
  BA, History   Oregon State University

Hawkins, John—Foundation Executive Director
  BA, History   Whitman College

Hayes, Dan—Counselor
  MS, Counseling   Western Oregon University
  BS, Pre-Med   Loyola University

Healey, Lisa—Instructor, Mathematics
  MAT, Teaching Program   Willamette University
  BS, Mathematics   Willamette University
  AB, Mathematics: Calculus   Bard College

Herrera, Herlinda—Coordinator, CAMP & HEP
  AS, General Studies   Clackamas Community College

Heryford, Stella—Instructor, Nursing
  MSN, Nursing   University of Phoenix
  BSN, Nursing   Point Loma Nazarene College

Hibbeler, Duane—Instructor, CAD/CAM
  AS, Industrial Mechanical Technology
                      Chemeketa Community College

Hillis, David—Instructor, Mathematics
  MS, Mathematics   Colorado School of Mines
  BS, Engineer Physics   Colorado School of Mines

Hillyer, Rebecca—Director, Legal Resources
  JD, Law   Willamette University
  BS, Social Studies Education   Oregon State University

Hirt, Donna—Instructor, Human Services
  MSW, Social Work   Portland State University
  BS, Psychology   Western Oregon University
  AA, Secretarial Studies   Cerritos College

Hodgson, Traci—Instructor, History
  PhD, History   Boston University
  MA, History   Boston University
  BA, History   University of Kansas Main Campus

Hoelter, Peter—Instructor, Visual Communications
  BS, Psychology   Oregon State University

Holler, Barbara—Instructor, Business Technology
  MS, Business Education   Oregon State University
  BS, Liberal Arts   Oregon State University

Hornibrook, Debra—Instructor, Speech
  EdD, Educational Leadership: Curriculum & Instruction
                      Portland State University
  MS, Speech Communication   Portland State University
  BS, Psychology   Portland State University

Howard, Jeffrey—Counselor
  MS, Rehabilitation Counseling: Deafness
  Western Oregon University
  BS, Interdisciplinary Studies   Western Oregon University
  AAS, Finishing Optical Technician
                   Rochester Institute of Technology

Huckestein, Julie—Assistant Chief Financial Officer
  MS, Education: Policy Foundation & Administration
                      Portland State University
  BA, Management & Organizational Leadership
                      George Fox University
  AS, Business Administration
                  Linn-Benton Community College

Hughes, Moira—Instructor, Nursing
  MS, Gerontological Nursing   Oregon Health Science University
  BSN, Nursing   Oregon Health Science University
  AA, Nursing   College of San Mateo

Hulett, Ronald—Associate Dean, Business, Computer Science & Electronics
  EdM, Education   Oregon State University
  BS, Psychology   Michigan State University

Hurst, Douglas—Director, Auxiliary Services
  AS, Business Management   Linn-Benton Community College

Jabin, Tammy—Instructor, English
  MA, English   Portland State University
  BA, English   Willamette University
  AA, Lower Division—Oregon Transfer
                  Chemeketa Community College

Jacobson, Lee—Instructor, Ceramics/Sculpture/Art
  MFA, Art   University of Arizona
  BA, Art   Weber State University

Jantzi, Ronald—Associate Dean, Math, Science, Trades, & Technologies
  MA, Adult Education   University of Nebraska—Lincoln
  BEd, Trade & Industrial Education   Colorado State University
  AA, Architecture Drafting Technology
                 Nebraska Vocational Tech. School

Jasper, Sally—Instructor, Nursing
  MSN, Parent-Child Nursing   Vanderbilt University
  BSN, Nursing   Vanderbilt University

Jensen, Erik—Instructor, Physical Science
  MS, Physics   Oregon State University
  BS, Physics   Portland State University

Jones, Daniel—Information Technology Support Manager
  AS, Computer Electronics Technology AAS
                  Chemeketa Community College

Jones, Jason—Instructor, Business Management
  JD, Law   University of Oklahoma Norman
  MA, History   Oklahoma State University
  BA, History Education   University of Central Oklahoma

Kapan, Teter—Coordinator, International Student Services
  BA, Spanish   University of Oregon
  AA, Speech Communication   Clatsop Community College

Karbginsky, Darrel—Instructor, Computer Science
  MSE, Information Technology   Western Oregon University
  BS, Computer Sciences   Western Oregon University
  AA, Lower Division—Oregon Transfer
                  Chemeketa Community College
  AS, Automotive   Mira Costa College
  AS, Retailing Careers   Mira Costa College

Kelly, Michael—Instructor, Architecture Drafting
  AS, Drafting   Chemeketa Community College

Klein, William—Instructor, Fire Protection Technology
  AAS, Fire Protection/Fire Suppression
                  Chemeketa Community College

Knode, Kelsey—Instructor, Mathematics
　BS, Mathematics　　　　　　　　　Portland State University
Knowles, Wayne—Instructor, Visual Communication
　BA, Art　　　　　　　　　　　　　Marylhurst College
　AA, General Studies　　　　　　　　Miami Dade College
Kraus, Donald—Instructor, Computer Science
　MS, Education　　　　　　　　Western Oregon University
　BS, Business　　　　　　　　　Western Oregon University
　BS, Computer Sciences　　　　Western Oregon University
　AS, Business Administration: Management
　　　　　　　　　　　　　　Portland Community College
Kuhn, Gary—Instructor, Cooperative Work Experience
Coordinator
　MS, Teaching & Training Online　　　Capella University
　BS, Speech Communication　　Southern Oregon University
LaBelle, Jewel—Instructor, GED Options/HSC
　M.Ed, Education　　　　　　　　University of Portland
　JD, Law　　　　　　　　　　　　　Seattle University
　BS, Secondary Education　　　　　Bloomsburg University
Lacy-Tang, Jean—Counselor
　MA, Guidance & Counseling　　University of North Dakota
　BA, Psychology　　　　　North Dakota State University
Lander, Gregg—Instructor, Emergency Medical Technology
　BS, Liberal Studies　　　　　　　Oregon State University
Lanning, Patrick—Dean, Instruction
　PhD, Education　　　　　　　　Oregon State University
　MS, Interdisciplinary　　　　　　University of Oregon
　BS, Psychology　　　　　　　　　University of Oregon
Larsen, Melissa (Raschel)—Instructor, Physical Education
　MPH, Health Promotion & Education　Oregon State University
　BA, Health Education　　　　　　　　Linfield College
LaVine, Philip—Instructor, Farm Business Management
　MS, Agricultural Economics　　New Mexico State University
　BS, Agricultural Business　　California State University Fresno
Lazo, Omar—Instructor, Automotive Technology
　BA, Practical Theology　　　　　　　Advantage College
　Cert., Automotive Technology　　Universal Technical Institute
Lazzara, Edward—Instructor, Spanish
　MA, Romance Linguistics & Literature
　　　　　　　　　　　University of California—Los Angeles
　BS, Mathematics　　　　　　　　Montclair State College
Leonard, Phyllis—Instructor, Mathematics
　MS, Education　　　　　　　　Western Oregon University
　BS, Mathematics　　　　　　　　Oregon State University
LeRoy, Robert—Instructor, Composition & Literature
　MAT, English　　　　　　　　University of Washington
　BA, English　　　　　　　　　　　Williams College
Limbird, Marty—Instructor, Physical Education
　MAT, Education　　　　　　　　University of Portland
　BA, Athletic Training　　　　　　　Linfield College
Linder, Christine—Instructor, Visual Communications
　BAE, Art　　　　　　　University of Wisconsin—Oshkosh
Liss, Layli—Instructor, Learning Center-Santiam
　M.Ed, Education　　　　　　　University of St. Thomas
　BA, International Studies　　　　　　DePaul University

Lopez, Carlos—Instructor, Sociology
　BA, Sociology　　　University of North Carolina At Asheville
　AA, General Studies
　　　　　　　Asheville—Buncombe Technical Community College
　AA, Transfer Coursework
　　　　　　　Asheville—Buncombe Technical Community College
Lutz, Tonya—Instructor, Nursing-Clinical
　BS, Exercise & Sport Science　　　　Willamette University
　BS, Nursing　　　　　　University of Southern Maine
MacDonald, Al—Instructor, Vineyard Management
　MA, Psychology　　　　　　Central Michigan University
　BS, Psychology　　　　　　Central Michigan University
　BS, Sociology　　　　　　　Central Michigan University
Mack, Johnny—Associate Dean, Emergency Services & Physical
Education
　AAOT, General Studies　　Chemeketa Community College
　AAS, Fire Protection Technology
　　　　　　　　　　　Chemeketa Community College
Mack, Laura—Instructor, Art
　MFA, Fine Arts (Painting)
　　　　　　　University of Massachusetts—Dartmouth
　BFA, Studio Art　　　　　　　　　Tufts University
Marrow, Taylor—Instructor, History
　MA, History　　　　　　　　　Ball State University
　BA, History　　　　　　　　　　Indiana University
　BA, Telecommunications　　　　　Indiana University
Martin, Kimberly—Counselor
　MS, Counseling: Rehabilitation Counseling with the Deaf
　　　　　　　　　　　Western Oregon University
　BA, Education of Hearing Impaired
　　　　　　　　　　University of Northern Colorado
Martinez, Eduardo—Instructor, Adult Basic Education
　BA, Liberal Studies　　　　Loyola Marymount University
　AA, General Studies　　　　　　Marymount College
Martinez, Yolanda—Instructor, Human Services
　PhD, Education　　　　　　　Oregon State University
　MS, Counseling　　　　　　San Diego State University
　BA, Psychology　　　California State University—Fullerton
Massey, TT (Teresa)—Instructor, Developmental Education
　MA, Reading Education　　　University of South Florida
　BA, Elementary Education　　　　Stetson University
McCaffrey, Susan—Coordinator, Talent Search & Upward
Bound
　MPA, Public Administration　　Portland State University
　BS, Management & Communication　　Corban College
　AA, Lower Division Transfer　Chemeketa Community College
McCullough, Linda—Instructor, Accounting/Business
Management
　MM, Management　　　　　　　Willamette University
　BA, Liberal Studies　　　　　　　Linfield College
　AA, Lower Division Collegiate　Chemeketa Community College
McDonough, Thomas—Instructor, Astronomy-Planetarium
　MS, Atmospheric Sciences　　　Oregon State University
　BA, Physical Science　　San Francisco State University
　AA, General Studies　　City College of San Francisco
McGlynn, Maureen—Director, Curriculum & Instruction
　PhD, Education　　　　　　　　Capella University
　MA, Human Development　　　　Pacific Oaks College

McLaran, Diane—Director, Center for Business & Industry
BA, Managerial Leadership   Northwest Christian College
AS, Early Childhood Education   Lane Community College

McLaughlin, Suzanne—Instructor, French/Spanish
MA, Romance Languages: Spanish   University of Oregon
BA, French & Spanish   Keuka College

McLaughlin, Terrence—Instructor, Physical Education
MS, Interdisciplinary Studies   Western Oregon University
SSC, Sociology & Coaching
    University of California—Santa Barbara
BA, Sociology   University of California—Santa Barbara

McLearn, Brian—Instructor, Automotive
AAS, Automotive: Ford Asset   Mt Hood Community College

Messoline, Lindsay—Instructor, Adult Basic Education
MAT, Teaching Program   Willamette University
BA, Ethnic Studies   University of Oregon

Miller, Glen—Cooperative Work Experience Coordinator
M.Ed, College Student Services Administration
    Oregon State University
BS, Human Services   Corban College
BS, Psychology   Corban College

Miller, Mark—Instructor, Engineering & Mathematics
MS, Engineering: Mechanical   Oregon State University
BS, Engineering: Mechanical   Oregon State University

Mitchell, Nolan—Instructor, Mathematics
MA, Mathematics   Oregon State University
BS, Mathematics   Western Oregon University

Mohn-Brown, Elaine—Instructor, Nursing
EdD, Educational Administration   Brigham Young University
MA, Health Education   University of Northern Colorado
BA, Health Education   University of Northern Colorado
BS, Nursing   Metropolitan State College

Monson, Bryan—Instructor, Business Technology
M.Ed, Education   Oregon State University
BS, Secondary Education   Eastern Oregon University

Montgomery, Jennifer—Instructor, Anthropology
MA, American Indian Studies   University of Arizona
BS, Anthropology   University of Oregon

Moore, Eugene—Instructor, Electronics
MS, Engineering   Purdue University Main Campus
BS, Engineering   Harvey Mudd College

Morsches, Michael—Associate Dean, Developmental Education
PhD, Curriculum & Instruction   University of Akron
MA, Multicultural Education   University of Akron
BA, Secondary Education   Central State University

Moxley, Doug—Director, Employee Development, Planning & Internal Communication
BS, Psychology   Western Oregon University
AA, General Studies   Chemeketa Community College
AS, Food Sciences & Technologies
    Chemeketa Community College

Murray, Susan—Director, Office of High School Programs
EdD, Education   Oregon State University
BA, English   Willamette University

Myers, Michael—Instructor, Welding/Fabrication
AS, Welding   Chemeketa Community College

Nelson, Christopher—Instructor, Physical Science
MS, Chemistry: Organic   University of Illinois Urbana
BA, Chemistry   Central University of Iowa

Nelson, Gregory—Director, Chemeketa Cooperative Regional Library Service (CCRLS)
BS, Management & Communication   Corban College
AS, Electronics Technology: Electronics Engineering
    Chemeketa Community College

Newton, Kristi—Instructor, Business Management
MBA, Business Administration   Portland State University
BS, Business Administration   Oregon State University

Nord, Christopher—Instructor, Mathematics
MS, Mathematics   Oregon State University
BA, Mathematics   Goshen College

Northam, Ashley—Instructor, Education Program
MS, Speech Communication: Speech & Hearing Science
    Portland State University
BS, Speech & Hearing Science   Portland State University
AA, General Studies   Sierra College

O'Hara, Richard—Instructor, Life Science
PhD, Zoology   Oregon State University
MS, Zoology   Michigan State University
BS, Zoology   Michigan State University

O'Neill, Mary Ann—Instructor, Center for Industrial Learning
MS, Elementary Education
    Shippensburg University of Pennsylvania
BS, Elementary Education
    Shippensburg University of Pennsylvania

Ottaway, Carol—Instructor, Business Technology
M.Ed, Business Education   Oregon State University
BS, Business & Technology   Oregon State University

Paege, Keith—Instructor, Automotive
Cert., Automotive   Denver Automotive & Diesel College
Cert., Diesel Mechanics   Denver Automotive & Diesel College

Page, Frances—Student Services Coordinator/Analyst III
PhD, Counseling Psychology   University of Oregon
MS, Counseling Psychology   University of Oregon
BS, Community Services & Public Affairs
    University of Oregon

Park, Joyce—Instructor, Medical Assisting
MBC, Business   George Fox University
BS, Nursing   Idaho State University

Park, Russell—Instructor, Building Inspection
AAS, Building Inspection Technology
    Chemeketa Community College

Patterson, Steven—Instructional Supervisor-Exempt
BS, Park & Recreation Resources
    Michigan State University
M.Ed, Recreation & Leisure Studies
    University of Minnesota

Patterson, Susan—Instructional Supervisor-Exempt
BS, Education   Linfield College
M.Ed, Adult Education   Oregon State University

Payne, Eva—Instructor, Communication Skills
MA, English   Oregon State University
BA, English   Oregon State University

Peters, Julie—Instructor, Drafting-Structural
AS, Drafting Technology—Mechanical Design
    Chemeketa Community College

Peterson, Karen—Instructor, Nursing
MSN, Nursing   University of Phoenix
BSN, Nursing   California State University

Pierce, Samuel—Instructor, Psychology
- PsyD, Psychology — George Fox University
- MA, Psychology: Clinical — George Fox University
- BS, General Studies — Oregon State University

Pillette-Stephens, Debra—Instructor, Criminal Justice
- MS, Corrections — Western Oregon University
- BS, Physical Education & Health — Western Oregon University
- BS, Secondary Education — Western Oregon University

Pintler, Michael—Instructor, Welding/Fabrication
- AS, Welding Fabrication — Chemeketa Community College

Plett, John—Director, McMinnville Campus
- EdD, Ed Leadership: Curriculum & Instruction — Northern Arizona University
- MS, Physics — United States Naval Academy
- MBA, Business Administration — Long Island University, C.W. Post Center
- BS, General Studies — United States Naval Academy

Portman, Mark—Instructor, GED Options/HS Programs
- M.Ed, Elementary Education — Western Oregon University
- BA, Elementary Education — Portland State University
- BA, Art — Central Washington University
- AA, Education — Grays Harbor College

Powers, Kristina—Instructor, Hospitality & Tourism Management
- MA, Counseling Psychology — Lewis and Clark College
- BS, Business Administration — Oregon State University

Prange, Teresa—Instructor, Accounting
- MBA, Business Administration — Maharishi International University
- BA, Interdisciplinary Studies — Maharishi International University
- Cert., Secretarial Studies — Chemeketa Community College

Premo, Elaine—Instructor, Criminal Justice
- BS, Corrections — Western Oregon University
- BS, Psychology — Western Oregon University
- AAS, Criminal Justice—Corrections — Chemeketa Community College
- AA, Lower Division—Oregon Transfer — Chemeketa Community College

Prentice-Craver, Cynthia—Instructor, Life Science
- MS, Education Curriculum & Instruction — Portland State University
- BS, Physical Education — Oregon State University

Prothero, Marilyn—Instructor, English as a Second Language
- M.Ed, Adult Education — Oregon State University
- BA, Foreign Languages — University of Oregon

Protiva, Karen—Instructor, Life Science
- PhD, Human Performance — Oregon State University
- MS, Physical Education — George Mason University
- BS, Kinesiological Sciences — University of Maryland College

Rasmussen, Douglas—Instructor, Mathematics
- M.Ed, Education — Linfield College
- MS, Mathematics: Teacher's Program — University of Oregon
- BA, Mathematics — Linfield College

Reed, Lester—Project Coordinator, Northwest Center for Sustainable Resources
- PhD, Community College Leadership — University of Texas
- MS, Educational Guidance — Southern Illinois University
- BS, Psychology — University of Nebraska at Omaha

Reed, Marilyn—Coordinator, Extended Learning
- BS, Humanities — Oregon State University

Reed, Eric—Instructor, American Sign Language
- M.Ed, Special Educaiton — Lewis and Clark College
- BA, Education of Hearing Impaired — University of Tulsa

Reeves, David—Instructor, English as a Second Language
- MA, Sociology — University of California—Los Angeles
- MA, Linguistics — California State University—Northridge
- BA, Sociology — University of London

Regan, Valerie—Instructor, Speech-Language Pathology Assistant Program
- MS, Speech Pathology/Audiology — University of Oregon
- BA, Psychology — Southern Connecticut State College

Richardson, Steven—Instructor, Composition & Literature
- MFA, Literature: Creative Writing — University of Oregon
- BA, Literature: Creative Writing — University of California—Santa Cruz

Roelofs, Gary—Instructor, English as a Second Language
- MA, Literature Comparative — Michigan State University
- BA, Literature Comparative — Michigan State University

Roberts, Cheryl—College President
- PhD, Educational Leadership & Organizational Development — Seattle University
- MA, Student Personnel in Higher Education — Ohio State University
- BA, Psychology — Seattle University

Rogers, Timothy—Chief Information Officer
- BS, Administration of Justice — Portland State University

Rozin, Miriam—Business Services Manager
- MA, Education: Policy Foundation & Administration — Portland State University
- BS, Business — Western Oregon University

Rupert, Jill—Instructor, English
- PhD, English — Tulane University of Louisiana
- MA, English — Tulane University of Louisiana
- BA, English — Whitman College

Salinas-Oliveros, Rebecca—Cooperative Work Experience Coordinator
- MS, Education: Policy Foundation & Administration — Portland State University
- BS, Human Development & Family Science — Oregon State University

Schellenberg, Kellie—Distance Education Supervisor
- BA, Psychology — University of Regina

Schmitt, Loraine—Chemeketa Online Director
- M.Ed, Adult Education — Oregon State University
- BS, Journalism/News: Editorial — University of Kansas Main Campus
- BS, Journalism/Photo Journalism — University of Kansas Main Campus

Schmitz, Diane—Grants Development Coordinator
- MA, English Composition and Rhetoric — Washington State University
- BA, English — Washington State University

Schnider, Sheldon—Instructor, CAD/CAM
- AA, Manufacturing Engineering Technologies — Chemeketa Community College

Schramm, Jennifer—Instructor, Life Science
 PhD, Biology: Plant   University of California—Berkeley
 BA, Biology   Knox College
Sekafetz, Charles—Instructor, Electronics
 AAS, Electronic Engineering   Chemeketa Community College
Sessions, Patricia—Instructor, Business Technology
 MS, Business Education   Montana State University
 BS, Business   Montana State University
Skirvin, Charles—Counselor
 MS, Counseling   Oregon State University
 BS, General Science   Oregon State University
Slemenda, Steven—Instructor, Composition/Literature
 MA, English   Portland State University
 BA, English   Portland State University
Smith, Craig—Vice President/Chief Financial Officer
 JD, Law   Willamette University
 MBA, Management   Willamette University
 BA, Business Administration   Northwest Nazarene College
Smith, Paul—Instructor, Nursing
 BSN, Nursing   University of Phoenix
 AAS, Nursing   Southern Union State Junior College
Smith, Steven—Learning Technologies Facilitator
 BA, History   California State University-Long Beach
 MIM, Management
    Thunderbird School of Global Management
Solario, Chris—Counselor
 MS, Sociology   Portland State University
 BA, Sociology   Western Oregon University
 AA, Liberal Studies   Rio Hondo College
Soliday, Peggy—Instructor, Human Services
 MSW, Social Work   California State University, Fresno
 BS, Organizational Behavior   University of San Francisco
Steiner, Marcia—Instructor, GED Options
 M.Ed, Education   University of Portland
 BA, Social Sciences   Pepperdine University
 BA, Home Economics   Chapman University
 Cert., Secondary Education   Pepperdine University
Stevens, Karen—Counselor
 MSW, Social Work   Portland State University
 BS, Psychology   Western Oregon University
 AA, Transfer   Chemeketa Community College
 AGS, Transfer   Chemeketa Community College
Stevens, Malia—Instructor, Education Program Education
Assessment Coordinator
 EdD, Education   Oregon State University
 M.Ed, Master Teacher   Central Washington University
 BA, Special Education   Central Washington University
 AA, Liberal Arts   Clark College
Stewart, Jimmy—Instructor, Fire Protection Technology
 AA, General Studies   Blue Mountain Community College
Sunderland, David—Instructor, Farm Business Management
 MS, Agriculture Economics   New Mexico State University
 BS, Animal Science   Brigham Young University
Tardiff, Bryan—Instructor, Mathematics
 MS, Mathematics   Oregon State University
 BS, Mathematics   Oregon State University
TenEyck, Lorna—Instructor, Mathematics
 MS, Education   State University of New York at New Paltz
 BA, Anthropology   State University of New York at Albany

Teixeira, Denise—Instructor, Accounting Programs
 MBA, Management   University of Hartford
 BS, Business Management   University of Maryland
 AAS, Accounting   Northern Virginia Community College
Terpin, Mark—Instructor, English as a Second Language
 BA, Linguistics   University of Oregon
Thorp, Anne—Instructor, Adult Basic Education & GED
 M.Ed, Education   University of Portland
 BS, Occupational Therapy   San Jose State University
Trabue, Jeremy—Instructor, English
 MA, Psychology   State University of West Georgia
 MA, English   State University of West Georgia
 BA, Humanities   New College of California
Trattner, Tamara—Instructor, Early Childhood Education
 MA, Human Development   Pacific Oaks College
 BA, Human Development   Pacific Oaks College
 AA, Early Childhood Education Chemeketa Community College
Troupe, Count—Instructor, Adult Basic Education, Corrections
 MA, Educational Administration
    California State University—Los Angeles
 BA, Speech Communication
    California State University—Long Beach
 AA, Humanities   Cerritos College
Trousdale, Deborah—Instructor, Art History
 MA, Art History   University of Oregon
Tuss, Lana—Instructor, Accounting
 MIM, Management   Southern Oregon University
 BS, Business Administration: Accounting
    Portland State University
Urban, Wanda—Instructor, Human Services
 MS, Counseling   University of Oregon
 BA, Special Education   University of Oregon
Ure, Douglas—Instructor, Life Science
 MS, Zoology   Oregon State University
 BA, Botany   University of Montana
 BA, Zoology   University of Montana
Valdivia, Armandina—Instructor/Coordinator, English as a
Second Language/Adult Basic Education
 M.Ed, Adult Education   Oregon State University
 BA, Art   Oregon State University
Van Houten, Debra—Instructor, Life Science
 MS, Physiology   University of California—San Francisco
 BS, Animal Science   California Polytechnic State University
Van Slyke, Timothy—Instructor, Multimedia Language Center
 MSE, Information Technology   Western Oregon University
 BA, Arts & Letters   Portland State University
 BA, Teaching English as a Second Language
    Portland State University
VanStavern, Jan—Instructor, Composition/Literature
 PhD, English   University of California—Davis
 MA, English   University of California—Davis
 BA, Creative Writing   Oberlin College
Vaughan, Joyce—Instructor, Dental Assisting
 BS, Interdisciplinary Studies   Western Oregon University
 AS, Dental Assisting   Oregon Institute of Technology
Veldhuisen, Kathleen—Reference Librarian
 MLS, Library Science   Rutgers—The State University
 BA, English   Rutgers—The State University

Vessello, Jerry—Facilities & Operations Officer
    MS, Education: Policy Foundation & Administration
                           University of Oregon
    BS, Psychology   University of Oregon
    AS, Survey Technology   Chemeketa Community College

Villegas, Elias—Director, Woodburn Campus
    MPA, Public Administration California State University—Chico
    BS, International Business California State University—Chico
    BS, Spanish   California State University—Chico
    AA, Accounting   Butte College

Villwock, Cynthia—Instructor, Physical Science
    MS, Chemistry   Oregon State University
    BS, Engineering: Civil   Oregon State University

Vollmar, Lorene—Coordinator, Health Sciences
    MS, Community Health Administration & Wellness
              California College for Health Sciences
    BS, Social & Behavioral Sciences   Linfield College
    Cert., Dental Assisting   Chemeketa Community College

Ward, HJ (Jill)—Associate Dean, Student Services
    MS, Education: Counseling   Western Oregon University
    BA, Oral Communications: Speech Pathology & Audiology
                        Baylor University

Watkins, Carmen—Instructor, Mechanical Design
    BS, Mechanical Engineering   University of Alaska Fairbanks

Watson, Barney—Instructor, Enology
    MS, Food Sciences   University of California—Davis
    BA, Biochemistry   University of California—Berkeley

Wenzig, Theresa—Instructor, Nursing
    MSN, Nursing   University of Phoenix
    BSN, Nursing   Lewis-Clark State College
    AS, Nursing   North Idaho College

White, Roger—Instructor, Electronics
    AS, Electronic Engineering   Chemeketa Community College

Whitney, John—Instructor, English as a Second Language
    MA, English   Northern Arizona University
    BS, English   Northern Arizona University

Whitton, Louanne—Instructor, Developmental Education
    M.Ed, Reading Specialist   Eastern Washington University
    BA, Psychology   Gonzaga University

Wieczorek, Emily—Instructor, Health Records/Medical Transcription
    M.Ed, Education   University of Portland
    BS, Elementary Education   University of Nebraska—Lincoln

Wilkins, Jimmie—Coordinator, Small Business Development Center
    MBA, Management   University of Oregon
    BS, Business & Economics   Eastern Oregon University

Williams, Patrick—Instructor, Philosophy/Religion
    MAIS, Interdisciplinary Studies   Oregon State University
    BS, History   Oregon State University
    BS, Philosophy   Oregon State University

Willis, Monica—Instructor, Adult Basic Education
    M.Ed, Education   University of Portland
    BA, International Studies   Willamette University
    BA, Spanish   Willamette University

Wolfe, Steven—Instructor, Geography
    MA, Geography   University of Missouri—Columbia
    BS, Geography   Oregon State University
    AA, Geography   Central Oregon Community College

Wood, Josie—Instructor, Speech
    MAIS, Interdisciplinary Studies   Oregon State University
    BA, Speech Communication   Western Oregon University
    AA, Transfer Coursework   Central Oregon Community College

Wood, Rhonda—Instructor, Emergency Medical Technology
    BS, Nursing   California State University
    AA, Nursing: Registered   Fullerton College

Yancey, Theresa—Reference Librarian
    MLIF, Library Science   University of Washington
    BA, German   Linfield College

Zmolek, Veronica—Coordinator, Disability Student Support Services
    MS, Counseling   Western Oregon University
    BA, Secondary Education   University of Oklahoma

Student Rights and Responsibilities

Students are advised to read and understand this document. By accepting admission to Chemeketa Community College, students enjoy the rights and privileges as outlined here. To help ensure a positive learning environment, students have the responsibility to conduct themselves in accordance with standards as set forth in this policy.

I. **Preamble** Chemeketa Community College provides an environment that celebrates the freedom to learn and the freedom to teach. In that celebration of teaching and learning, it is appropriate that individuals and groups be viewed with regard to their potential to contribute within the learning environment. Each has dignity and value.

II. **Code of Behavior** As a community of people seeking education, Chemeketa students are dedicated to improving personally and academically. Choosing to join the college community obligates each member to a code of behavior. Chemeketa students will:

A. *Practice personal and educational integrity.*
1. Students shall practice academic honesty by not cheating, plagiarizing, or misrepresenting their coursework in any way.
2. Students shall not misuse college documents, library or computer resources, student records, or identification cards.

B. *Maintain standards of academic performance and contribute to the safe, cooperative and respectful learning environment throughout the college.*
1. Students shall participate in classroom assignments and discussions, and attend classes regularly.
2. Students shall not disrupt the teaching/learning process.

C. *Discourage bigotry and respect the diversity and dignity of all persons.*
1. Students shall not participate in physical or verbal abuse of any individual.
2. Students are encouraged to demonstrate respect for all persons.

D. *Respect the rights and property of all persons.*
1. Students shall do nothing to impede another's right to move about freely, express him/herself, or enjoy privacy.
2. Students shall not destroy, deface or misuse property belonging to an individual or the college

E. *Bear the ultimate responsibility for the effects of their decisions and behavior.*
1. Students have an ethical obligation to confront, challenge or report destructive or abusive behavior.
2. Students shall not possess any firearm, or knife with a blade exceeding four inches, or illegal weapon (see ORS Chapter 166), with or without a concealed weapon permit.
3. Students shall not abuse alcohol or other drugs.
4. Students shall abide by federal, state, and local laws.

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

A. *Provide access to education and campus facilities.*
1. The college shall be open to applicants who are qualified according to current admission requirements within the limits of its resources and facilities.

2. Students have the right to be informed about class requirements and college policy and procedures. Students' access to education shall not be inhibited by prejudiced or capricious academic evaluation.
3. Students have the right to participate in evaluations of programs, course content and educational objectives.
   If a student is charged with a violation of law not related to his/her activities on campus, the matter shall be of no disciplinary concern to the college, unless the student is incarcerated and cannot comply with educational requirements. (See Student Records Policy and Guidelines.)
4. Students, official clubs and organizations may use available college facilities according to college policy and procedures.

B. *Assure the protection of confidential student records and information.*
1. Student records and information are protected and governed by federal and state laws and the college's Student Records Policy and Guidelines.
2. Information about student views, beliefs, private activities, and political associations that is acquired or learned by college employees in the course of work is to be treated with professional judgment and confidentiality.
3. Professional evaluations and references about the ability and character of students may be provided under appropriate circumstances.

C. *Provide opportunities for association and preserve freedom of expression.*
1. Policy and procedures governing clubs and organizations shall be established by the college.
   Students may express their views on college policy or matters of general interest, and may support causes by any orderly means that do not disrupt the operation of the college.
2. In the classroom, students may take exception to the information and may reserve judgment about matters of opinion, but they are responsible for learning the content of the course.
3. Chemeketa Community College, as publisher, bears in conjunction with the staff of student publications, the responsibility for the content of the publications. The publications shall adhere to all applicable Oregon statutes, such as those regarding mass communications.
4. The student newspaper shall be governed by the Student Newspaper "Guidelines" and shall follow the Canons of Journalism of the American Society of Newspaper Editors.
5. Student publications shall state that the opinions expressed are not necessarily those of the college or student body.

IV. **Conflict Resolution Process** If a student has a complaint about a staff member or another student, the steps outlined in this section will summarize the process. Members of the Chemeketa Community College community involved in a dispute are encouraged to first seek resolution with the individual with whom the conflict exists. Chemeketa Community College emphasizes the importance of direct, courteous, and respectful communication to informally resolve concerns and complaints. However, if resolution through person-to-person communication is not possible, there are several informal and, if necessary, formal processes to assist with conflict resolution.

Please note: If the conflict involves alleged discrimination or harassment by a student or staff member, a different reporting process than what is listed in this section is followed. If you suspect discrimination or harassment, the College's Affirmative Action Officer or the Dean of Students should be contacted immediately. Please refer to section 8.0 in this document for more information.

Each of the dispute types listed here in sections 4.1-4.5, shall be subject to a specific conflict resolution process:

A. Grade Appeals. Students are encouraged to maintain frank and open communication concerning their progress and performance throughout the duration of the course.

1. When a student believes that he or she has been given an inappropriate grade, the student will speak directly with the instructor no later than four (4) weeks after the end of the academic term of the disputed grade.
2. If satisfaction is not received with the instructor, the student may appeal no later than six (6) weeks after the end of the academic term of the dispute.
   a. The student will submit a "Grade Appeal" form. These forms are available in the Dean of Students office and online at: http://www.chemeketa.edu/shared/forms/gradeappeal.pdf.
   b. The form should be submitted to the Dean of Students office, where it will be forwarded to the appropriate supervisor.
   c. The supervisor will review both the instructor's and student's facts related to the grade appeal (tests, papers, reports, participation, etc).
   d. At the end of the review, the supervisor will contact the student with their decision. The supervisor's decision shall be final and will be forwarded in writing to the instructor and student within thirty (30) calendar days of the receipt of the "Grade Appeal" form.
   e. The supervisor will keep a copy of the appeal for one year.

B. Academic Honesty. When an apparent violation of academic honesty occurs, the faculty member works directly with the student according to the Chemeketa Community College Academic Honesty Policy and Procedure 5020. The faculty member may resolve the matter by determining an appropriate course of action.

1. If the student contests the faculty member's decision, a meeting with the faculty member's supervisor may be requested.
2. The purpose of the meeting is for the student to hear the charges and present his/her side of the case.
3. The supervisor determines if the action recommended by the faculty member is appropriate.
4. If the student contests the supervisor's decision, the student may submit a written appeal to the Dean of Instruction.
5. The Dean of Instruction considers the appeal and responds. The decision of the dean is final.
6. Further consequences may be imposed by the Dean of Students in cases of grievous violations of academic honesty or for a continued pattern of violations.
7. Consequences for violations of academic dishonesty:
   a. If a student is found guilty of violating academic dishonesty, any one or a combination of the following consequences may be imposed by the faculty member.
      1) Oral or written disciplinary admonition and warning.
      2) Temporary exclusion from class, lab, or clinical, not to exceed one class session.
      3) A grade of "F" or a zero for the assignment, project, or examination
   b. The following consequence may be imposed by the faculty member after an inquiry conducted by their supervisor:
      1) Program-based academic probation.
      2) A lower grade or a grade of "F" or "No Pass" for the course, overriding a student's ability to withdraw from the course (in some programs, this may result in a student's removal from the program).
      3) Requirement to attend an Academic Honesty seminar.
   c. The following consequences may be imposed by the Dean of Students in cases of grievous acts of dishonesty or for a continued pattern of dishonesty:
      1) Disciplinary admonition and warning.
      2) Disciplinary probation with or without the loss of privileges for a definite period of time. The violation of the terms of the disciplinary probation or the breaking of any college rule during the probation period may be grounds for suspension or expulsion from the college.
      3) Suspension from Chemeketa Community College for a definite period of time.
      4) Expulsion from Chemeketa Community College.
8. Some professional-technical areas have program-specific student handbooks, and in these handbooks there may be further explanation of their unique policies and consequences.

C. Charges of Student Misconduct by Staff or Student. These complaints would include any violation of section 2.0, Code of Behavior of this document (except for issues involving Academic Honesty, which are covered in section 4.2). Students and staff are encouraged to deal with student misconduct on an informal basis whenever possible. However, when the misconduct rises to a level that informal resolution cannot be reached, the appropriate staff or student may file a complaint.

1. The appropriate staff or student will file a "Student Misconduct Complaint" form with the Dean of Students. These forms are available in the Dean of Students office and online at: http://www.chemeketa.edu/shared/forms/studentmisconduct.pdf.
2. The student whom the complaint is filed against will be notified in writing of the charges and the maximum penalty which might result from consideration of the complaint. (See Section 5.0, #2 Types of Disciplinary Action)
3. The student has ten (10) working days from the notification date of the complaint to respond.
   a. If the student fails to respond, the dean will decide next steps and the student forfeits the right to appeal the decision.
4. After review of the evidence and interviewing of appropriate persons, the Dean of Students or designee may take one of the following actions:
   a. Terminate the proceedings, thereby exonerating the student;
   b. Dismiss the complaint after appropriate counseling and advice to the student;
   c. Impose an appropriate sanction in accordance with section 5.0

5. The student will be notified in writing of the decision within thirty (30) calendar days of the student's response to the complaint.

6. The decision of the Dean of Students or designee shall be final and not subject to further appeal except in the case of expulsion.
   a. When expulsion is recommended by the Dean of Students, the student may appeal to the college's Ombudsperson/Executive Dean.
   b. The Ombudsperson/Executive Dean may convene the College Appeals Committee for assistance in arriving at a final decision.
   c. The Ombudsperson/Executive Dean will issue a written decision to the student within thirty (30) calendar days of the hearing. A copy of the decision will be given to the Dean of Students.
   d. The decision of the Ombudsperson/Executive Dean will be final and not subject to further appeal.

D. Charges of Staff Misconduct. Complaints in this dispute type refer to perceived violation of law or college policy or section 3.0, Student Rights, of this document. These complaints, made by a student, do not include grade issues. Except for sexual harassment and discrimination complaints, the faculty and staff members of the College are subject to collective bargaining agreements and formal disciplinary rules, which are beyond the scope of this document. By law, certain procedures must be followed before discipline can be imposed. For this reason, complaints concerning the conduct of a faculty or staff member shall be made to the faculty and/or staff member's supervisor and shall be subject to dispute resolution procedures as the supervisor determines appropriate. If the student believes that the supervisor has not resolved the issue, the student may meet with the supervisor's dean.

E. Student Complaints Alleging Violation of a College Rule, Policy, or Procedure. This type of complaint is used when a student believes that the college, as a matter of practice, is violating its own rules, policies, or procedures.

1. The student will submit a complaint in writing to the Dean of Students.
   The complaint will include:
   a. The student's name
   b. The nature of the complaint along with all documents, policies, procedures and related material that may be necessary for college review of the complaint.

2. Upon receipt of the complaint, the Dean of Students will schedule a meeting with the student filing the complaint. At that meeting, the Dean of Students shall attempt a resolution of the complaint.

3. In the event that the resolution proposed by the Dean of Students is not acceptable to the student, the student may make a secondary appeal to the Ombudsperson/Executive Dean. Upon receipt of the student's complaint, the Ombudsperson/Executive Dean shall meet with the student to discuss the complaint.
   a. The Ombudsperson/Executive Dean may convene the College Appeals Committee for assistance in arriving at a final decision.
   b. The Ombudsperson/Executive Dean will issue a written decision to the student within thirty (30) calendar days of the hearing. A copy of the decision will be given to the Dean of Students.
   c. The decision of the Ombudsperson/Executive Dean will be final and not subject to further appeal.

4. If a student needs further information regarding the conflict resolution process, they are encouraged to contact the Assistant to the Dean of Students.

V. Student Discipline. Disciplinary action may be imposed upon a student by college staff for misconduct or for violation of law and/or college rules and policies.

A. Disciplinary action may be imposed upon a student by college staff for misconduct or for violation of law and/or college rules and policies.

B. Types of disciplinary action that may be imposed and authorization for such action are:
   1. Temporary Exclusion is the removal of a student from a class or service area, not to exceed one class session, one day, or removal from a college-sponsored function for the duration of the function. If an employee deems that the language, manner, or physical behavior of a student violates an atmosphere conducive to learning, safety, the orderly administration of the college, or the rights of the members of the college community, the employee may request the student to leave. Reinstatement may be sought in accordance with the Student Rights and Responsibilities document. (See College Policy 4220.) A written report of the circumstances requiring this action shall be submitted to the appropriate director or dean within one working day following the incident with specific directions or expectations and consequences for non-compliance.
   2. Disciplinary Probation is a written warning to a student which may include interim exclusion. Interim exclusion may not exceed five days. The appropriate director may impose disciplinary probation.
   3. Suspension is the exclusion of a student from classes in a program or service area, and college-sponsored functions for a specified period of time as set forth in the notice of suspension. The appropriate dean may impose suspension from classes in a program, from a service area, or from college-sponsored functions. Suspension may not exceed one term.
   4. Expulsion is the permanent separation of a student from a program or service area or conditional separation from the college. The Dean of Students may impose expulsion. Conditions of readmission, if any, shall be stated in the order of expulsion.

C. The Dean of Students may take any disciplinary action deemed appropriate for student behaviors which are considered destructive to the educational environment of the college.

VI. College Appeals Process

A. The Ombudsperson/Executive Dean may decide, at his/her discretion, to take any issue involving student misconduct to a hearing before the College Appeals Committee. A hearing before the College Appeals Committee occurs in situations that may require a summary decision on an unresolved conflict or may result in the permanent expulsion of a student.

B. The college Ombudsperson/Executive Dean, in consultation with the Dean of Students, shall appoint two students and three staff members to form a College Appeals Committee. The appeals committee must have a quorum of four to conduct a hearing. The hearing is not considered a formal, legal trial.

C. The general rules governing a hearing are listed below. The specific rules for a hearing are contained in the guidelines of the College Appeals Committee. A copy of these guidelines is on file in the office of the Dean of Students and is available for examination by any student upon request.

D. A hearing shall be held not less than three nor more than twenty (20) working days after the filing of the statement of violation with the Dean of Students. For reasonable cause, the College Appeals Committee may grant a postponement.

E. The student may be accompanied by counsel for advising purposes only; however, counsel will not participate directly in the hearing.

F. If the student who filed the appeal or is the subject of the appeal fails to appear for the hearing or agrees in writing not to contest the case, the Committee shall review the evidence and prescribe the appropriate action.

VII. Definitions

A. **College** shall mean Chemeketa Community College.

B. **College Board** shall mean the Board of Education.

C. **Staff** shall mean any employee of the college, both full-time and part-time, management, faculty, and classified. Staff rights and responsibilities shall be provided by college policy, procedure and collective bargaining agreements. Staff is expected to intervene and facilitate adherence to the Student Rights and Responsibilities document.

D. **Student** shall mean any person currently enrolled in a college class.

E. **Community member** shall mean any person not enrolled in a Chemeketa class. A community member shall have the rights and responsibilities provided by local, state and federal laws. The Student Rights and Responsibilities document does not apply to community members. Community members may contact the college Executive Dean for clarification of their rights and responsibilities.

F. **The College Appeals Committee** shall be composed of students and staff and will conduct non-judicial hearings on alleged violations of the Student Rights and Responsibilities document. The hearings are not considered formal, legal trials.

VIII. Harassment Issues.
Chemeketa is committed to providing everyone with an environment focused on learning and growth, free of discrimination or harassment. Such behaviors will not be tolerated and are against college policies.

A. Every member of the college community, students and employees, is expected to keep Chemeketa's work and educational environment free of any conduct that causes intimidation, hostility or discrimination.

B. Given these goals, the college is making every effort to notify students and employees of their rights and responsibilities under the college's Harassment/Discrimination, Sexual Harassment, Respectful Workplace, and Consensual Relationships Policies and Procedures.

C. **Definition of harassment:** Harassment is any verbal, visual or physical behavior reasonably perceived by the receiver as unwelcome or offensive and refers in a demeaning way to a person's race, religion, color, gender, marital status, national origin, age, sexual orientation, disability, pregnancy and related conditions, family relationship, veterans status, or cigarette usage; creates a hostile or adverse work or educational environment; and subjects employees or students to different terms or conditions based on the characteristics listed above.

D. **Examples of harassment:** May include, but are not limited to, comments, slurs, jokes, symbols, innuendoes, cartoons, pranks, touch or other forms of physical harassment. An occurrence does not have to be considered "derogatory" for harassment to have happened.

E. **Types of Harassment:**
1. **Sexual Harassment:** sexual advances, request for sexual favors, and other verbal or physical conduct of a sexual nature. The courts have defined two principle types of sexual harassment:
   a. when a person in a position of power misuses his or her authority, and
   b. when a hostile environment is created.
2. **Gender-Based Harassment:** behavior that degrades, denigrates, ridicules, or is verbally or physically abusive to an employee or student because of his or her gender.
3. **Racial Harassment:** behavior that degrades, denigrates, ridicules or is verbally or physically abusive to an employee or student because of his or her perceived race.
4. **Harassment Based on National Origin:** behavior that degrades, denigrates, ridicules or is verbally or physically abusive to an employee or student because of his or her perceived ancestry, heritage or cultural identification.
5. **Sexual Orientation Harassment:** behavior that degrades, denigrates, ridicules, or is verbally or physically abusive to an employee or student because of his or her sexual orientation.

F. **Consensual Relationships Statement.** The college has a responsibility to promote an atmosphere of professionalism, respect, and trust and to prevent any appearance of impropriety. The decision-making processes must be seen by employees and students as fair and without favoritism. A consensual relationship is a close personal relationship of a romantic or sexual nature between willing participants who both are of legal age and possess legal capacity. College Policy and Procedure 1753 addresses consensual relationships between students and college employees and supervisors and employees. Employees involved in a consensual relationship with another employee or student are prohibited from supervising or making grading decisions related to that person. In consensual relationships involving employees, or employees and students, it is the responsibility of the person with the most power to make explicit arrangements to assure that the decision-making processes will be fair and without favoritism. Employees will work with their supervisor in making arrangements to comply with this policy

G. **Non-retaliation Statement.** It is critical that everyone feel free to come forward with complaints or concerns regarding inappropriate conduct. Retaliation against any person for making a complaint or for providing information concerning a complaint is prohibited. Examples of retaliation may include, but are not limited to, such actions as expulsion, suspension or termination.

G. Complaint Process for Harassment Issues

Step 1: Informal Complaint Procedure. If appropriate and safe, anyone alleging a violation should meet with the person and ask them to stop the offensive behavior. You might also write to the person, stating that you view the behavior as unlawful harassment and that you will report these actions if to continue. Be sure to keep a copy.

OR

Consult with a member of the Harassment Network to explore your options and begin to keep a record of the harassment: track dates, times, places and statements. See list of Harassment Network members below.

OR

If the harassment involves a Chemeketa employee, students should contact the college's Human Resources Director/ Affirmative Action Officer for assistance. If the harassment involves another student, students should contact the Dean of Students.

Step 2: Formal Complaint Procedure. You may file a complaint with:

1. Human Resources Director/Affirmative Action Officer;
2. The Executive Dean;
3. The Dean of Students;
4. The Director of College Safety & Risk Management.

   Formal complaints should be made within 180 days of the action, but you may file a complaint at any time.

   If warranted, the Human Resources Director/ Affirmative Action Officer or their designee will conduct an investigation or may use an outside investigator to do so.

   Please Note: If you feel your personal safety is at risk or a crime is being committed, contact Public Safety immediately, 503.399.5023.

Harassment Network. Make an appointment to see one of the following individuals to discuss the situation with you. They can advise you of the available options.

Peggy Borjesson 503.399.2537
Director, Human Resources/ Affirmative Action Officer

Cassie Belmodis 503.399.5159
Director, Human Performance and Athletics

Andrew Bone 503.399.6529
Ombudsperson/Executive Dean

Candy Brummond 503.399.2381
Counselor, Counseling and Career Services

Jim Eustrom 503.399.6148
Dean of Students

Ted Gross 503.316.3290
Advising Specialist, McMinnville

Irma Guzman* 503.316.3255
Office Assistant, Woodburn

Rebecca Hillyer 503.399.8677
Director, Campus Safety & Risk Management

Julie Huckestein 503.399.6575
Assistant CFO, Business Services and Human Resources

Steve McLaughlin 503.316.3206
Instructional Assistant, Santiam

James McNicholas* 503.589.7644
Student Services Coordinator, Marketing and Student Recruitment

Rebecca Woods 503.399.5276
Coordinator, Disability Services

*Se habla español

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Campus Map Legend

1. Bookstore and Staff Offices
2. Counseling & Career Services, Diversity & Equity Office, Testing Services, Business Services, Financial Aid, Human Resources, President's Office, College Advancement, Purchasing, Enrollment Center, Student Records, Tutoring, Food Court, Disability Services, Student Life, Public Safety, College Access Programs, Convenience Store, College Support Services
3. Academic Services Office, General Classrooms, Math Lab, Apprenticeship Office, Salem Area Programs, Art Gallery, Deans, Vice-President
4. Career and technical education Classrooms/Labs,
   Crossroads Café
5. Career and technical education Classrooms/Labs and Art Classrooms
6. Technology Classroom Building, Computer Lab
7. Physical Education, Gym
8. Science and Allied Health Classrooms, Labs
9. Library, Classrooms, Distance Education, Curriculum Resource Center, Television Studio, Curriculum Resource Center, Opportunity Center, Chemeketa Cooperative Regional Library Services (CCRLS)
12. Information
14. Fire Station
15. Emergency Operations and Research Facility
16. High School Equivalency Program (HEP), Classrooms
19. Classrooms, Hospitality & Tourism classroom
20. Occupational Skills Training; JOBS Program; ACE program
22. ABE/GED/ESL Classrooms, Volunteer Literacy Programs, Information Technology (IT)
23. JOBS Program classroom
24. Machine Shop
25. Welding Shop
26. Classrooms A–B
27. Classrooms A–B
28. Classrooms A–F
29. Classrooms, Hospitality and Tourism Programs
30. Classrooms
31. Classrooms
32. Classrooms A–F
33. Staff Training Center/Northwest Innovations/Graphics
34. Food Service Kitchen and Meeting Rooms
35. Writing Center and Classrooms
36. Classrooms
37. Staff Offices
38. Staff Offices
39. Child Development Center
40. Maintenance, Custodial, Construction/Facilities Services
41. Classrooms
42. Vacant
43. Shipping, Receiving, Recycling, Copy Center
45. Activity Field
46. Greenhouse
48. Office Building (MaPS) Credit Union, Blue Moon Café
49. Northwest Center (PSU/Linfield)
50. Conference Rooms, Winema School, Apprenticeship, Enterprise, Mid-Willamette Education Consortium, Northwest Innovations
51. Apprenticeship
52. Classrooms
53. Department of Human Services
60. Agriculture
61. Classrooms
62. Classrooms

How to get there

CHEMEKETA
COMMUNITY COLLEGE

Admission Application

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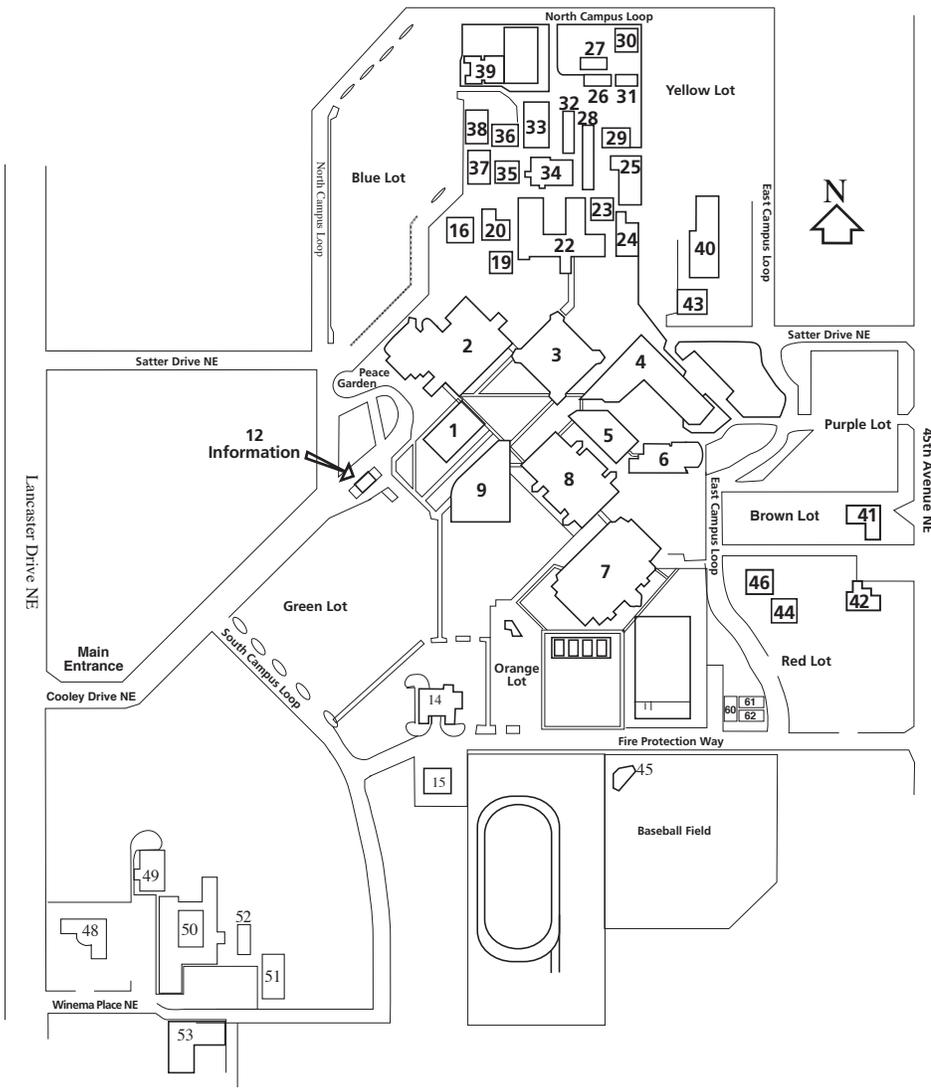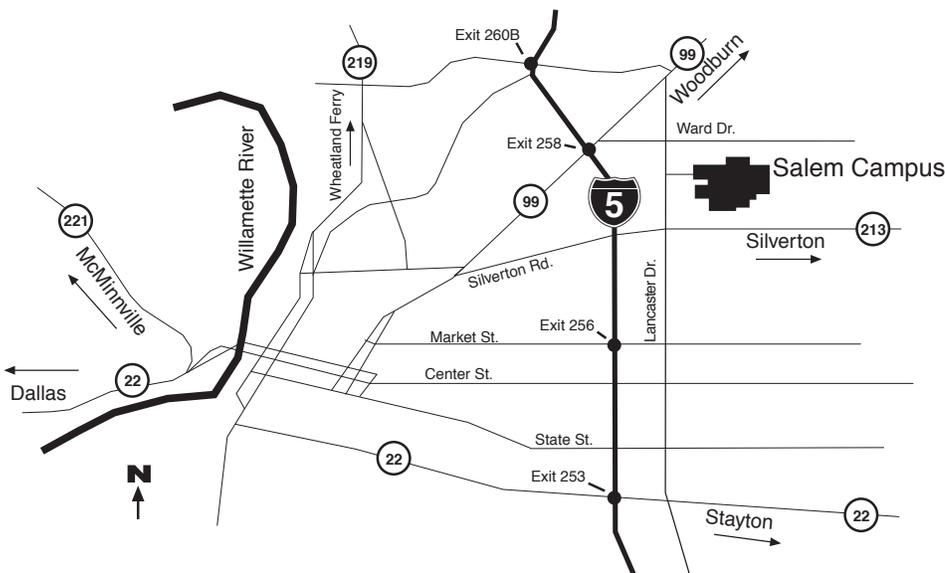
Providing your social security number is voluntary. If you provide it, the college will use your social security number for keeping records, doing research, aggregate reporting, extending credit and collecting debts. Your social security number will not be given to the general public. If you choose not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

Social Security Number or ID Number

Term I plan to enroll at Chemeketa Community College (choose one):

○ Summer (June)   ○ Fall (Sept.)   ○ Winter (Jan.)   ○ Spring (March)   20 ☐☐

First Name

Middle Name

Last Name

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

○ Noncredit   ○ Credit

Will you have lived in Oregon for the 90 days just prior to the term you begin?

○ Yes   ○ No

Are you a United States Citizen?

○ Yes   ○ No

Former Last Name

Mailing Address

City   State   Zip Code

Daytime Phone Number   Evening Phone Number   Date of Birth (mm/dd/yyyy)   Age

Email Address (Preferred)

Please choose one: (voluntary)

○ American Indian or Alaskan Native   ○ Asian   ○ Black or African American   ○ Hispanic or Latino   ○ Native Hawaiian or Pacific Islander   ○ White

Gender:
○ Male   ○ Female

Do you plan to earn a degree/certificate/diploma at Chemeketa Community College? (Choose one)

○ Yes, certificate or associate degree
○ Yes, high school diploma or GED
○ No, here to take classes
○ Undecided

High School Name (no abbreviations please)

City   State

Select a major code from the list on the reverse side of this form that best describes your area of study or area of interest:

I have completed high school as follows: (choose one)

○ Did not complete high school   ○ Still in high school   ○ High School Graduate   Year: ☐☐☐☐   ○ GED Year: ☐☐☐☐   ○ Alternative high school diploma

○ Certificate of Initial Mastery   ○ Certificate of Advanced Mastery   ○ External diploma program   ○ Attendance completion   ○ Proficiency exam

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Name of last college attended other than Chemeketa

City   State

Prior to Chemeketa, I have completed college as follows: (choose one)
○ Have not attended college
○ Short-term training, private vocational school award, or other
○ One-year certificate from a community college

○ Associate degree
○ Bachelor's degree
○ Master's degree
○ Doctorate or professional degree

Pick the one MAIN reason you are here this term: (Choose one)

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

Are you currently employed? (Choose one)

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

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

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

Signature: X _____   Date: _____

Program Choices

Select one of the following programs of study:

Students younger than 18 who do not have a high school diploma or GED must complete the Underage Consent Form. Contact the Admissions office at 503.399.5006 for information.

Personal Enrichment (non-degree seeking)

PER1   Students 18 or older with a high school diploma or GED certificate

Professional/Technical Programs

Some programs listed below may have special admission requirements, prerequisites and/or require assessment before admission. Contact Counseling Services at 503.399.5120 for information.

Associate of Applied Science (AAS)

PRAC	Accounting
AS01	(One-year), AS02 (Two-year) Aquarium Science
PRAT	Automotive Technology
LD03	Building Inspection Technology
PRBT	Business Technology
PROF	Business Technology—Office Fundamentals
PRCT	Civil Technology
PREE	Electronics Technologies
EL16	Electronics Technologies—Advanced Technology Endorsement
EL17	Electronics Technologies—Microelectromechanical Systems Design
PRIE	Electronics Technologies—Industrial Electronics
PRCP	Computer Programming
PRCJ	Criminal Justice
PRDA	Dental Assisting
PRDT	Drafting Technology
DF11	Drafting Technology—CAD—Computer-Aided Manufacturing
DF12	Drafting Technology—CAD—Computer Numerically Controlled Operator
DF13	Drafting Technology—CAD—Manual Machine Operator
PREC	Early Childhood Education (One- and Two-year)
ES03	Emergency Medical Technology—Paramedic
EST1	Employment Skills Training
FP08	Fire Protection Tech.—Fire Services Supervisor & Management (One-year)
FP06	Fire Protection Tech.—Fire Prevention
LD03	Fire Protection Tech.—Fire Suppression
PRHM	Health Services Management
HS06	(17 or under), HS07 (18 or older) High School Completion
PRHO	Hospitality Management (One- and Two-year)
PRHS	Human Services
IND3	Industrial Technology

PRCJ	Juvenile Corrections (One-year)
PRBM	Management
PRDT	Mechanical Design
PRMA	Medical Office Assisting
PRNT	Network Technology
OC01	Occupational Skills Training
ED05	Paraeducator
PRNU	Pre-Nursing
PRPT	Professional Technical Teacher Preparation
PRRM	Retail Management
PRSP	(One-year), PRSL (Two-year) Speech Language Pathology Assistant
PRHO	Tourism and Travel Systems Management (One- and Two-year)
PRVC	Visual Communications
PRVM	Vineyard Management
PRVO	Vineyard Operations
WD05	Welding Technology—Welding
WD04	Welding Technology—Welding Fabrication
PRWM	Winemaking

Lower Division Transfer

LDC-Business

LD18   Associate of Science Oregon Transfer—Business (AS/OT—Business)

LDC-General Studies

LD03   Associate of General Studies (AGS)
            Exploratory

LD02   Associate of Arts Oregon Transfer (AAOT)
            Undecided Majors
            Transfer

OTM   Oregon Transfer Module (OTM)

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